ANNUAL REPORT
2007 - 2008

“A network without walls, without professional boundaries, and without limits on quality patient care, research and education”

DEPARTMENT OF MEDICINE
Calgary Health Region
and University of Calgary
VISION, MISSION & CORE PRINCIPLES
OF THE
DEPARTMENT OF MEDICINE

“To prevent disease, to relieve suffering and to heal the sick – this is our work”

Sir William Osler

OUR VISION
Creating the medical network of the 21st Century
A network, without walls, without professional boundaries, and without limits on quality patient care, research and education.

OUR MISSION
To be widely recognized for advancing health and wellness, leading innovation, creating technologies and disseminating knowledge

OUR CORE PRINCIPLES
Innovation – Excellence – Patient Care – Scholarship – Education
Leadership - Technology
Calgary Health Region

OUR HEALTH PLAN

vision

healthy communities

values

caring, respectful relationships; quality and safety; accountability

mission

leaders in health
partners in care

Working with you to be as healthy as possible at every moment of your life

OUR GOALS

A Culture of Caring: A culture where we treat everyone with respect equality and fairness and recognize the strength and uniqueness of the individual.

A Safe and Accessible health Delivery System. The highest level of quality and safety while providing the right care in the right place, at the right time.

A Strategic, responsive and Adaptive organization: The ability to be innovative and flexible and adopt the best practices from around the world

An Engaged and Knowledgeable Community: Forging partnerships with individuals and communities toward our collective participation in health and well-being.

OUR FOCUS

Wellness: Optimizing health at all stages of the life through programs and partnerships that support individuals and communities toward well-being and healing of mind, body and spirit.

Access: Emphasizing wellness and community care while adding and expanding infrastructure throughout the system.

Excellence: Embracing innovation that improves care, integration and efficiency, and allows health care professionals and the public to connect like never before.

People: Creating an environment where individuals want to work and grow, recognizing that people are the Region’s most valuable assets.

Investment: Investment in people, partnerships, technology and facilities in a thoughtful, co-ordinated way that ensures sustainability of the health care system.
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EXECUTIVE SUMMARY
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This report is respectfully submitted by:
John Conly MC, FRCPC, FACP, Professor and Head University of Calgary and Calgary Health Region

On behalf of the Department of Medicine, November, 2008
EXECUTIVE SUMMARY

During this last fiscal year, The Department of Medicine has continued to focus on its vision and mission through recruitment and retention, enhancing its training program, facilitating the quality of care provided, utilizing alternate care providers in its care delivery models, providing leadership in evolving systems of health care related to chronic disease management, further embracing medical services for rural Albertans through direct care delivery and telehealth and enhancing the research infrastructure of the Department.

Recruitment and Retention

- Recruited 17 new members to the Department (4 Clinical, 5 Major Clinical, 4 GFT, 4 Clinical Scholar).
- A new multi module project entitled “WELL DOC” was launched, the goals of which are to promote and facilitate physician wellness and to educate physicians, health care administrators and the public about its importance. The first module explores physician nutrition and cognition in the workplace and our team includes expertise in Exercise Physiology and Sociology.
- An Alberta Heritage Foundation for Medical Research funded study entitled “Determinants of Physician Wellbeing” was initiated and will pursue a detailed analysis to facilitate an understanding of the positive and negative determinants of physician wellness.

Clinical and Administration

- Continued development of multidisciplinary teams – the Department of Medicine in conjunction with Medical Services continues to embrace team based care including Nurse Practitioners, Nurse Clinicians, pharmacists, therapists and clerks with 53 FTEs continuing the innovation initiatives.
- Continuation with integration of 18 innovations into Medical Services and Cardiac Sciences which have demonstrated improved patient outcomes in selected populations, including improved access and improved outcomes.
- Planning for implementation of Central Intake Systems across most specialized medical services. The Department of Medicine & Medical Services, Department of Family Medicine, Calgary Health Region Primary Care Networks, Department of Rural Medicine, Department of Cardiac Sciences, the Chronic Disease Management Program, Western Canada Waiting List (WCWL) and the Alberta Medical Association (AMA) sponsored this project through a $4.2 million grant from the Provincial Wait Times Management Steering Committee. The key changes were the introduction of a single, standard, flexible referral form, replacing a number of existing separate forms and standardized processes and target times, including acknowledging receipt of referrals within two days, triaging referrals within seven days of receipt, and clarifying responsibilities for arranging tests for triage and consultation.
- Planning for implementation of two Alberta AIM collaboratives (Access, Improvement, Measures) to improve access and efficiency in both primary care and specialized medical ambulatory care settings.
- Development and piloting of a service model for patients with chronic complex needs introduced to the PLC in early 2008.
- Deployment of an additional general internist in the RGH Emergency for consultation purposes, the “TIME Project” resulting in alternate triage of 1/3 of referrals destined for admission
- Participation in the orthopedic hip care collaborative.
- Additional telehealth clinics in high risk foot and wound care, vascular risk reduction and education. Telehealth continues to exceed targets.
- Quality improvements focused on GRIDLOCC, SCM, Patient Safety reporting system, development of admission guidelines for internal medicine services, and safety action teams.
- Continued deployment of the ambulatory EMR (EMIS).
Completion of the Bearing Point evaluation for the ARP and preparation for ARP renewal for August 2008.

**Education**

- Increasing the number of positions in the Core Internal Medicine Residency Program to 63, including PGY4 positions, (from historic level of 47 in 2005-06 fiscal year), inclusive of 10 IMG positions.
- The Subspecialty Residency Programs within the Department of Medicine contribute 33 residents and fellows.
- Active engagement in the AMIG Program with planning for 14 international graduates entering the core program.

**Research**

- Ongoing research activities with 436 peer reviewed publications (includes editorials and letters); 54 non-peer reviewed publications; 80 books and book chapters, 333 abstracts, 385 presentations and almost $20 million in research funding.
- Development of new Research Chairs - Southern Alberta Chair Kidney Disease Research, Child’s Chair in Rheumatic Disease Epidemiology and recruitment to Therapeutics Initiative physician leader.
- Planning for Departmental Research Development Fund and new Endowments – Aphaeresis and Health Promotion.

**Challenges and Priorities for Next Fiscal Year**

- Determine optimal delivery of services and administrative capacities across the continuum of care within the new Alberta Health Services framework.
- Meeting recruitment targets of 22 FTEs / per year to meet clinical service requirements for population growth and the new South Health Campus.
- Developing innovative short term space requirements – shared office space and the virtual office.
- Renewal of funding for Central Access and Triage for all Divisions for fiscal 2008-09.
- Implementation of new innovation initiatives coupled to ARP renewal – forwarded to AHS.
- Planning for E–simulation.
- Supporting the deployment of an EMR solution in outpatient clinics as part of the overall Outpatient Clinical Care Integration Strategy.
DEPARTMENTAL STRUCTURE AND ORGANIZATION

Dr. John Conly
Regional Clinical Department Head, Medicine

Division of Dermatology
Dr. Richard Haber

Division of Endocrinology & Metabolism
Dr. Alun Edwards

Theresa Williams
220-3037

Division of Gastroenterology
Dr. Ron Bridges-Mar, to Dec.07
Dr. Samuel Lee (Co-Acting)
Dr. Sylvain Coderre (Co-Acting)

Division of Geriatric Medicine
Dr. David Hogan
Acting Chief

Beverly Forbes
943-3775

Division of General Internal Medicine
Dr. Robert Herman

Division of Hematology & Hematologic Malignancies
Dr. Doug Stewart

Lori Wishart
944-4451

Division of Infectious Diseases
Dr. Ron Read

Vacant

Vacant

Division of Medical & Radiation Oncology
Dr. Vivien Bramwell

Division of Nephrology
Dr. Nairne Scott-Douglas

Louise Kosmack
944-2804

Division of Respiratory Medicine
Dr. Robert Cowie (Acting)
Dr. Chris Mody
Sabbatical

Division of Rheumatology
Dr. Liam Martin

Cassandra Pugh
220-7725

Hanifa Rhentullla
944-2783

Dragana Stanojovic
210-9356

Maureen Sorensen
220-6926

Vilma Svetina-Atkins
943-5681

Marlene Kupchanko
521-3707

Robert Dopitar
220-8479
“Our team of Administrative Assistants”

Department of Medicine
Administrative Assistants
“By Division”

FMC Site
Kelly Beaulieu
Nephrology
Rhoda Borag
Medicine
Suzanne Buffet
Nephrology
Chantelle Cni
Medicine
Lauren Clayden
Medicine
Meagan Clayden
Medicine
Tynh DeCrate
Hematology
Shari Derksen
Medicine
Surjadev Gaffer
Hematology
PLC Site
Brenda Green
Nephrology
Doreen McMurty
Respirology
Anabela Moreno
Medicine
Tracey Morrey
Medicine
Hanif Rehmi/Rla
Endocrinology & Dermatology
Kathleen Holt
Medicine
Kathleen Holt
Nephrology
Jenna Rollton
Medicine
Tara Schreyer
Nephrology
Carol Lazen
Nephrology
Sherry Schatz
Hematology
Lynette Lipinska
Medicine
Brenda Simpson
Nephrology
Amanda Sinclair
Medicine
Linda Slack
Medicine
Ivana Svarcik
Hematology
Marge Tracey
Medicine
Merrie Tracey
Medicine
Dana Pinnock
Respiratory
Amanda Fuller
Respiratory
Margaret Anderson
Hematology
Anne Merzelli
GI & Hematology
Lynn Drnec/or
GI & Endocrinology
Brenda Norris
Respiratory
department of Medicine

RGH SITE
Tara Elter
Rheumatology
Deborah Gehlen
Respiratory
Selena Gil
Respiratory
Caril Holtzman
Respiratory
Alysha Sunden
Medicine
Ruby Leachman
Respiratory
Janet Osz
GI & ID
Kerr Vaar

BILLING CLERKS
Helen Andrews
Leslie Cooper
Michelle Del Pra
Rahemat Fazal
Gail Fletcher
Joanne Nylchuck
Luciana Rasmussen
Robbie Waters
## DEMOGRAPHICS OF THE DEPARTMENT OF MEDICINE

*(Primary Appointment Regional Dept. Medicine)*

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<tr>
<th>Division</th>
<th>Male</th>
<th>FTE</th>
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## DEMOGRAPHICS OF THE DEPARTMENT OF MEDICINE
(Primary Academic Appointments)

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<th>Clinical Scholar</th>
<th>Research Assistant Professor</th>
<th>Clinical Lecturer</th>
<th>Clinical Assistant Professor</th>
<th>Clinical Associate Professor</th>
<th>Clinical Professor</th>
<th>Assistant Professor</th>
<th>Associate Professor</th>
<th>Professor</th>
<th>No University Appointment</th>
<th>Total</th>
<th>ARP Members</th>
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| **Adjunct Research Assistant/Associate Professors:** 5  
**Adjunct Clinical Professor:** 1 |

| TOTALS                    | 10                | 3                            | 28                | 81                          | 35                           | 8                 | 19                | 26                | 37       | 12                       | 259   | 166         |
# RELOCATION - RETIREMENT

The following table indicates physicians and the reason for their departure.

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<thead>
<tr>
<th>Surname</th>
<th>Given Name</th>
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<th>ARP Member</th>
<th>Left DOM (Date)</th>
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<th>Reason</th>
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<tr>
<td>Whitelaw</td>
<td>William</td>
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<td>April 30, 2007</td>
<td>M</td>
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<td>Michaud</td>
<td>Gaetane</td>
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<td>MacCannell</td>
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<td>Mandin</td>
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<td>Culleton</td>
<td>Bruce</td>
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<td>DERMATOLOGY</td>
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<td></td>
<td>STORR</td>
<td>MARTIN</td>
<td>07-25-07</td>
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<td></td>
<td>KAPLAN</td>
<td>GIL</td>
<td>08-01-07</td>
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<td>Assistant Professor</td>
<td>Male</td>
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<td></td>
<td>YAN</td>
<td>BRIAN</td>
<td>10-15-07</td>
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<td>HAUSSMANN</td>
<td>JESSICA</td>
<td>10-15-07</td>
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<td>GENERAL INTERNAL MEDICINE</td>
<td>FORZLEY</td>
<td>BRIAN</td>
<td>07-17-07</td>
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<td></td>
<td>ZARNKE</td>
<td>KELLY</td>
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<td>JACKSON</td>
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Specific Clinical Highlights

Continuation of Innovation Initiatives

The Alternative Relationship Plan within the Department of Medicine has supported changes to physician practices, allowing innovative approaches to enhance patient care. Alberta Health and Wellness and the Calgary Health Region provided support for 18 innovation initiatives and following the completion of the grant agreement in June 2007, the Calgary Health Region executive approved ongoing funding to sustain these clinical innovations through the regional budgeting process.

The Innovation Initiatives affect a broad number of health services across the continuum of care in both urban and rural settings, and reported through a number of portfolios. Seventeen new specialty clinics were launched as a result of the innovation initiatives. Access and quality of care was improved for a diverse range of patient populations including patients with lung cancer, chronic cough, rheumatic disease, atrial fibrillation, congestive heart failure, vascular risk, obesity and others. Within the ongoing activities across 18 initiatives, a total of 53 FTE were hired: 18 Nurses, 6 Nurse Practitioners, 9 Allied Health Professionals, 8 exempt employees, and 12 Administrative Support Staff.

The innovation initiatives achieved and in some settings exceeded expectations and were highlighted in last year’s report. Concrete outcomes in improving patient care have resulted in decreased waiting times, decreased Emergency visits, decreased hospitalizations, and decreased length of stay. Completion of the full evaluation report on the clinical innovations was endorsed by a letter from the Minister of Health highlighting the enormous success of the project.

Central Access and Triage

Planning for implementation of Central Intake Systems across most specialized medical services was undertaken and completed during this past fiscal year. The Department of Medicine, Medical Services, Department of Family Medicine, Calgary Health Region Primary Care Networks, Department of Rural Medicine, Department of Cardiac Sciences, the Chronic Disease Management Program, Western Canada Waiting List (WCWL) and the Alberta Medical Association (AMA) sponsored this project through a $4.2 million grant from the Provincial Wait Times Management Steering Committee. The key changes were the introduction of a single, standard, flexible referral form, replacing a number of existing separate forms and standardized processes and target times, including acknowledging receipt of referrals within two days, triaging referrals within seven days of receipt, and clarifying responsibilities for arranging tests for triage and consultation.

EMIS Implementation

The Department has continued with its EMIS rollout for ambulatory care and it has been implemented in Rheumatology and partially implemented in several Divisions including: Endocrinology, Cardiology, Hematology and General Internal Medicine. In addition significant progress has been made on the planning and development of taking complex medical files and placing them into a pdf format which is logical and searchable. In addition a historic Data Sharing Agreement was completed between MDERA and the Calgary Health Region which was considered a model for such agreements by the Alberta Medical Association.

Chronic Complex Care Clinic

This is a highly supported clinic based approach to enhance access to specialized medical services for patients with a history of multiple inpatient admissions and complex chronic needs. The clinic was piloted at PLC in January 2008 with an official clinic launch on March 17, 2008. The clinic is staffed by an interdisciplinary team of 14 Internists and Hospitalists, two clinic nurses, with representation from pharmacy, social work, respiratory therapy, and nutrition services. In addition, the clinic has partnered...
with Community Accessible Rehab (CAR) for rehabilitation services. Direct referrals from inpatient units and the emergency department at PLC are currently being accepted.

**IMG Program (International Medical Graduates)**

The Department of Medicine IMG Program expanded from 9 to 14 positions and is one of the largest in the Region. This Program, which presently supports 2 x 24/7 in-hours hospital call schedules at RGH and FMC will now move to support a third admitting service at the PLC in the fall of 2009. Increases in the complement are being planned within the context of a shared model with other services including Clinical Neurosciences and Family Medicine Hospitalists. The IMG program provides essential onsite services and call to patients admitted to non resident-supported IM Units, including the GMU, Pulmonary, GI admitting services, Hospitalist’s Subacute Unite and the new Neurology admitting service at RGH. The Department has also successfully integrated IMGs into the Alberta IMG Program with several entering Internal Medicine residencies.

**Telehealth**

Telehealth continues to be an enabling resource within the Department and is provided by the Divisions of Geriatric Medicine, Endocrinology and Metabolism, Nephrology, General Internal Medicine, Rheumatology, Dermatology and most recently Respiratory Medicine. In addition, Telehealth has been used for discharge planning and education. Newly added in this past year are clinics in wound care and vascular risk reduction.

**Rural Outreach**

Outreach by the Department is an active process and provides specialty specific physicians to support those health regions without the staffing complement to deliver services using either Telehealth or direct visits. The Diabetes, Hypertension and Cholesterol Centre (DDHC) sees clients from Chinook, Palliser and David Thompson Health Regions as well as southern British Columbia. Diabetes in Pregnancy (DIP) clinic specialist’s consultation services are provided via Telehealth to Chinook Health Region and the Foothills Medical Centre Diabetes in Pregnancy (DIP) Clinic does provide consultation to clients in Brooks via phone.

Twenty four hour Ambulatory Blood Pressure monitoring clients come from Chinook, David Thompson and Palliser Health Regions as well as southern British Columbia. Many of these clients are also seeing specialists at the Diabetes, Hypertension and Cholesterol Centre (DDHC). The Vascular Risk Reduction program sees clients who reside in Chinook, Palliser and David Thompson Health Regions as well as clients who live in Invermere and Cranbrook. Clients are seen in person or via phone or Telehealth. General Internal Medicine provides Clinics in Palliser Region once per month and Rheumatology outreach clinics are provided to David Thompson and Chinook Regions about once per month.

The following programs provide services to other regions south of Edmonton, southeastern British Columbia and southwestern Saskatchewan: Bone Marrow Transplant, the Sleep Centre, the Apheresis Clinic, Viral Hepatitis, GI (gastro-intestinal) Subspecialty Procedures, TOPS (thoracic oncology, pulmonary services), Cystic Fibrosis Clinic and Southern Alberta Clinic (to support HIV patients). Thoracic Oncology sees patients from Palliser at a rate of one to three per month. An agreement was struck to provide this service to David Thompson with anticipated three to four referrals per week. Communication has begun with Chinook to provide services. Ad hoc services are provided to David Thompson for Adult Cystic Fibrosis. Connections to Palliser and Chinook Regions occurs through the Southern Alberta Renal Program.
CHALLENGES – SHORT TERM

- Meeting manpower targets (22 FTEs/year) for workforce planning over next 2-3 years
- Space availability for both clinical and office space
- Central access and triage for all Divisions
- Continued implementation of the ambulatory EMR
- Renewal process for ARP to 2011 (completed Aug 2008)
- Expanded Regional acute care capacity in internal medicine
- Implementation of new innovation initiatives coupled to ARP renewal – forwarded to AHS

PRIORITIES FOR THE NEXT YEAR

- Meeting recruitment targets
- Space – shared office space and the virtual office
- Central access and triage to improve ambulatory care – expand to provincial setting
- RRDTC (Richmond Road Diagnostic Treatment Centre) Planning for the new South Health Campus
- Planning for e-simulation
- EMR solution in outpatient clinics

FUTURE DIRECTIONS

- Strengthening our integration of care, from in-patient care to ambulatory care to maintain our patients’ health in the community
- Fostering partnerships with other faculties, disciplines to enhance research and education enterprise
- Determine optimal delivery of services across the continuum of care within the new AHS framework
- Promoting work-life balance for all department members
- Promoting the development of high performance teams
- Focus on horizontal themes across divisions—clinical informatics, knowledge translation and pharmacology/pharmacogenomics
- Fundraising to enhance research – goal of 2 Endowed Chairs per Division
This was another eventful year for E-health in the Department of Medicine. Some of the initiatives which continue are funded through specific Project grants from Alberta Health and Wellness. Other successful initiatives continue following the completion of the Innovations project and interest generated through other avenues.

Alberta Health and Wellness

The Chronic Disease Management/Enhanced Transition Patient Care Project encountered several changes this year. Carolyn Grolman was hired to replace Shirley Chandler as Project Coordinator in February 2007. Carolyn provided ongoing support to the successful rural Diabetes program. Additional endocrinologists became involved through the leadership of Dr Alun Edwards bringing the number to seven that provide patient care through telehealth. Telehealth clinics were expanded to an additional Calgary rural site bringing the total number of rural outreach telehealth clinics for Diabetes care to five with additional non-diabetes endocrinology consults occurring on an ad hoc basis. Internal Medicine involvement in this Project is in the form of the Vascular Risk Reduction Clinic in which the Nurse Practitioner sees about ten percent of clinic patients using telehealth.

Carolyn expanded the work begun in the Transition Care portion of the Project and coordinated several demonstration discharge sessions at Rockyview General Hospital completing the inclusion of all three adult acute care sites. Additional pilot sessions were successfully completed over the course of the year which was useful in determining which variables required refinement before this could be adopted universally in the Region.

An extension and expansion of the Clinical Grant Funded project was received through a Clinical Telehealth Innovation Program (CTIP) funded through Canada Health Infoway. The expansion includes the ongoing support to the Vascular Risk Reduction Clinic and expansion of the Wound Care Telehealth outreach. Following Carolyn’s resignation in September 2007, Rauj Walia was hired as Project Coordinator in February 2008 to bring the project to its completion in December 2008.

The Rheumatology project, under the direction of Dr Sharon LeClercq which was funded by AH&W, has been successful in developing an Arthritis consultation program in Southern Alberta. Five Rheumatologists are now involved in providing telehealth consultations. This project also received expansion and extension funds from Canada Health Infoway through CTIP. Education sessions for health care providers and the development of learning modules are underway.

Presentations were given at the national conference of the Canadian Society of Telehealth (CST) by both the Arthritis and Chronic Disease Management projects. Other DOM telehealth educational successes include presentations at the Provincial Clinical Telehealth Forum and Divisional meetings and retreats within the Region. Abstracts have once again been submitted for the CST conference this year.
**Existing programs**

Several programs that originated in the Innovations project last year are ongoing and successful. Though Dermatology has experienced fewer referrals than originally expected from the three current rural sites, we have been successful in piloting the technology chosen and the processes for this highly specialized clinic. Other communities and First Nations (Siksika) sites have approached Dr Rick Haber to provide service and are being considered for expansion of this initiative.

The Sleep Centre Telehealth program has taken a somewhat different approach than was explored during the Innovations project with Dr Pat Hanly. The equipment purchased from that project for this initiative was changed from a room based system to a desktop telehealth unit and will be used initially in Primary Insomnia patient consults. Dr Tammy Moroz and Respiratory Technicians from the Sleep Centre are taking the lead in this and plan to look for opportunities to expand once this application is operational. At fiscal year end this initiative is ready to begin imminently.

The Thoracic Oncology Telehealth Program with Dr Alain Tremblay and Susanne Pereira, Nurse Practitioner, have successfully partnered with other Regions in Southern Alberta since January 2007. This outreach program provides urgent and ad hoc consults to professionals and patients using two desktop units provided through last year’s Innovations funding. This program is integrated into everyday clinical practice and provides an average of four consults each month to 16 communities.

In addition Nephrology has once again begun looking at using telehealth in clinical settings in patient education and consults with nursing and allied health professionals. The new Chronic Kidney Disease Pilot project may lend itself to piloting telehealth in these types of interactions. The Southern Alberta Renal Program (SARP) continues to use telehealth for administrative meetings between outreach sites as well as occasional clinical consults.

Planning and process development for telehealth use in Gastroenterology is well underway. Dr Chris Andrews will be piloting this initiative with a Functional Gut program and there are at least one or two additional Gastroenterologists interested in exploring the use of telehealth in their outreach practices. A Practitioner cart from Ward of the 21st Century was loaned to facilitate an early start to this new program however connectivity to the network is a challenge we need to overcome for full functionality. Initial work is also being done to explore the use of telehealth in Hematology with Dr Hull.

The ongoing success of existing programs in Geriatrics and General Internal Medicine continue to showcase the model of service and capacity building that is now the standard for additional clinical programs as they are being developed. Geriatrics currently serves 11 communities with three Geriatricians participating. Education through videoconferencing and Rounds for several Divisions are shared both within Calgary and the Region but also with other partnering locations and sites.

The adoption, continued growth, sustainability and integration of e-health and telehealth technologies within the Department of Medicine (DOM) has been greatly enhanced through the continued support and funding of the 1.0 FTE Technical position with Regional Telehealth and the DOM Telehealth Coordinator. In addition these positions help to support the ongoing partnership with Regional Telehealth which is vital to the success of any DOM Telehealth initiative.

The challenge for Telehealth for the coming year continues to be to sustain the interest and advances that have been made over the past several years. Finite resources, both human and fiscal, for future programs or services are factors that must be carefully considered and planned for.
### Calgary Health Region Telehealth Activity

#### DOM Clinical Telehealth

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* This denotes clinical sites – numerous other sites involved in education sessions
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**RHEUMATOLOGY TELEHEALTH HIGHLIGHTS**

The needs of patients with chronic rheumatic disorders residing in Southern Alberta are not being adequately met. Arthritis is one of the most common and physically disabling chronic illnesses. It was estimated that as of the year 2000, in Southern Alberta, there were over 185,000 people with a rheumatic disease requiring treatment and management. The population grows and ages, this number is increasing, as is the complexity of the patients.

- There is a high demand on primary care providers, specialists, and health regions to meet these needs.
- Southern Alberta currently has too few rheumatologists [9 FTE in Calgary and 1 FTE in Lethbridge] to adequately meet the need for timely and comprehensive primary assessment and follow-up care for this population.
- Primary care physicians have identified the challenges of caring for arthritis patients.
- These include long wait lists, poor adherence to treatment programs, inadequate follow-up, and difficulty managing complex patients.
- Three groups in particular are of concern: the frail elderly, the First Nation patients with inflammatory arthritis, and the disabled patient with arthritis.

Our goal was to establish an effective consultative process utilizing videoconferencing for patients with arthritis residing in Southern Alberta. We have succeeded.

- We have shown that it is possible to perform effective consultations for patients with different forms of arthritis at 3 separate sites, with 7 individually trained primary care physicians interacting with 6 rheumatology specialists.
- We have enhanced access to specialty care for arthritis patients close to home.
- We have educated and mentored primary care physicians, creating a permanent resource at the far site.
- We have successfully promoted the use of telehealth for clinical functions, including the care of patients, the education of primary care physicians, patients and allied health workers, and the establishment of a network of arthritis care providers.

The challenge now is to address the integration of this service into the everyday practice of arthritis care in Southern Alberta and sustain the high standards achieved by the project.

- During the 2 year project, 44 clinics were conducted, 19 in Pincher Creek [PC] and 22 in Rocky Mountain House [RMH].
- One hundred and ninety-nine patient visits occurred, including 106 new patient visits.
- No patients were required to attend the consultant’s office in Calgary due to an inadequacy of the preceding TH assessment. Six rheumatologists and 7 primary care physicians interacted in the clinics for the first 2 sites [PC and RMH].
- All parties expressed satisfaction with the process and their willingness to continue utilizing TH clinics in the future.
- Clinics have continued on a monthly basis at one site (RMH) and a near monthly basis at the other (PC). The Crowsnest Pass/Blairmore site has been trained and their first clinic was held in August, 2007. Three sites were bridged for this activity, including Lethbridge.
The initial intention of the project was to provide a clinical consultative service to the arthritis patient and primary care physician. A much more robust service developed over time. This provided added value to the project.

- Each patient visit was comprehensive [history, physical, investigational review, arrival at a working diagnosis, determination of a treatment program, assignment of individual responsibilities, and follow-up planning].
- Patients were extremely appreciative of the direct interaction with the specialist. They felt their questions and concerns were addressed.
- The observation of the interaction between the PCP and the specialist reinforced patient confidence in their physician. The PCPs were very appreciative of the unlimited discussion of any issues around their patient concerns.
- Comprehensive case reviews were conducted on all scheduled patients, regardless of attendance. Treatment recommendations were made despite the patient’s absence, ensuring continuity of care.
- In addition, the PCP had the opportunity to discuss any difficult cases during clinic time, time permitting. Clinic time also lent itself well to informal education i.e.: discussion around patients of disease pathology, diagnosis, appropriate and inappropriate investigations, and treatment programs.

The following charts illustrate the type of service provided to each of the first 2 sites.

**Rocky Mountain House**
- Education topics: 27%
- New patients: 37%
- Case Reviews: 6%
- Follow ups: 30%

**Pincher Creek**
- Education topics: 25%
- New patients: 25%
- Case Reviews: 19%
- Follow ups: 31%
DIABETES and WOUND CARE TELEHEALTH HIGHLIGHTS

The Department of Medicine recognized the need to support chronic disease management-Diabetes (CDM-Diabetes) outside the city of Calgary. Rural communities are managing increasingly complex cases of chronic illness and are generally supported by itinerant diabetes care providers, working in isolation from specialist services. By using Telehealth facilities, patient management has shown to be amenable to videoconferencing through remote consultation, enhanced education for patients and providers and support to health professionals.

It was recognized that:

- Rural communities require enhanced and more efficient access to specialists for consultation without travel to Calgary.
- Urban CD Specialists are needed to provide greater support to local professionals to create a regional wide care team.
- Enhanced education is also required to meet growing needs.

The Division of Endocrinology was both interested and willing to provide consultative services for chronic conditions, including diabetes, lipid disorders, thyroid diseases, polycystic ovarian syndrome and osteoporosis. The advantage was that it allowed the Division to have a “quick win” and clearly contributed to the subsequent willingness of other members to become involved as further services developed.

The CDM-Diabetes project exceeded all targets.

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Definitions:
Specialist Clinic – a clinical session where a specialist is in attendance (Physician, NP, CNS)
This includes a combination of:
Patients seen – patient attends the clinical session
Case reviews – the number of patients whose case/care is discussed/reviewed by the participating health care providers without the patient being present at the clinical session.
Multidisciplinary clinics – a clinical session consisting of case review only between either specialist & physician, specialist & other health care providers or some other provider to provider combination.
Potential benefits to this project included:

- Better ability to address needs of rural patients and professionals;
- Enhanced access to specialist service for rural Albertans;
- Reduced wait times for specialist service for rural Albertans;
- Delivery of specialist consultant clinics directly to rural communities;
- Delivery of multi-diplomacy specialist team consultant clinics;
- Educational opportunities that meet the needs of rural professionals;
- Easier access to and support from, specialists in urban Calgary.

The success of the Diabetes in Pregnancy model of care for diabetes patients assisted with the expansion to rural settings within the region. At project completion four rural diabetes Telehealth clinics take place monthly from High River, Canmore/Banff, Disbury and Strathmore in addition to the Diabetes in Pregnancy clinic to Lethbridge.

The Vascular Risk Reduction clinic was developed to facilitate follow up and management of risk factors for patients from the Stroke program. The clinic is led by a Nurse Practitioner and now receives referrals from both the Stroke and Vascular programs. The clinic generally sees 50 to 60 patients each month of which five to seven are through Telehealth.

Many patients require specialized wound care treatment and follow up due to their underlying chronic diseases. The High Risk Foot and Wound Clinic receives referrals from rural Calgary as well as other Regions in southern Alberta. Telehealth provides a means of increasing access to specialty wound care and facilitates primary health care. The Home Care nurse who assists with the wound, attends the Telehealth consultation with the patient, allowing the opportunity to be involved in care plan formulation. Patients are overwhelmingly satisfied with Telehealth as a means of receiving care. The Wound Clinic has seen five to seven patients per month by Telehealth and this number is increasing as it becomes more integrated into clinic processes.

Telehealth is now used to provide access to rural and other urban sites for real time participation in education sessions. Learning is more interactive and provides the opportunity for participants to ask questions of the presenter or discussions that include the far sites. Visiting professors in diabetes and other chronic diseases that come to Calgary can now present new treatment regimens and research results to wider audiences.

A collaborative approach to caring for cross regional patients was enhanced through a needs assessment and agreement between the Chinook Health Region, Internal Medicine, Obstetrics teams and the Division of Endocrinology in the Calgary Health Region.

A willingness to explore a variety of ways of using Telehealth has resulted in the Division of Endocrinology becoming one of the top three users of Telehealth in the Calgary Health Region within a year of the project commencement.
RESIDENCY EDUCATION PROGRAM

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. At present our Program has 63 residents in the “core” PGY 1 to 3 years and the General Internal Medicine PGY 4 to 5 years. The Subspecialty Residency Programs within the Department of Medicine contribute an additional 33 residents soon to join the medical workforce as independent specialists. In 2008 the Department’s Residency Programs included 14 Alberta International Medical Graduates (AIMG) whose residency level ranged from their first to fifth year of residency. Ten of the 14 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. Six of the AIMG residents will likely be entering independent specialty practice in the next one to two 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. 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, the additional clinical space at the Richmond Road Center, the additions to the three Calgary Adult Hospitals of about 450 beds, and the new Calgary South Health Campus in 2011 or 2012.

This year two of our residents received awards for Best Presentations in their categories at the National Resident Research Competition of the Canadian Association of Professors of Medicine/Canadian Society of Clinical Investigation annual meeting. Congratulations to Drs. Sayeh Minoosepehr and Laura Stinton.

A very successful Annual Resident Retreat was held in Canmore on the March 7-9, 2008 weekend. The Retreat Theme was medical worklife balance and keynote speakers were Drs. M. Gautam, University of Ottawa, and Dr. Jane Lemaire, University of Calgary.
PHYSICIAN WELL BEING

Following the success of the Seeking Balance study where physician wellness was researched and promoted, a new project, the WELL DOC? initiative was launched. WELL DOC? is a series of modules based on physician ideas from the Seeking Balance study.

The goals of the WELL DOC? initiative are to promote and facilitate physician wellness and to educate physicians, health care administrators and the public about its importance. Our philosophy is definitive: that research should lead to change.

The first module explores Physician Nutrition and Cognition in the workplace and our team includes Dr. Delia Roberts PhD in Exercise Physiology, Kelly Dinsmore a current Masters student studying exercise physiology and Professor Jean Wallace from the Department of Sociology.

This module is structured as a pilot study exploring the association between physician nutrition and cognitive function during the work day. We had hoped to recruit 15 – 20 physicians for the study and within two and a half days we had thirty volunteers and turned many more away.

Entry interviews with the 20 physician participants indicated that almost all physicians describe having difficulty accessing proper nutrition during the work day. A number of physicians described how “getting the job done, patient care comes first” and their sense of professionalism are barriers to eating and drinking well.

Other major barriers identified included lack of time to stop and eat, lack of convenient access to food and limited food choices. Further data analysis will help us understand how to optimize nutrition for health care providers.

In other events, our Alberta Heritage Foundation for Medical Research funded study entitled Determinants of Physician Wellbeing is well underway and includes as team members Dr Jean Wallace, Dr Jane Lemaire, Dr William Ghali, Dr Dave Megran, Dr Maeve Obeirne, and Dr Todd Watkins.

Initially we identified burnout rates of over 30% in our Department of Medicine members. Now, we are pursuing greater analysis to understand the positive and negative determinants of physician wellness.

- What contributes to stress and burnout?
- What contributes to job satisfaction in our profession?
- What sustains the negative aspects?
- How do our attitudes towards personal and workplace wellness affect our ability to care for others?
- Are there gender differences in how we cope with stress?
- What is the link between physician wellness and patient care?

We have completed 42 physician interviews, 32 spouse interviews and 44 job shadows. We constructed a survey based on this qualitative data and received an impressive response rate of 40% return.
Preliminary data analysis of various findings were submitted as abstracts to an international conference on physician well being that will be held in London, England in November 2008, along with two papers and three posters that have been accepted for presentation.

As our studies continue on in understanding this topic, more questions arise.

- How do we integrate physician wellness into the culture of medicine?
- How do we engage physicians, those responsible for physician workplaces and the public in recognizing the importance of physician wellness?
- How do we implement change in a gradual responsible and accountable way?

Lastly, how do we harmonize our diverging goals of achieving work/life balance while maintaining professional autonomy, self regulation, and honor our contract with society and the patients we serve?

We would like to express our gratitude to all physicians who participated as well as the leaders within the Calgary Health Region and the University of Calgary. Your partnerships are invaluable in assisting us in attaining our goal of improving physician workplace wellness.

Submitted by:
Dr. Jane Lemaire, Vice Chair, Physician Wellness and Vitality, DOM
Medical Access to Service

There are three critical needs driving the design of the Medical Access to Service Project: 1) an aging and complex medical population and the burden of chronic disease; 2) challenges with access to services by primary care physician; and 3) the complex organization of health service delivery and how the referral process sub-optimizes system navigation.

**Creation and/or standardization of Central Intake Systems across most specialized medical services:**

The Central Intake clinics have been working together to develop standardized processes. The key changes to process, as a result of the Medical Access Project work, are:

- The introduction of a single, standard, flexible referral form, replacing a number of existing separate forms.
- Increased flexibility in that the format of the referral submission is not important, as long as all of the required information for the relevant specialty is included, and the patient’s requirements for care are specified.
- Standard processes and target times, including acknowledging receipt of referrals within two days, triaging referrals within seven days of receipt, and clarifying responsibilities for arranging tests for triage and consultation. In addition, contact to inform the patient about a specialty consultation booking is the responsibility of the specialty clinic. A communication strategy regarding the change in process will be directed to physicians throughout the rest of 2008.

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Team</th>
<th>Scope</th>
<th>Staff hired</th>
<th>Launch</th>
<th>Strategies /Progress /Achievements to March 31, 2008</th>
</tr>
</thead>
</table>
| General Internal Medicine (GIM) | Steve Duncan Rhonda DeMarco Dr. Cook | Specialists from General Internal Medicine (GIM) at UMC and RGH participate. GIM Specialists from all three adult hospital sites attend in the GIM Urgent Assessment Clinic. | 1.5 Triage Clinician 1.0 Clerk | October 2007 | - All urgent referrals are triaged through central intake.  
- Other non-urgent referrals are triaged or directed directly to Specialists as required |
| Hematology              | Karen Valentine Kathy Cassidy Rhonda Demarco | Nine out of 13 Hematologists (FMC) and one Hematologist from PLC participate. | 1.0 Triage Clinician 1.0 Clerk | April 2008 | - Hired and trained 1.0 FTE Nurse Clinician for Triage January 2008  
- Developed Patient Data base for Hematology Central Triage Evaluation and Hematology Patient Management  
- Development and Divisional Approval of Triage Categories and Maximum wait time bench marks for Hematology  
- Development of Workflow management Process for Hematology Central Triage process.  
- Launch plan developed for April 2008 |
| Endocrinology           | Norm Wong Alan Edwards Jane Garratt Jodi Glassford Leslie Antymis | All Specialists from Endocrinology at FMC participate. | 1.0 Triage Clinician 2.0 Clerk | July 2008 | - Training plan developed for triage nurse  
- Full launch planned for July 2008 |
| Respiratory             | John Chan Alan Tremblay Doug Helmersen Linda Sutherland | All Specialists from Respiratory Services participate. | 2.0 Triage Clinician 1.0 Clerk | March 2008 | - Physician lead /Manager planning for phased implementation with plans in place for implementation at PLC in April 2008; RGH and FMC to follow in the fall |
| Cardiology              | Maureen Stewart Carol Connolly Leslie Jackson-Carter David Goodhart Shauna Wilkinson | Central Intake for all urgent cardiac referrals within the Calgary Health Region catchment area | 1.0 Triage Clinician 1.0 Clerk | March 2008 | - February 2008, accepting only urgent chest pain referrals from all Calgary city Emergency Departments (ED) and Urgent Care Centres (UCC)  
- Chest pain referrals seen in a new chest pain clinic run by Cardiology Consultants with rapid access to tests, assessment and diagnosis for chest pain patients  
- March 2008 expanded to accept urgent non-chest pain from all Calgary city ED & UCC as well as chest pain  
- Assistance to redirect some routine referrals where no current referral patterns exist or there is no previous cardiologist of record  
- Urgent non-chest pain referrals seen in dedicated slots provided by a number of general cardiology clinics across the region  
- Working collaboratively with the Cardiac Access project |
Implementation of AIM (Access Improvement Measure) collaborative to improve access and efficiency:

The first collaborative started in October, 2008 with 13 specialty and family physician clinics participating. Partnership with Primary Care Networks has contributed to a successful collaborative scheduled to finish in November, 2008. Time to third next available appointment and cycle time are being used to help clinics address and measure their patient wait times. Recruitment for the second collaborative will begin early in 2008, which is planned to begin in September 2008.

Development and piloting of a service model for patients with chronic complex needs:

This is a highly supported clinic based approach to enhance access to specialized medical services for patients with a history of multiple inpatient admissions and complex chronic needs. The clinic was piloted at PLC in January 2008 with official clinic launch on March 17, 2008. The clinic is staffed by an interdisciplinary team of 14 Internists and Hospitalists, two clinic nurses, with representation from pharmacy, social work, respiratory therapy, and nutrition services. In addition, the clinic has partnered with Community Accessible Rehab (CAR) for rehabilitation services. Direct referrals from inpatient units and the emergency department at PLC are currently being accepted.

Development of a Referral Management strategy:

The vision for clinical electronic systems within ambulatory care is to support integration and enhanced continuity of care through evolution of one person – one record, the provision of role based access and the availability of contextually relevant clinical data to providers from multiple locations. The architecture must enable the ambulatory clinics to communicate effectively with primary care in the management of referrals and ongoing communication on patient care.

The Referral and Access Management Project is the piece of the ambulatory architecture that specifically supports the exchange of information between pieces of the care continuum (i.e. the referral process). Currently, all implementation work has been 'low tech' with paper referrals and rudimentary referral tracking databases. This approach has allowed the clinics to mature their Referral & Access Management processes, and they are now in a strong position to define the requirements for an IT solution to facilitate this process. There are four major requirements included in the scope of a Referral & Access Management solution:

1. Common definition and single repository of referral requirements to provide consistent communication to referral sources (e.g. Family Physicians) regardless of channel.
2. Facilitation of the electronic exchange of information between EMR’s and Clinical Application Systems (CIS) and storing the unedited (original) referral form as submitted by the referral source.
3. Decision Support tools to assist in administrative screening activities and possibly well defined clinical triage elements.
4. Tracking tool (similar to FedEx package locator tool) to provide status of referrals (e.g. received, triaged, expected appointment timeframe, scheduled dates) to the referral source and eventually patient.

Recruitment and planning for Phase 1: Business Requirements for Referral & Access Management Solution – Medical Access to Services began in March 2008 with a completion goal of March 2009.

Next steps:

The Medical Access to Service project funding ends in March 2009. Evaluation has been ongoing and a final report will be submitted to the Alberta Health and Wellness (AH&W) Waitlist Steering Committee, and other stakeholders, in June 2009. Through the 2008/09 fiscal year, sustained budget requests for the individual projects will be submitted. Delay in progressing the development of a referral management strategy due to re-organization of the health region have required a request for extension of the Referral Management project through AH&W.
GLOBAL AND NATIONAL IMPACT

The Department of Medicine members contribute significantly nationally and globally, impacting care at all levels.

Dr. Man-Chiu Poon is the consultant for the World Federation of Hemophilia Country Program for China. His ongoing work on promotion of hemophilia care since 1993 continues. Starting with twinning relationships with clinics in Tianjin, Guangzhou and Shanghai there is now a collaborative network of 6 centres involved in 5 projects. These projects include a registry, laboratory diagnosis, nursing physiotherapy, prophylaxis and are supported by external grant funding from Canada and elsewhere. Infrastructure training and working with patient groups have led to the 6 centres becoming sufficiently mature to being outreach education programs to cover other areas of China. The program will proceed to become a World Federation Hemophilia country program within the next 2 years.

Dr. Jane Lemaire continues her assistance and knowledge in restructuring Undergraduate and Postgraduate programs for future Laos physicians.

Dr. Gordon Ford spent 8 months as a visiting professor in Australia, New Zealand and Canada. While on his journey, he wrote two research grants and interacted in research seminars with Drs. Christine Jenkins and Iven Young in respiratory physiology. At the Gold Coast, Queensland he attended the Asia Pacific Society of Respirology annual meeting. Interactions of knowledge, research were all shared during this 8 month journey.
Dr. Naushad Hirani worked in pulmonary hypertension at the University of Bologna. He participated in the day to day management of the most complex patients with pulmonary hypertension. Contributions from Dr. Hirani, included 4 research manuscripts and presentations of abstracts at the 2007 American Thoracic Society meeting. He also obtained a Master’s degree in Pulmonary Vascular disease through the University of Bologna under the supervision of Professor Gaile.

Dr. Charlene Fell attended the University of Michigan and worked in the area of interstitial lung disease. Her creation of a database for analysis of patients was reported at the 2007 American Thoracic Society meeting.

Dr. Peter Sargious while on sabbatical in Melbourne, Australia was requested to prepare a commissioned report by the Conference Board of Canada, on behalf of Health Canada. The report focused on the state of Chronic Disease Prevention and Management in Canada, following completion of the $800M Primary Health Care Transition Fund in 2006. He was also invited to address the international collaboration in Chronic Disease Management at the inaugural SGIM International Symposium in Toronto.

The above contributions are a sample of our members in the Department of Medicine who continue to impact healthcare on an international level.
<table>
<thead>
<tr>
<th>Member/Faculty</th>
<th>Division</th>
<th>Impact/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richard Haber</td>
<td>Dermatology</td>
<td>Co-Chair Dermatology Examination Committee, RCPS</td>
</tr>
<tr>
<td>David Hanley</td>
<td>Endocrinology</td>
<td>President, Canadian Society of Endocrinology and Metabolism</td>
</tr>
<tr>
<td>David Lau</td>
<td>Endocrinology</td>
<td>President, Obesity Canada</td>
</tr>
<tr>
<td>Ron Bridges</td>
<td>Gastroenterology</td>
<td>President, Canadian Association of Gastroenterology</td>
</tr>
<tr>
<td>Remo Panaccione</td>
<td>Gastroenterology</td>
<td>Co-Chair, Canadian Association Basic Science Lecture Series</td>
</tr>
<tr>
<td>Maria Bacchus</td>
<td>General Internal Medicine</td>
<td>Chair, RCPSC Internal Medicine Oral Examination Board</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vice President, Education, Canadian Society of Internal Medicine</td>
</tr>
<tr>
<td>Norm Campbell</td>
<td>General Internal Medicine</td>
<td>Co-Chair, Canadian Heart Health Strategy &amp; Action Plan</td>
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<td>Chair, Canadian Hypertension Education Program</td>
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<tr>
<td>David Hogan</td>
<td>Geriatrics</td>
<td>Chair, Brenda Strafford Foundation</td>
</tr>
<tr>
<td>Robert Card</td>
<td>Hematology</td>
<td>Chair, Association of Hemophilia clinic Directors of Canada</td>
</tr>
<tr>
<td>John Conly</td>
<td>ID</td>
<td>Chair, Canadian Committee on Antibiotic Resistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vice-Chair, CEDAC, Common Drug Review</td>
</tr>
<tr>
<td>Brenda Hemmelgarn</td>
<td>Nephrology</td>
<td>Member, Board of Directors, Canadian Organ Replacement Register Advisory Committee</td>
</tr>
<tr>
<td>Marvin Fritzler</td>
<td>Respirology</td>
<td>Co-Chair, Planning Committee, Seventh International Symposium on Auto antibodies</td>
</tr>
<tr>
<td>Stephen Field</td>
<td>Respirology</td>
<td>Chair, Canadian Thoracic Society</td>
</tr>
<tr>
<td>Liam Martin</td>
<td>Rheumatology</td>
<td>Chair, Canadian College of Academic Rheumatologists</td>
</tr>
</tbody>
</table>
RESEARCH HIGHLIGHTS

- 436 ARTICLES editorials and invited reviews published in peer reviewed journals
- 54 ARTICLES published in non-peer reviewed journals
- 333 ABSTRACTS published
- 80 BOOKS and book chapters published
- 385 PRESENTATIONS (invited)
- $19.6 Million in research grants, clinical trials and industry sponsorship

MEDICAL LEADERSHIP AND ADMINISTRATION

- Dr. Jonathan Yau, New Site Leader, Rockyview General
- Dr. Maria Bacchus, Deputy Head, Vice Chair, Strategic Planning and Clinical Affairs, Site Leader, Foothills Medical Centre
- Dr. Elizabeth MacKay, Site Leader, Peter Lougheed Centre
- Dr. Jane Lemaire, Vice Chair, Physician Wellness & Vitality
A W A R D S

ENDORCINOLOGY

Dr. Greg Kline  2007 Research Award, Adjunct and Clinical
Dr. Hanan Bassyouni  2007 Letter of Excellence Outstanding Clerkship Teaching CMSA
Faculty, Faculty of Medicine
Dr. Otto Rorstad  2007 Professionalism Award, University of Calgary
Dr. Lois Donovan  2007 Fifteen Year Long Service Award
Dr. Gregory Kline  2007 Gold Star Award in Undergraduate Medical Teaching

GASTROENTEROLOGY

Divisional Award  2007 Quality Improvement and Patient Safety Award
Dr. Kelly Burak  2007 Gold Star Award
Dr. Kelly Burak  2007 McLeod Distinguished Achievement Award for Teaching
Dr. Kelly Burak  2007 Excellence in Clinical Education Award
Dr. Sylvain Coderre  2007 CAG Young Educator Award
Dr. Sylvain Coderre  2007 Gold Star Award
Dr. Shane Devlin  2007 Teaching Award
Dr. Jose Ferraz  2007 Research Award
Dr. Jennifer Jones  2007 Research Award
GASTROENTEROLOGY
Dr. Remo Panaccione  2007 Gold Star Teaching Award
Dr. Mark Swain  2007 Research Investigator Award
Dr. Rostom  2007 PGME Research Supervisor Award
Dr. Rob Myers  2008 Senior Clinical Investigator Award

GENERAL INTERNAL MEDICINE
Dr. Norm Campbell  2007 Leadership Award in Heart Healthy Policy
(Heart & Stroke Foundation)
Dr. Sharon Straus  2007 CIHR Tier 2 Canada Research Chair
in Knowledge Translation
Dr. Maria Bacchus  2007 Presentation Award, AFMC Medical Education Conference
Dr. Sharon Straus  2007 Health Scholar Award, AHFMR
Dr. Sharon Straus  2007 Watanabe Distinguished Achievement Award
University of Calgary
Dr. Richard Dear  2007 Dr. Howard McEwan Award Clinical Excellence
Dr. Maria Bacchus  2007 Silver Finger, IM Residency Program Teaching Award
Dr. Sharon Straus  2007 Rookie of the year, IM Residency Program Teaching Award
Dr. Troy Pederson  2007 Repeat Offenders, IM Residency Teaching Award
Dr. Fiona Dunne  2007 Outstanding Clerkship Teaching Award
Dr. Bill Ghali  2007 Outstanding Clerkship Teaching Award
Dr. Partha Datta  2007 Outstanding Clerkship Teaching Award
Dr. Sharon Straus  2007 Outstanding Clerkship Teaching Award
Dr. Ghazwan Altabbaa  2007 Rockyview General Hospital Residents
Clinical Preceptor Award

GERIATRICS
Dr. David Hogan  2007 Distinguished Service Award, Canadian Geriatrics Society

HEMATOLOGY AND HEMATOLOGIC MALIGNANCES
Dr. Deirdre Jenkins  2007 CMSA Letter of Excellence in Teaching
Dr. Farzana Sayani  2008 Gold Star Teaching Award Class University of Calgary

INFECTIOUS DISEASES
Dr. Andrew Pattullo  2007 GIM Teaching Award, Department of Medicine
Dr. Harvey Rabin  2007 Dr. John Dawson Award Clinical Excellence
Dr. Ron Read  2007 Excellence in Clerkship Teaching Award, Department of Medicine

NEPHROLOGY
Dr. Sophia Chou  2007 Medical Science Program Specific Award, University of Calgary
Dr. Brenda Hemmelgarn  2007 CIHR New Investigator Award
Dr. Brenda Hemmelgarn  2007 AHFMR Population Health Investigator Award
Dr. Brenda Hemmelgarn  2007 Cochrane Distinguished Achievement Award
RESPIROLOGY

Dr. Martha Ainslie  2007 Golden Bull, IM Residency Program Teaching Award
Dr. Karen Rimmer  2007 Life Balance Award
Dr. Gordon Ford  2007 Terry Groves Award for Clinical Excellence
Dr. Martha Ainslie  2007 Golden Bull Award for Medical Teaching
Dr. Kris Fraser  2007 CAME Certificate of Merit, CAME
Dr. Alain Tremblay  2007 Innovation Award, Department of Medicine
Dr. David Stather  2007 ACCP Sarcoidosis Research Foundation

RHEUMATOLOGY

Dr. Marvin Fritzler  2007 Research Mentor Award, University of Calgary
Dr. Liam Martin  2007 Gold Star Teaching Award
Dr. Christopher Penney  2007 Clinician Teaching Award, The Arthritis Society of Canada
Dr. Christopher Penney  2007 Small Group Teaching Award
Quality Improvement, Patient Safety, Patient Advocate, Clinical Decision Support and Health Informatics Annual Report for 2008

Elizabeth MacKay, Judy Pederson, Gordon Kliwer, Munira Jessa, David Chakravorty, Jayna Holroyd-Leduc

The last year has been predominantly focused on the GRIDLOCC projects and implementation of the Safety Reporting System as well as ongoing work with SCM on decision support activities and our performance measurement framework development. To enhance communication and integration of various activities and priorities the Medicine Quality Council was reconfigured with membership and terms of reference to bring all of the key players in Quality and Safety together with the Directors and Site Chiefs. The new Council includes: Quality Improvement Physicians and Consultants for Internal Medicine and Acute Care Family Medicine, Clinical Safety Leader for Medicine, Patient Advocate for Medicine, Health Informatics Physician for Internal Medicine, Manager of Information, Evaluation and Clinical Decision Support, Directors of Medicine and 3 site chiefs of medicine. In addition to the new Council, a review and inventory of present QI/QA/Clinical decision support and patient safety projects was undertaken with the plan to share with medical services and departmental members via the departmental shared drive as well as with the greater regional staff via the internal website.

GRIDLOCC /Visual Trigger Discharge LEAN Project

The frontline staff from Patient Care Unit 43 were able to participate in a GRIDLOCC visual trigger discharge LEAN project during the past winter. GE consultants lead and taught the methodologies for this LEAN process of improving flow in the value stream (client journey) and eliminating waste. The LEAN team included front line nurses, unit clerks, a nurse’s aide, a social worker, a PT, an outpatient pharmacist, physicians, patient’s family member and transition services rep. This team identified that there was waste in the discharge process that translated into delays in bed turnover, and frustration among staff, physicians, patients and families with the discharge process. A simple visual management tool was used to provide (relevant) easily-accessed information about the patient’s discharge status that involved the entire multidisciplinary team.
**Figure 1**: Planned and Unplanned Discharges Pre- and Post- Implementation of LEAN initiative on Unit 43 at PLC

<table>
<thead>
<tr>
<th>Pre-improvement</th>
<th>Post improvement</th>
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<tbody>
<tr>
<td><strong>Pre-Kaizen UNIT 43 LEAN Project</strong></td>
<td><strong>Post-Kaizen UNIT 43 LEAN Project</strong></td>
</tr>
<tr>
<td>64%</td>
<td>100%</td>
</tr>
<tr>
<td>Planned D/C</td>
<td>Planned D/C</td>
</tr>
<tr>
<td>Unplanned</td>
<td>Unplanned</td>
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A visual tool was used to identify a simple solution whereby different colored stickers were placed on a patient’s chart, letting unit staff know where the patient was in the discharge process. The stickers not only helped improve communication between team members but also improved communications with the patient.

The Visual Trigger Discharge LEAN Project has now been spread to several units and may be integrated into a larger regional project sometime next year.

**Figure 2**: Example of the Visual Trigger Tool to enhance Discharge Planning

- Physician assessment of current status of patients stability and readiness for discharge planning
- Involvement of Multi-disciplinary team and status of discharge plan by their group
**Medicine Admission/Consultation Project**

The department of medicine has also been engaged in the quality improvement project that is designed to reduce the time from internal medicine consult request to admission request to 120 minutes or less 80% of the time by March 30, 2009. The project was started by evaluating a QSHI data report that clarified that although there was some good correlation between REDIS and chart data on consultation and admission times, there was a substantial documentation gap in charting of times that consultants arrive and process admission requests. Internal medicine consultants continue to participate in data collection to help identify specific causes for delays and to better understand process steps. Internal medicine residents have also started to use the admission guidelines template to help document any admission obstacles and record process times to determine if communication using a preliminary order set (Figure 6) expedites admissions to the unit.

**Figure 4.** Gridloc cc Decision to Admit Times for Internal Medicine, All sites

**Data analysis** has revealed that many of the delays associated with the consult request to admission project were related to process issues and due to the complexity of the patients been seen by the internal medicine residents (Figure 5). Data analysis also identified that other process participants such as emergency department and ICU would also benefit from participating in the improvement process. These departments have been invited to engage in process mapping and to learn about and implement various LEAN visual tools to assist in improving this process.
Admission Guidelines were developed for each of the key admitting services including Internal Medicine and Hospitalists. These are available to the ED staff on their website and are intended to facilitate identifying the best possible first admission consultation as well as other possible admission services when the best possible service is not available (Figure 7).
Patient Safety

The Calgary Health Region's safety policies and procedures were successfully communicated with frontline staff members via Safety Awareness fairs, and through the use of safety ambassadors. Medical services hosted the safety fairs at the PLC and Richmond Road Diagnostic Treatment Centre where approximately 300 staff members attended in total. The safety ambassadors were staff members who had a keen interest in patient safety. Making use of in-services and unit based training programs, the safety ambassadors shared the policies and procedures with over 600 medical services staff members.
The Medical Services Clinical Safety Committee continues to actively investigate serious adverse events and close calls that occur within the Department of Medicine in both the inpatient and outpatient setting. The group consists of physicians, patient care managers, educators, administrators and quality/safety consultants. It analyzes systemic issues as they pertain to negative outcomes or close calls, and provides recommendations for system improvements. Examples of recommendations include prioritization of an Argatroban Order Set, and training and availability of portable suction and prioritization to implement 'medical air' recommendations.

The Safety Learning Reporting (SLR) System was launched through the Calgary Health Region in March of 2008. The system provides an electronic means for staff members to report harm events, close calls, and hazards. The SLR system has been very well received by staff members, and it is expected that positive changes will result from issues and trends identified in the system. We will be analyzing the trends in reporting over the next 6 to 12 months to identify themes or potential QI initiatives. In addition, we continue to take part in the Regional Medication Reading Group to identify trends in the area of medication safety.

Performance Measures
Work on the development of Performance Measures has been ongoing through the year. A steering committee was established with representation from both the Clinical and Operational components representing Department of Medicine, Medical Services and Family Medicine Acute Care. The Alberta Health Quality Council’s Quality Matrix for Health is the framework being utilized to ensure a balanced approach to Indicator selection and Indicators have been selected within each of the Dimensions of Quality for ongoing development and monitoring (Figure 8).
### Figure 8. Current Medicine Performance Measures Based on Alberta Health Quality Council Quality Matrix

<table>
<thead>
<tr>
<th>Dimensions of Quality</th>
<th>Acceptability</th>
<th>Accessibility</th>
<th>Appropriateness</th>
<th>Effectiveness</th>
<th>Efficiency</th>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Better Care related to acute illness or injury.</td>
<td>Rating of Physician: How often did physicians explain things in a way you could understand? Pain control. Follow up on concerns and observations. Rating of nursing care: Follow up on concerns?</td>
<td>1) Time from consult Request to bed request in ED. 2) Time from bed request to discharge from ED. 3) ALC Days. 4) ALC Patients 5)Occupancy</td>
<td>VTE Prophylaxis use</td>
<td>1) Health Care Related VTE rates. 2) Readmit rates. 3) Mortality rates</td>
<td>1) Length of stay.</td>
<td>1) Falls 2) Medication and oxygen errors. 3) Cdiff/VRE, MRSA 4) Med reconciliation 5)Pain management</td>
</tr>
</tbody>
</table>

Accountability for each of the selected indicators has been established with the setting of targets and, where possible, benchmarks currently taking place.

**Current status:**
- Acceptability – In collaboration with other Departments utilizing the Region Patient Feedback tool (H- CAPHs) a User Group has been established. Questions asked of patients have been modified to better enable the departments to identify focus areas for potential improvement strategies.
- Accessibility – GRIDLOCC projects, newsletters
- Appropriateness – Awaiting necessary reporting from SCM
- Effectiveness – Identification of prioritized disease groups for readmit rates is ongoing, includes work in areas of COPD, CHF, Diabetes.
- Safety – The Regions new reporting system will facilitate improved reporting in this area. In collaboration with IP&C reporting is being developed to address the CDiff/VRE/MRSA rates.

**'Next Steps':**
Areas of focus for the next year will include increased reporting from the Out-patient areas including the Medical Access project and the impact on the acute care areas.
We are building capacity within our areas to report from the SCM system which will facilitate ‘real time’ reporting in many areas.
Decision Support
Clinical Decision Support continues to develop the Clinical Practice Guideline website. An inventory of
the guidelines currently available on the website was completed which included the identification of
'ownership' of each of the guidelines. A number of new guidelines have been added to the website over
the year.
In collaboration with the Health Informatics physician, an inventory of new order sets entered in SCM is
being established which will include required information for order set inclusion as well as a process for
evaluation and review of order sets for both new and existing.

Office of Patient Relations
In compliance with the Alberta Patient Concerns Resolution Process Regulation and the Alberta
Ombudsman Act, the Region has been working diligently on the development of new processes for
reviewing, receiving and responding to concerns about Regional care, facilities or services.
A new Patient Concerns policy, brochure, and updated web-resources, are being implemented across the
Region to provide employees - as well as patients and families - with a set of valuable resources. The
Patient Concerns policy strengthens the Region's standard of care by engaging patients and their families
throughout the concerns process. Moreover, accountability and transparency are key components of the
process, while providing frontline staff the flexibility to de-escalate issues before a matter becomes a
formal concern. The concerns process has been developed to work concurrently with the relevant dispute
resolution process in the applicable professional bylaws.
During the fiscal year, 2195 patient concerns were responded to through the Region's Office of Patient
Concerns (now referred to as the Office of Patient Relations). Of those, 156 were categorized under the
umbrella of Medical Services. The accompanying chart reflects the key issues identified in the Medical
Services' concerns. The Office of Patient Relations is currently using the Respond database system, and
in the future, there is the possibility of bringing the Datix database system (currently used by Clinical
Safety) online to enhance the reporting capability of the Office of Patient Relations.
Figure 9. Categories and Volumes of Patient Concerns Identified in Medicine in 2007/2008

Clinical Informatics Activities within the Department of Medicine
Dr. Jayna Holroyd-Leduc is the Department of Medicine MD lead in clinical informatics. In this role she represents the department’s interests on the SCM Core Clinical Design Team (CCDT) and also at the Clinical Informatics Quarterly meetings. Dr. Elizabeth Mackay also attends the CCDT meetings as a Quality Improvement physician. Their participation on CCDT helps ensure that relevant issues around patient safety and quality of care that arise as the result of SCM utilization are identified and prioritized for repair. Specific examples have included the resolution of issues around the recording of blood sugars on the SCM clinical summary view and the improvement of several order sets utilized by department members as well as developing a prioritization for Order set Requests (Figure 10). They also took part in the development of the Order Review function to replace the previously problematic automatic stop order function that was causing important orders to fall off of the active orders leading to patients not receiving important therapies such as anticoagulants, antibiotics or psychotropic medications.

Department members submitting an order set to SCM are now required to demonstrate that the order set is evidence-based and that there is a plan to keep it up-dated as evidence changes. This initiative is supported by the CDS team within Medicine. Dr. Holroyd-Leduc is leading a CHR funded initiative to evaluate an evidence-based clinical decision support (CDS) application developed for SCM to help reduce delirium in hip fracture patients. This project is a collaboration between geriatrics and orthopedics. If effective this application could be expanded to other populations.

Dr. Holroyd-Leduc also represents the Department of Medicine and the Calgary Health Region on the Alberta Netcare pHIE/Portal Clinical Working Group. Her participation in this group includes acting as the co-chair of the CDS sub-committee responsible for determining the role of CDS applications within Netcare.
A number of Department and portfolio members involved with Quality Improvement and Patient Safety took part in courses including Health System Safety Analysis and Conflict Resolution as well as additional training in the use of SCM for quality and safety initiatives. Additional training in the area of Critical Conversations has been prioritized for the upcoming year. The 1st year medicine residents took part in the annual QI and patient safety workshops given by the Medicine QI physician and Consultant.
Division of Dermatology
Division Chief – Dr. Rick Haber

Administration

The Division of Dermatology consisted of 3 full time ARP members and 14 members in community Dermatology practice.
Dr. Gilles Lauzon joined the Division in March of 2007.
Dr. Regine Mydlarski returned from maternity leave in March and was an invited member of the CIHR Skin Health Research Priority Workshop.
Dr. Parsons coordinated the Undergraduate Dermatology teaching for MDCN-360 and organized the Division of Dermatology Journal Club. She also organized monthly wound care rounds and was a leader of a regional best practice sub-committee on wounds.
Dr. Haber continued as the English Co-Chair of the Dermatology Examination Committee of the Royal College of Physicians and Surgeons. He is also the Medical Telehealth Advisor for the Department of Medicine, while serving on the Medical Services Executive Council, ARP Management Committee and acted as a reviewer for the ARP Application Review Committee.

Clinical

Dr. Regine Mydlarski continues to run 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 the Calgary Health Region, Western Canada, Central Canada and parts of the United States. As well, she continues with the dermatology solid organ transplant clinic in conjunction with the Southern Alberta Transplant Program, providing dermatologic assessment of high risk patients.
Dr. Parsons established three patch test clinics per week, participated in three multi-disciplinary wound care clinics and one general dermatology clinic per week. She was also involved with wound care telehealth sessions.
Dr. Haber conducted two general dermatology clinics, one pediatric dermatology clinic and one dermatology telehealth clinic per week.
Research

Dr. Mydlarski continued to do dermatologic basic science research with a special interest in autoimmune bullous diseases, connective tissue diseases and GW bodies in the skin (also known as mammalian P-bodies).

The Division published four peer reviewed publications, four non-peer reviewed publications and one abstract.

Education

The Division ran a dermatology elective program for Internal Medicine residents with a resident in every one of thirteen blocks. They also supervised elective undergraduate medical students, clerks, family medicine residents and other medical residents (including medical genetics). The Division sponsored the Second Annual Day in Dermatology CME in October 2007 and was attended by 70 family physicians.

Dr. Parsons acted as a co-coordinator for the Undergraduate Medical School dermatology component of MDCN-36-(Musculoskeletal, skin and special senses). Both Dr. Haber and Dr. Parsons lectured to the Undergraduate Medical Students in MDCN-360.

Three other divisional members along with Drs. Haber and Parson facilitated small group dermatology teaching sessions for students in MDCN-360. Dr. Todd Remington, Dr. Catherine Zip and Dr. Derek Wooner all contributed to various small group teaching.

Division members attended six invited presentations with Dr. Parsons presenting at Medical Grand Rounds September 2007.

Challenges

The delays in relocating to the new dermatologic clinics and Mohs surgical procedure rooms at the Richmond Road Diagnostic and Treatment Centre affect the division’s ability to offer new regional services (Mohs surgery and ultraviolet therapy) and expand our current clinical services. Hopefully, this move will occur in 2009 and without significant further delays as these new facilities will enable the division to better serve the people of southern Alberta.

Expansion of dermatology consult service to the South Health Campus in 2011 remains a challenge due to the distance our division members need to travel to perform these consultations.
Future Directions

The recruitment of Dr. Habib Kurwa from London, England as a Mohs surgeon in a major clinical position will be a tremendous asset to the division both in terms of treating patients with difficult skin cancers as well as teaching dermatologic surgery.

The division intends to establish a Dermatology Residency Program at the University of Calgary. Plans are underway to apply for a Carms dermatology residency position in 2010. Establishing a dermatology residency training program in Calgary is supported by the members in the Division of Dermatology, the head of the Department of Medicine and the dermatopathologists in Calgary.

Dermatology telehealth consultations will be expanded to include the Siksika Reservation Health and Wellness Centre. We look forward to a beneficial relationship with this First Nation facility.

With a new clinical area the Richmond Road Diagnostic and Treatment Centre, the Division of Dermatology is hopeful of recruiting another full-time ARP dermatologist over the next 1 -2 years.
Division of Endocrinology and Metabolism  
Division Chief – Dr. Alun Edwards

Administration

Our Division members are involved in various areas of administrative work. Service administration continues to be met by Drs. Charlotte Jones, Lois Donovan and Alun Edwards related to the DHCC (Diabetes Hypertension and Cholesterol Centre). Dr. David Hanley and Dr. Gregory Kline continue their involvement in the Osteoporosis clinic, while the Endocrine testing unit is under the administration of Dr. Bernard Corenblum. There is increasing demand and commitment required in these areas of chronic disease management. The Division has 17 members with 4 members working part-time. The total effective FTE remains at 13.9.

Clinical

All clinics support attendance of medical trainees at all levels including non-regional private offices. City wide hospital consultation service is available and SARCC makes use of on-call endocrinology to provide advice to practitioners in rural areas.

<table>
<thead>
<tr>
<th>Dimensions of Quality</th>
<th>Clinic</th>
<th>Key Personnel</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>Diabetes, Hypertension and Cholesterol Centre, Osteoporosis Centre, Endocrine testing unit, TBCCs Thyroid Cancer and Neuroendocrine Tumor clinics, UCMC Clinics (FMC and PLC)</td>
<td>Entire Division</td>
<td>↑ of 50% in referral rates to all clinics</td>
</tr>
<tr>
<td>Access</td>
<td>Consultations - 9000</td>
<td>Entire Division</td>
<td>↑ 11,400 follow-up visits</td>
</tr>
</tbody>
</table>

Clinical Leadership:

- Dr. Charlotte Jones,
  - Medical Director, CHR Vascular Risk Reduction Clinic
  - Medical Director, Hypertension Cholesterol Centre

- Dr. Gregory Kline
  - Associate Medical Director, Foothills Osteoporosis Centre, University of Calgary
  - Medical Staff, Calgary Health Region and Tom Baker Cancer Centre

- Dr. David Lau, Director, Weight Management Program
The majority of the clinical service delivery is in ambulatory care at acute care sites. The Division provides telephone support for consultation with primary care physicians, allied health professionals and patient consultations. The patient follow up issues relate to biochemical and radiologic investigations providing management support for the growing population with chronic diseases.

**Research**

Progress in research endeavors were made in 2007 by members of the Division. Members were named on 43 peer-reviewed, 10 non-peer reviewed publications and 3 book chapters. Division members are investigators in research funding endeavours to a total of $2.7 million. Our principal grant holders include Drs Ronald Sigal, David Hanley, David Lau and Norman Wong. These members also have direct supervisory roles with graduate trainees.

**Education**

“One of our many programs”

**Education**

The integration of health-care projects and teams such as at the DHCC is leading to improved patient education and awareness of chronic disease management.

After diagnosis, usually by a family physician, patients with diabetes have more resources available to them than ever before. These resources include community programs such as Living Well with a Chronic Condition and Row Your Own Boat, the DHCC diabetes educators, psychology and social work consultations. Education includes creating or supplementing diet regimen, developing customized physical fitness programs or learning net technologies such as blood glucose meters for diabetes patients.
Division members are active in public education, and important disorders such as obesity, diabetes, hypertension and osteoporosis. Medical school classes continue to increase and are being accommodated by all division members in teaching undergraduate students. The receipt of several applications for training from outside Calgary is testament to the strength of the training program, under the skillful leadership of Dr. Chris Symonds. The Division’s primary role in Course IV at the University of Calgary has met with change and increased workload as the class size increases. Until the availability of space at RRDTC is met, medical students are significantly hampered by restricted access to clinic space at UCMC-FMC. Several Division members contribute to bedside clinical teaching, clerkship and resident seminars.

Innovations

Clinical innovations will become focused on the application of the Central Triage system with the expectation that this will improve referral efficiency, reduce wait times and direct referrals appropriately. An innovation project to assist in hospital discharge for patients with diabetes (currently 25% or more of all hospital discharges) awaits determination of funding by Alberta Health. The number of achievements is noteworthy as our relatively small Division continues to provide clinical care with innovation while meeting the increasing educational needs.

Challenges

Plans to relocate DHCC and other endocrine services to RRDT are at various stages of progress, mostly related to budget dependency. Many Division initiatives in clinical service, innovation, education and clinical research are heavily dependent on this geographic move. Administratively, the recruitment of a Medical Director for diabetes services is crucial as this role contributes to the development for strategies for dealing with this increasing problem from in hospital to community and long term care.

Awards:

Dr. David Hanley  President, Canadian Society of Endocrinology and Metabolism
Dr. Greg Kline  Research Award, Adjunct and Clinical Faculty, Faculty of Medicine
Dr. Otto Rorstad  Professionalism Award, Department of Medicine
Dr. David Lau  Leader, National endeavour to publish Clinical practice Guidelines for the Management of Obesity

Medical school classes increase.
Dr. Chris Symonds continues to lead training program.
Increased class sizes equals increased workload.
Clinical space hampered by restricted access to space at UCMC –FMC.

Central Triage system applied for.
Patient Discharge project awaiting funding.

Delay of geographical move to RRDTC poses challenges to clinical service, innovation and research.
Administration

The following summarizes our Division’s multiple involvement in administration, locally, provincially, nationally and internationally:

<table>
<thead>
<tr>
<th>Member</th>
<th>Local</th>
<th>National</th>
<th>International</th>
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<tbody>
<tr>
<td>Andrews, Christopher</td>
<td>Director GI Motility Clinic</td>
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<td></td>
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<tr>
<td>Aspinall, David</td>
<td>Program Director, Hepatology Program Hepatology Research</td>
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<tr>
<td>Beck, Paul</td>
<td>Director, UME MD PHD program, Unit Manager, MDCN 350, Research Director, GI training program, MDCN 350 course Committee</td>
<td></td>
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</tr>
<tr>
<td>Bridges, Ron</td>
<td>Associate Dean, Clinical affairs, Division Head, GI, Associate Chief Medical Officer, CHR Colon cancer Screening Center Leader, South Health Campus Committee, UCMG Executive Committee, Dean’s Advisory Committee, Dean’s Executive Committee, Leadership Forum Committee, Medical Advisory Board Planning, Priorities Committee, Reach! Partnership Committee</td>
<td>CAG President</td>
<td></td>
</tr>
<tr>
<td>Burak, Kelly</td>
<td>Chair, MDCN 350 Committee, LCME Self-Study Committee, UME CDIC Committee, Director, Liver Transplantation Hepatology Research team.</td>
<td>Data Committee, CLF Chair, CAG GRIT course, CAG Education Committee, CDDW/CASL Meeting Committee</td>
<td></td>
</tr>
<tr>
<td>Coderre, Sylvain</td>
<td>Assistant Dean, UME Council of Associate Deans Education, UME Clerkship Committee-Chair, UME Design and Implementation Committee-Chair, UME Evaluation Committee, Member UME Committee, (UME) Member, MDCN 350 Undergraduate Course Committee, Dean’s Letters Committee, UME Management Team, GI Executive Committee (Interim Division Chief December 2007), UME Self-Study Accreditation Committee, Co-Chair (data base and report writer), Integrated Community Clerkship Committee, CADE Teaching Awards, Subcommittee, Faculty Development Advisory Working Group, Master Teacher Program, IBD Rresearch Team</td>
<td>RCPSC GI Examination Board, MCC Objectives Book – Co-Chair, Past President, Alberta Society of Gastroenterology</td>
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<tr>
<td>Member</td>
<td>Local</td>
<td>National</td>
<td>International</td>
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</tr>
<tr>
<td>Coffin, Carla</td>
<td>Hepatology Research</td>
<td>CASL Membership Committee</td>
<td></td>
</tr>
<tr>
<td>Devlin, Shane</td>
<td>GI Graduate Education, IBD Research Team</td>
<td>ASG Quality Assurance Committee</td>
<td></td>
</tr>
<tr>
<td>Dube, Catherine</td>
<td>Central Triage Lead QA/QI Lead for GI Division, Director, Capsule Endoscopy Program</td>
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<td></td>
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<tr>
<td>Ferraz, Joe</td>
<td>Mucosal Inflammation Research Group Member</td>
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<tr>
<td>Hillsden, Robert</td>
<td>Research Director, Executive Team Member for Colon Cancer Screening Center, DOM Resident Research, Deputy Head, Division of GI, IBD Research Team</td>
<td>Alberta Cancer Board, Colon Cancer Screening, CAG Research, ASG Secretary Treasurer, AHFMR Health Trainee</td>
<td></td>
</tr>
<tr>
<td>Jones, Jennifer</td>
<td>IBD Research Team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kaplan, Gilaad</td>
<td>IBD Research Team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lee, Sam</td>
<td>Interim Division Chief, Hepatology Research Team, Director of Research, GI Division, UCMG Management Team, ARP Committee, DOM</td>
<td></td>
<td>Editor, Liver International Journal</td>
</tr>
<tr>
<td>Love, Jonathan</td>
<td>Director, Therapeutics Fellowship, Chair, Endoscopy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myers, Robert</td>
<td>Hepatology Research Team, Director, Viral Hepatitis Clinic</td>
<td>Chair, CASL Education</td>
<td></td>
</tr>
<tr>
<td>Nash, Carla</td>
<td>FHH GI Site Chief, Director GI Central Triage TRW Committee</td>
<td>CAG Practice Committee</td>
<td></td>
</tr>
<tr>
<td>Panaccione, R</td>
<td>Director IBD Research, Program Director, GI Training Program, Medical Director, CCFC Chapter, Co-Chair, Western Canada IBD, Symposium Director, University of Calgary IBD Clinical Observation program</td>
<td>Member, CAG Education, Co-Chair, CAG Basic Science Lecture Series Chair, CAG Breakfast with the Experts, Chair, Western Canada Scholars Program, Co-Chair, Canadian GI Fellows IBD Symposium, Co-Chair, National Mentoring in IBD, Program Co-Chair, Western Canada mentoring in IBD Program, member, CCFC Medical Advisory Committee</td>
<td>Co-Chair, Update in IBD, Valencia Spain, Co-Chair, IBD Summit, Athens Greece</td>
</tr>
<tr>
<td>Member</td>
<td>Local</td>
<td>National</td>
<td>International</td>
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<tr>
<td>Raman, Maitreyi</td>
<td>MDCN 350 Course</td>
<td>Health Canada Expert Advisory Panel</td>
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<tr>
<td>Rioux, Kevin</td>
<td>Crohn's Disease Working Group Member, Intestinal Inflammation Tissue Bank</td>
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</tr>
<tr>
<td>Rostom, Alan</td>
<td>Colon Cancer Screening, Center Medical Director (subcommittees) ; Celiac Association Scientific Advisory Board, Capsule Endoscopy</td>
<td>RCPSC Chief Examiner, CAG Education Chair, CDDW Implementation; CAG Videoconferencing, CAG interactive Lecture</td>
<td></td>
</tr>
<tr>
<td>Shaffer, Eldon</td>
<td>MDCN 350 Course, PGME Program Director, Academic Appointment, ARP Innovations</td>
<td>ASG Finances Chair, CAG Executive</td>
<td>AGA Council, Chair of liver/biliary section</td>
</tr>
<tr>
<td>Stapleton, Melanie</td>
<td>MDCN 350 Course, Chair, Home Nutrition Program, Regional Nutrition Support, C SCN Education, UME: History of Medicine Course Chair</td>
<td>AMA Alberta Medical Foundation – Vice President</td>
<td></td>
</tr>
<tr>
<td>Storr, Martin</td>
<td>Center for Digestive Motility Committee Member</td>
<td></td>
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<tr>
<td>Swain, Mark</td>
<td>Hepatology Research Team, Member of GIRG Immunology Research Group Graduate Training, Training program in Immunology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbite, Christian</td>
<td>Chair, CME Committee</td>
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</tr>
</tbody>
</table>
## Clinical

<table>
<thead>
<tr>
<th>Dimensions of Quality</th>
<th>Clinic, Innovation, Initiative</th>
<th>Key Personnel/Leads</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>GI Motility Clinic</td>
<td>Dr. Andrews</td>
<td>Pending</td>
</tr>
<tr>
<td>Access</td>
<td>Hepatology Cirrosis Clinic</td>
<td>Hepatology Group</td>
<td>Pending</td>
</tr>
<tr>
<td>Access</td>
<td>Colon Cancer Screening Center</td>
<td>Drs. Rostom, Bridges, Hilsden</td>
<td>Pending long term outcomes re: quality assurance, detection rates, cancer prevention</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Central Triage</td>
<td>Drs. Nash, Dube</td>
<td>Pending</td>
</tr>
</tbody>
</table>

## Research

The GI Division has had a productive year in the area of research. A wide variety of areas of research is seen within our Division, including:

- "Bench" Research in GI and Hepatology
- Clinical/translational research, including,
  - GI motility, Inflammatory Bowel Disease, Celiac Disease
  - Biliary disease
  - Viral hepatitis, Hepatocellular carcinoma, Cirrosis/fibrosis markers
- Epidemiological research, related to air pollution, screening, disease prevalence
- Medical Education Research

Progress in research endeavours were made in research as follows:

- 106 Peer-Reviewed Publications
- 114 Abstracts
- 12 Books/Book chapters
- 161 Presentations

Currently, the Division, accounted for over $6 million dollars of research funds.
Education

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>97</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>83</td>
</tr>
<tr>
<td>Graduate</td>
<td>9 (plus 10 supervised research trainees)</td>
</tr>
<tr>
<td>Thesis Supervision</td>
<td>21 students supervised (or part of committee)</td>
</tr>
</tbody>
</table>

N.B. Hours do not include unstructured teaching, bedside, clinics, endoscopy, formal rounds or education administration

Awards

Dr. S. Coderre
Honorable mention, CAME National Education Meeting
Nominee for CAG Young Educator Award
Gold Star MDCN 350

Dr. P. Beck
PGME Teaching in Endoscopy

Dr. K. Burak
Gold Star MDCN 350
PGME GI Teaching Excellence
University of Calgary McLeod Teaching Excellence

Dr. S. Devlin
Education

Dr. R. Panaccione
Gold Star Teacher, MDCN 350

Dr. Rostom
PGME Research Supervisor

Challenges and Future Directions

- Central Triage
- Acute Care site endoscopy (increasing resources, especially Rockyview General site
- Liver transplants in Calgary
- Maintaining a vibrant “Small Bowel Program” (capsule and double balloon endoscopy)
- Instituting the Global Rating Scale for GI unit and physician QA/QI
- Integrating rural sites in GRS, and accessing these sites for Calgary GI physicians (reciprocal relationship of allowing endoscopy access to rural patients, allowing most endoscopy access to Calgary patients, and providing an “outreach” GI Consult Service.
- Maintaining research and academic profile; New GI Research Committee
Division of General Internal Medicine
Division Chief – Dr. Robert Herman

Administration

The Division of General Internal Medicine is the largest Division in the Department of Medicine. It is responsible for delivery of a significant amount of inpatient and outpatient direct and consultative care at all 3 adult acute care hospital sites. There is also a vibrant core of basic and applied medical researchers donating time and services to external and community projects, locally and abroad.

Presently, there are 56 full and part-time members in the Division. In 2007 the following physicians were recruited to GIM in Calgary.

- Dr. Stephen Duncan, Clinical Lecturer, FMC Site
- Dr. Brian Forzely, Clinical Scholar, FMC Site
- Dr. Kelly Zarnke, Associate Professor, Director of Pharmacy Services for the Calgary Health Region, FMC Site
- Dr. Oliver Haw For Chin, Clinical Scholar, RGH Site

Appointments were made for the following individuals:

- Dr. Amber Fripp Clinical Lecturer, PLC Site
- Dr. Mike Fisher, Clinical Lecturer, PLC Site
- Dr. Aleem Bharwani, Clinical Scholar attending the Kennedy Institute Health Policy, Harvard University in Boston, FMC Site
- Dr. Pin Li, Clinical Scholar, FMC Site

Clinical

In 2007, the Division added and expanded the following clinical areas:

- Reorganization and optimization of Area 2b and RGH GIM clinics
- Placement of General Internist triage service (the TIME Project) at RGH, ED
- Opening of Chronic Complex Care Clinic at PLC
- Plans and support for General Medicine Admitting Unit at PLC in 2008

Ambulatory clinic space is now assigned and referrals directed to clinical groups such as undifferentiated GIM, Hypertension, Vascular Risk, Diabetes, Internal
Medicine High Risk Pregnancy, and Mind and Body Medicine. We are now servicing over 1500 clinics and 10,000 patient visits per year for a 90% clinic operation efficiency. These clinical additions and expansions have occurred within a single year and is a compliment to the Division.

Calgary’s second busiest Emergency Department opened an Internal Medicine Triage service at the Rockyview General in January 2008. The many positive outcomes of this service have been as follows:

- Expedited triage of all IM patients
- Effective filling of GIM inpatient bed census
- Improved patient flow, communication and cooperation between triaging and admitting services.
- Capability of discharging no less than 30% of all patients referred to GIM for admission to hospital

The implementation of this service has provided quality health care and a cost saving to the Region made possible due to the concomitant expansion of our ambulatory services.

The Chronic Complex Care Clinic is an innovative proposal designed to help keep patients with chronic medical problems requiring frequent admissions out of hospital.

Education

We have been able to create new and innovative learning opportunities for Undergraduate, Postgraduate, CME and alternate program students (IMG, Nurse Practitioner and other allied health professionals). Our team contributed over 1700 hours of lectures, small group seminars, evaluation and career counseling sessions in the University of Calgary medicine programs. Over 1800 hours of graduate-level supervisory and mentorship support was offered to over 130 students. We further provided 4000 hours of structured bedside teaching in clinical sciences each year and over 25,000 hours of supervisory clinical support on Medical Teams and consult services.

The Division currently has 4 clinical Scholars which is an increase of 1 from the previous year.

- Dr. Fiona Dunne continues to work on her Masters thesis in Medical Education
- Dr. David Sam continues his Masters in Epidemiology and Public Health.
- Dr. Ghazwan Altabbaa has been accepted in the Masters Program at the University of Calgary, September 2008.
- Dr. Jeff Schaefer completed the Masters Teacher Program
- Dr. Marcy Mintz and Dr. Dina Fisher are currently enrolled in the Master Teacher Program.

The Division is heavily involved in teaching and at present, we are engaged in approximately 7700 hours of teaching outside of clinical service activity.

IMG Program

The Department of Medicine IMG Program expanded from 9 to 14 positions last year. This Program, which presently supports 2 x 24/7 in-hours hospital call
schedules at RGH and FMC will now move to support a third admitting service at the PLC in December of 2009.

The IMG program provides essential onsite services and call to patients admitted to non resident-supported IM Units, including the GMU Pulmonary, GI admitting services, Hospitalist's Subacute Unit and the new neurology admitting service at RGH.

**Community Outreach and Internal Medicine Residence Training Program**

General Internists attend at ambulatory IM clinics in Brooks, Didsbury and a number of other small communities. Dr. Ian Scott does locum tenens on IM Ward and ICU inpatients in Red Deer and Thunderbay, Ontario. The IM resident now does up to 4 X 1 month IM community Medicine blocks as part of their core GIM training such as Lethbridge, Medicine Hat, Red Deer and Grand Prairie. It is important to realize these responsibilities of all Alberta constituents.

**GIM R4 Fellowship Program**

The 3 GIM R4 Fellows for this year are Dr. Lee-Ann Hawkins, Dr. Michaela Jordan and Dr. Simona Burs.

Dr. Fiona Dunne and the GIM R4 Training Program committee revised the Training Objectives and have we successfully passed the Internal Accreditation Review in October, 2007.
Academic Accomplishments, Promotions and Faculty Development

- Contributed 53 publications in peer-reviewed scientific journals including JAMA, CMAJ, Archives of Internal Medicine, American Heart Journal, Journal of the American Society of Nephrology, Diabetes Care Archives of Neurology and the Canadian Journal of Cardiology
- 13 invited reviews or papers in non-peer reviewed publications
- 4 book chapters
- 40 Abstracts, posters and oral presentations at research meetings
- Principle investigator or co-investigator on research projects totaling over $8 million in new funding
- Annual Career Awards, Endowed Chairs and other funding totaled $1.4 million
- Ongoing research support equaled $1.5 million

Awards

International
- Dr. Don Cook – FOCUS Trial Investigators Award

National
- Dr. Norm Campbell – Heart & Stroke Foundation 2007 Leadership Award in Heart Healthy Policy
- Dr. Sharon Straus – CIHR Tier 2 Canada Research Chair in Knowledge Translation
- Dr. Hannan Bassyouni – CMSA, Letter of Excellence for Outstanding Clerkship Teaching 2007
- Dr. Maria Bacchus – Presentation Award, AFMC 2007 Medical Education Conference

Provincial
- Dr. Sharon Straus – Health Scholar Award, AHFMR, 2007

University
- Dr. Sharon Straus – University of Calgary, Watanabe Distinguished Achievement Award, 2007
- Center Medical Advisory Committee

Departmental
- Dr. Richard Dear – Dr. Howard McEwan Award for Clinical Excellence, (PLC), 2007
DOM Residency Training Program Awards 2007

- Dr. Martha Ainsle  
  Golden Bull, IM Residency Program
- Dr. Maria Bacchus  
  Silver Finger, IM Residency program
- Dr. Sharon Strauss  
  Rookie of the Year, IM Residency Program Teaching Award
- Dr. Troy Pederson  
  Repeat Offenders, IM Residency Teaching Award

DOM Clerkship Awards -2007

- Dr. Fiona Dunne  
  Outstanding Clerkship Teaching Award
- Dr. Bill Ghali  
  Outstanding Clerkship Teaching Award
- Dr. Partha Datta  
  Outstanding Clerkship Teaching Award
- Dr. Sharon Strauss  
  Outstanding Clerkship Teaching Award
- Dr. Ghazwan Altabbaa  
  Rockyview General Hospital Residents Clinical Preceptor
Division of Geriatrics
Division Chief – Dr. David Hogan
(Acting Division Chief)

Administration

The Division of Geriatrics includes 10 members of the Department of Medicine. We have 3 members who are jointly appointed with the Division of General Internal Medicine as well as 3 cross-appointed members from the Departments of Community Health Sciences, Family Medicine and Psychiatry.

Our fiscal year saw our Divisional retreat in Canmore in February of 2008. The topics that were discussed at length included:

- Emergent/urgent referrals
- South Hospital Campus
- Recruitment & Retention
- Expanding and developing new services to deal with service gaps while working with limited resources
- Improving morale and cohesiveness within the Seniors Health Program and the Division
- Administrative and Clinical issues, such as, encouraging internal referrals, maintaining the ability to admit patients from the community

Recruitment this past year, resulted in an important accomplishment to the Division with the addition of a new Division Head. Dr. Karen Fruetel will assume her duties as Division Head in September of 2008.

Clinical

The clinical activities of the Division are closely intertwined with those of the Seniors Health Program (Calgary Health Region). We have been at the forefront in the Department for a number of years in developing interdisciplinary and transdisciplinary approaches to service delivery. Working relationships with the other disciplines in the Seniors Health Program are both collegial and effective. The Division offers many services including:

- In-patient consultation services at the three adult hospitals in Calgary
- Ambulatory clinics at all 3 adult hospitals, including the Cross Bow Centre
- Teleconsultation program which supports six rural communities; Banff, Canmore, Cardston, Didsbury, Drumheller, and Strathmore
- Active home visiting service as needed

The wide distribution and diverse nature of our services ensures ready access by seniors requiring our input.
Innovations

- The implementation of a central intake referral service (One-Line Referral) for all of our ambulatory programs, which now sees 200 consultation requests monthly
- The responsibility of 65 in-patient beds
- Implementing the closure of our 15 bed unit at PLC
- Intensive planning to restructure the ambulatory services at Rockyview General and the Bridgeland sites
- Internal review of our Fall Prevention Clinic which showed striking evidence of effectiveness.
- Establishment of a Divisional budget process enabling access to Divisional funds
- Implementation of a Divisional website (http://www.departmentofmedicine.com/GER/)

The total number of injurious falls decreased 73.4% from 394 (pre-intervention to 105 (post-intervention). These results were presented at the 2007 annual scientific meeting of the Canadian Geriatrics Society held in Banff.
Education

Members of the Division are active undergraduate and post graduate teachers. We have a RCPSC accredited sub-specialty program in Geriatric medicine and support the care of the elderly R3 program in family medicine. Most internal trainees are now taking an elective in geriatric medicine, while a geriatric rotation is compulsory for all family medicine residents. Postgraduate trainees include neurology, physical medical & rehabilitation and psychiatry. Dr. Darren Burback is the Co-Chair of undergraduate Course 5 where most of the compulsory teaching of medical students is completed. While Geriatric medicine remains as a selective within the medicine clerkship, we have medical students from the University of Calgary and across the county that take electives in geriatrics in our Division. Only a small number of University of Calgary medical students take either a selective or an elective in geriatric medicine with us. The Division hosts monthly journal clubs as well as Medical Grand Rounds, which our members have taken part in over the last year. We also support the yearly interdisciplinary Shades of Grey Symposium which attracted 300 attendees this past year.

Research

For a relatively small Division, with 3 FT University appointees, we have attained a record of scholarly productivity which is in the top tier of Canadian Divisions of Geriatric Medicine. Research interest of Divisional members include:

- Epidemiology
- Clinical practice
- Health service research (including population therapeutics)
- Knowledge translation

The following are highlights of our research year:

Dr. David Hogan Chair, Brenda Strafford Foundation in Geriatric Medicine

Dr. J. Holroyd-Leduc Recipient of CIHR Knowledge Translation Grant (Preventing delirium among hospitalized old hip fracture patients) as Co-PI.

Between March 1, 2007 and March 31, 2008, members of the Division authorized and co-authored 19 peer reviewed publications listed on MEDLINE and PubMed.

Challenges and Future Direction:

- Understanding and thriving with the new organizational structure being established for health care in our province.
- Recruitment and Retention of physicians with additional training in geriatrics. Utilizing effectively and efficiently our human resources.
- To recruit one subspecialty trainee per year over the next 5 years
- Planning for both the South Hospital Campus and the Bridgeland Seniors Health Centre
- Create benchmarks and performance indicators for clinical services.
Administration

The Division of Hematology includes 13 members within the Department of Medicine ARP (5 at the FMC and 2 at the PLC with major clinical appointments, 6 with GFT appointments who are based at FMC, including 2 clinician scientists. There are also 3 Fee for Service clinicians at the PLC. In addition, 2 individuals heavily involved with Bone Marrow Transplant and hematological malignancies are based at the TBCC, have primary appointments within the academic Department of Oncology and are funded by the Province wide services BMT Program via the TBCC.

The Division welcomed Dr. Robert Card, Dr. Michelle Geddes and Dr. Shannon Jackson as our new recruits for this fiscal year.

The Division has initiated a website focusing on recruitment, referral process, education programs rounds and CPGs. The BMT Database facilitates research and quality assessment and quality information reports for the Federation for the Accreditation of Cell Therapy (FACT). The clinical database involves the Hematology Tumor Bank with tissue biorepository information.

Clinical

Participation in the Department of Medicine Medical Access and Central Referral Project has been initiated in the Division with great enthusiasm. The Adult Rare Blood and Bleeding Disorders Program opened November, 2007 at FMC. Our BMT initiatives include weekly meetings between TBCC and FMC staff and discussions focus on capacity, triage referrals and prioritizing admissions. As well, a new quality assurance and improvement program is in effect for the FACT accreditation visit in 2009.

Our Hematology Tumor Group, is involved with weekly videoconferencing meetings with Lethbridge and Medicine Hat Cancer Centres. In these meetings, discussions are aimed at management of patients with hematological cancers. Monthly clinics are held at the Medicine Hat Cancer Centre with Dr. J. Lategan and Dr. P. Duggan in attendance.
The Blood and Marrow Transplant Program also entertains weekly videoconferencing meetings with the CCI (Cross Cancer Institute) in Edmonton to discuss patient eligibility, schedule BMT and quality assessment issues. There is also attendance at the monthly BMT Clinics at Cross Cancer Institute in Edmonton.

The Adult Rare Blood and Bleeding Disorders Program at FMC collaborates with the Hemophilia Clinic at SCH with Dr. MC Poon, Dr. R. Card and Dr. S. Jackson. Dr. Poon is the consultant for the World Federation of Hemophilia Country Program for China.

Research
Focus on Divisional 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 Leukemia/MDS (Drs. L Savoie and M Geddes).

Blood and Marrow Transplantation:

- Busulfan pharmacokinetics, adjusted does 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)
- 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 pts and carriers
- Treatment of Glanzmann’s thrombasthenia: prospective observational registry
- International immune tolerance for eradication of inhibitors in hemophilia A.
Thrombosis:

- Thrombosis Clinical Research (Drs. R. Hull, G. Pineo)
- PIOPED III (Prospective Investigation of PE disease) using MRI (Dr. R. Hull)
- Thrombophilia screening practices in the community (Dr. MC Poon)

Scholarly Productivity

- Peer Reviewed Publications: 42
- Non Peer Reviewed Publications: 08
- Abstracts: 31
- Book Chapters: 09
- Reviews: 08
Education

(Teaching hours)

| Undergraduate | MDCN 350 Blood Course, 440, 540, 320 | 300 hrs |
| Postgraduate  | MDSC 731.02 MDSC 678, and Resident Seminars & J Club | 50 hrs |
| CME           | National/International: 76 presentations. Local | 24 presentations |
| Thesis        | Defense Committee 3 PhD and 1 MSc: Supervisor 2MSc, 2PhD, 1 BHSc honors project | 20 hours |

Challenges

- Transition from separate CHR/ACB administrations to the Alberta Health Services Board model. Objectives include bed capacity, functional planning for malignant hematology/BMT and the South campus, EMR, Patient Flow, Space Allocation and Clinical Research Staff.
- Lack of office space and secretarial support for new recruits.
- Program development for benign Hematology addressing long waiting lists, triaging, QA/QI, comprehensive research program and CGPs.
- Desire to increase accrual to clinical Trials, expand research in BMT/Cell Therapy and Benign Hematology, improve support for Translational Research (protected time, start-up money, tumor bank), and initiating Health Services Research
- Increased teaching responsibilities for increasing numbers of medical students and residents.

Future Directions

- Planning for new South Campus
- Work with CHR and ACB to transition to Alberta Health Services Board
- Expanding the Adult Rare Blood and Bleeding disorders Clinic at the FMC to include hemoglobinopathy patients.
- Develop the Benign Hematology Program
- Create mentorship program for diverse needs of young division members and fellows.
Division of Infectious Diseases  
Division Chief – Dr. Ron Read

Administration

Members of the ID Division are involved in Medical Administration at a number of levels. Our major roles include:

- **Dr. David Megran**, Chief Medical Officer, Calgary Health Region

- **Dr. John Conly**:
  - Regional Clinical Department Head, Medicine
  - Co-Director, Snyder Institute
  - Chair, Snyder Institute Finance Committee
  - Chair, Infectious Diseases Research Group, University of Calgary
  - Director, Centre for Antimicrobial Resistance, University of Calgary and Calgary Health Region
  - Chair, Canadian Committee on Antibiotic Resistance

- **Dr. Ron Read**:
  - Division Head, Infectious Diseases, Calgary Health Region
  - Medical Director, Home Parenteral Therapy Program
  - Medical Director, Calgary STD Clinic

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

- **Dr. Tom Louie**
  - Medical Director, Calgary Health Region Infection Prevention and Control

- **Dr. John Gill**
  - Medical Director, Southern Alberta HIV Clinic (SAC)
  - Director, University of Calgary retrovirology laboratory

- **Dr. Harvey Rabin**
  - Medical Director, Adult Cystic Fibrosis Clinic

- **Dr. Dan Gregson**
  - Head, Medical Microbiology, Calgary Laboratory Services
  - Cross Appointment

- **Dr. Marie Louie**
  - Associate Director, Provincial Laboratory, Southern Alberta
  - Cross Appointment
The Division of Infectious Diseases continues to provide full service consultative care at all three adult hospitals. A variety of changes and improvements in ID clinics were achieved this year.

<table>
<thead>
<tr>
<th>Clinic</th>
<th>Access</th>
<th>Innovations</th>
<th>Case Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Parenteral Therapy (HPTP)</td>
<td>New direct referral process for SCC Urgent Care and SCHC patients</td>
<td>Practicing guidelines for soft tissue infections implemented at SCC</td>
<td>6000 patients per year</td>
</tr>
<tr>
<td>Cystic Fibrosis Clinic</td>
<td>Use of telehealth for rural patients</td>
<td></td>
<td>500 patients per year</td>
</tr>
<tr>
<td>Southern Alberta (HIV) Clinic</td>
<td>Proposal for a rapid response team to triage and rapidly enroll newly diagnosed HIV patients</td>
<td>Clinical trials to allow patients access to investigational drugs; health outcomes research and economic analysis of HIV care, rural outreach at Bowden Correctional Institution</td>
<td>1200 patients per year</td>
</tr>
<tr>
<td>STD Clinic</td>
<td>New “fast flow” nurse to reduce wait times</td>
<td>Outreach – via satellite clinic in Banff, collaboration with SafeWorks program, NE Women’s Clinic, Drop-In-Centre, CUPS and Margaret Chisholm Resettlement Centre, New Herpes support program developing with Sexual Health Access Calgary, Direct-to-teen STD education via Nexopia.com</td>
<td>23,000 patients per year</td>
</tr>
<tr>
<td>General ID Clinics</td>
<td>Expanded patient access</td>
<td>Incorporated ID Fellows clinics</td>
<td></td>
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<tr>
<td>Hepatitis C Clinic</td>
<td>Expanded access to marginalized patients</td>
<td></td>
<td></td>
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<tr>
<td>MRSA Decolonization Clinic</td>
<td>Construction underway at RRDTJ</td>
<td></td>
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<tr>
<td>Drop-In-Centre</td>
<td>Collaboration with Dr. Janet Hurley to expand ID outreach to Calgary’s homeless patients</td>
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</tr>
</tbody>
</table>
Other Infectious Diseases Programs include:

- Infection Prevention and Control
  - Hand Hygiene social marketing initiatives throughout the Calgary Health Region
  - MRSA working group focusing on MRSA surveillance and control
  - Liaison with Engineering and Maintenance to develop IPC standards for building, construction and renovation activities
  - Focus on *C. difficile* control in Acute Care.

- CHRAUC (Calgary Health Region Antibiotic Utilization Committee)
  - Acute Bacterial Meningitis – Initial Management Pathway to be used in ER
  - Cautious Graded Challenge protocol for antibiotic allergies

- Clinical Informatics
  - Dr. A. Pattullo is the current Medical Director for the Calgary Health Region Clinical Informatics team and directed numerous activities including;
    - Guiding the ongoing deployment of Sunrise Clinical Manager
    - Liaison to development of e-Record initiatives locally and provincially, and presented at international e-Record meetings.
    - Clinical decision support, measurement and reporting capabilities for physicians to answer their own clinical questions using PCIS

Research

The Division is active in research at several levels from bench to bedside. Many divisional members are also members of the Infectious Diseases Research Group and the III Institute (the Calvin, Phoebe and Joan Synder Institute of Infection, Immunity and Inflammation.

In this fiscal year, the Division produced:

- 46 Papers in peer-reviewed journals
- 6 Papers in non-peer reviewed journals
- 46 Abstracts and conference presentations
- 4 Book Chapters
- 10 Invited keynote presentations/plenary sessions at major scientific meetings
Education

The Division of Infectious Diseases is committed to education at all levels including the following:

- Undergraduate microbiology (Department of Biological Sciences)
- Clinical Nursing training
- Nurse practitioner program
- Clinical clerkship (volume surpassed only by GIM)
- Internal Medicine and other residency training programs
- Fellowship training in ID
- Continuing Medical Education
- Community Agency in-services

Awards and Recognition

Dr. Harvey Rabin  Dr. John Dawson Award for Clinical Excellence 2007

Dr. Ron Read Department of Medicine Award for excellence in clerkship teaching 2007

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 www.Nexopia.com

Challenges and Future Directions

Manpower is the major ongoing challenge in Infectious Disease. We are facing manpower shortages due to retirements, population growth, the new South health campus and expanded roles for Infectious Diseases in the community. We have been innovating with the use of nurse practitioners in the HPTP program, forming collaborations with community clinics and agencies to take ID expertise out into the community and into rural areas. We have chosen a model of local training o ID specialists as a recruitment strategy and in 2007 had 3 fellows in the training program. We will be continuing to innovate in the delivery of ID specialty care with new service delivery models and outcome analysis of our program.
Division of Nephrology
Division Chief – Dr. Nairne Scott-Douglas

Administration

The Division of Nephrology continues to expand and advance with improvement in clinical care and research endeavors. Our training program continues to attract top candidates.
Dr. Sophie Chou formally joined the Division and has helped meet our large clinical need and is involved in teaching.
Dr. Pietro Ravani, a clinical epidemiologist and biostatistician has joined the Division and will contribute greatly to our academic, clinical and teaching programs.
Dr. Chandra Thomas joins us in a part-time position initially and is undertaking extra training in Palliative Care Medicine. She will eventually become the physician lead on the Advanced Care Initiative and implementation of the Goals of Care Initiative by the Region.

Clinical

We are fortunate to have the support of past trainees in nephrology to assist with the clinical workload. Drs. Wenjie Wang, Vinay Deved, Matt James and Mike Walsh provide clinical nephrology rotations and outpatient clinics helping to deliver care to Southern Alberta patients.

Dr. Jennifer MacRae, Director of Hemodialysis and Vascular Access, continues to provide a very extensive program including all aspects of hemodialysis. She has developed evidence-based protocols for transmissible virus screening, infection prevention, treatment and delivery of adequate dialysis. There has been a large improvement in the rates of fistula use in SARP.

The Renal PARIS electronic patient database, developed by Dr. Garth Mortis continues to excel in clinical care delivery and research. Expansion of the database includes, scanned documents, discharge summaries, diagnostic imagine reports and external consult letters. This expansion has reduced the time for physicians and nurses in delivering care to SARP patients. The new version of PARIS II will be released in the coming months.

The Nephrology Central Referral system continues to be an enormous success. Under the guidance of Dr. Braden Manns, referrals are triaged by a nephrologists and is very successful in prioritizing patients, decreasing unnecessary referrals and decreasing patient wait times. Referring physicians are providing positive feedback and the success has been supported by a 20% increase in referrals. The addition of a Nurse Practitioner will also have a stage 3 kidney disease clinic.

The Glomerulonephritis Clinic continues to expand with patients being followed by specialists and clinical nurse specialists. The clinic is under the direction of Drs. Manns, Hemmelgarn and Vitale and projections of expansion to Rheumatology and Neurology are anticipated in the future.
The Aboriginal Outreach Clinic under the direction of Dr. Brenda Hemmelgarn continues to attract highly satisfied patients and the support of family physicians in cardiovascular risk factor modification. Evidence based protocols for blood pressure, lipids, diabetic management and weight control are all being utilized.

Innovations

Dr. Ken Taub has initiated a new screening initiative including a protocol for assessment regarding the waiting list for assessments of kidney transplant donors and recipients. This has resulted in a more efficient and streamlined process in this area.

The Southern Alberta Renal Program has been given approval for expansion of a new hemodialysis unit in Brooks and the move to the Sheldon Chumir Centre. Home dialysis therapies continue to expand with a 10% increase in the number of patients choosing home therapies including Peritoneal Dialysis.

Education

- Dr. Kevin McLaughlin has returned from sabbatical and is the new Assistant Dean of Undergraduate Medical Education Research.
- Dr. Ron Hons is the administrator of the training program, which attracts internal and external candidates.
- The monthly Nephrology Journal Club coordinated by Dr. Hons is hugely successful with nephrology trainees and internal medicine residents.
- Dr. Sophie Chou has completed her Master’s Degree in Medical Education and with several other members provide exemplary teaching in our program.
- Dr. Stefan Mustata continues as the Co-Chair of the Endocrine-renal course in Undergraduate Medical Education.
- Dr. Vinay Deved has entered a Masters Degree program in Epidemiology under the supervision of Dr. Hemmelgarn.
- Dr. Matt James has received Kidney Foundation and Alberta Heritage Foundation funding and will complete a PhD in clinical Epidemiology.
- Dr. Mike Walsh received funding to pursue a PhD in Vasculitis/Glomerulonephritis with world renowned researcher in Cambridge, England.
Research

The Division of Nephrology is now considered to be the top nephrology epidemiology centre in Canada and is highly regarded worldwide. From the science perspective Dr. Dan Muruve received $300,000 as a CIHR operating grant and continues to be a mentor and leader in the Division and the III Institute. Dr. Lee Anne Tibbles has developed an innovative protocol to treat BK virus infection in solid organ transplant patients using Sirolomus. Our research Chair was named the Roy and Vi Baay Chair in Kidney Research. We are now closer to our goal of an endowment of $8 million. In the near future after the commitment of infrastructure support, we will commence the recruitment process for the first holder of this Chair.
The Division of Respirology has had an exciting and productive year. While there have been many changes and successes, we have also experienced a number of significant challenges. The Division members continue to meet all these issues with hope, optimism and determination.

The members of the Division total 27 including 9 associate members based at the three hospital sites and private clinics in the Calgary Health Region. Seven Members are University Geographic Full Time (GFT), while 20 are University Major part time or private practice.

Recruitment for the fiscal year included Dr. Charlene Fell and Dr. David Stather. Dr. Fell completed additional training in pulmonary fibrosis at the University of Michigan. She worked with Dr. Fernando Martinez, who is a world authority in pulmonary fibrosis. Currently she is a Staff Respirologist at the Peter Lougheed General Hospital and an Assistant Clinical Professor in the Department of Medicine at the University of Calgary.

Dr. David Stather trained in Critical Care and Interventional Pulmonary Medicine prior to joining our Division. He developed a special expertise in medical simulation and training and spent dedicated time at the Harvard Facility in Medical simulation, where he developed new approaches. Dr. Stather brings great expertise to the area of bronchoscopy, airway stenting and ultra sound guided bronchoscopy. Currently Dr. Stather is a Staff Respirologist at Foothills Medical Centre and Assistant Clinical Professor in the Department of Medicine at the University of Calgary.

Clinical

The Sleep Centre

- The Division is one of Canada’s leaders in Sleep Medicine
- Dr. Pat Hanly leads the Sleep Centre in the assessment and management of Sleep Disordered Breathing
- Improved patient access to diagnosis and treatment for uncomplicated obstructive sleep apnea and severe sleep disordered breathing
- Reduced waiting lists
- First time Public Private Partnership with home care companies have been employed in Canada

Interventional Pulmonary Medicine Service

- One of only two services in the country.
- Dr. Alain Tremblay leads this program with the assistance of Dr. David Stather
- Innovative tools and techniques used in endobronchial ultrasound, permanent and removable stents and indwelling pleural catheters
Interventional Pulmonary Medicine Service (continued)

- Program received a $1M private donation, enabling the purchase of equipment to perform highly technical and ground-breaking service
- Dedicated in training young respirologists

Pulmonary Hypertension Program

- Dr. Doug Helmersen leads this program along with Dr. Sid Viner and Dr. Naushad Hirani.
- Provides day to day management
- Comprehensive Diagnostic services including right heart catheterization and pharmacologic treatment
- Private donation has enabled Dr. Helmersen to purchase equipment that is required for right heart catheterization studies.

This group is providing a world-class service for patients that would have died only a few years ago.

Calgary Asthma and COPD Program

- Nationally recognized providing cohesive service linking together family physicians offices, hospitals, and emergency departments
- Dr. Bob Cowie leads the team of dedicated health care providers, including physicians, respiratory, therapists, kinesiologists and nurses.
- Dr. Richard Leigh and Dr. Warren Davidson developed the program for assessing sputum inflammation and is now incorporated into the standard management of patients
Research

Members of the Division published 91 papers, abstracts and book chapters and 76 presentations were made. In addition $1.9M in research grant support was received and one patient was obtained on the "Use of a Drug Eluting Catheter for Pleurodesis".

Some of the highlights of these publications demonstrate the breadth of academic activity in the Division.

<table>
<thead>
<tr>
<th>Author</th>
<th>Title/Contribution</th>
<th>Rest of Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Pat Hanly</td>
<td>Pharyngeal narrowing in end-stage renal disease</td>
<td>Implications for obstructive sleep apnea. European respiratory Journal</td>
</tr>
<tr>
<td>Dr. Pat Hanly</td>
<td>Mechanisms of cyclical breathing in sleep apnea</td>
<td>Journal of Applied Physiology</td>
</tr>
<tr>
<td>Dr. Naushad Hirani</td>
<td>&quot;Understanding Kaposi sarcoma herpes virus infection in patients with idiopathic pulmonary arterial hypertension&quot;</td>
<td>Current Medical Research Opinion</td>
</tr>
<tr>
<td>Dr. Bob Cowie</td>
<td>&quot;Highlighting the discrepancies between symptoms and lung function&quot;</td>
<td>Canadian Respiratory Journal</td>
</tr>
<tr>
<td>Dr. Richard Leigh</td>
<td>&quot;Repression of inflammatory gene expression in human pulmonary epithelial cells by small molecule 1B kinase (IKK) inhibitors&quot;</td>
<td>Journal of Pharmacology and Experimental Therapeutics</td>
</tr>
<tr>
<td>Dr. Chris Mody</td>
<td>&quot;Established the signaling pathway used by lymphocytes when they bind and directly kill microbes&quot;</td>
<td>An observation published in the Journal of Immunology</td>
</tr>
<tr>
<td>Dr. Alain Tremblay</td>
<td>Reported his experience on the use of hot biopsy forceps in the diagnosis of malignant airway lesions</td>
<td>European Respiratory Journal</td>
</tr>
<tr>
<td>Dr. Dina Fisher</td>
<td>&quot;Cost-effectiveness of chest x-ray screening for diagnosis and treatment of inactive pulmonary tuberculosis&quot;</td>
<td>Thesis</td>
</tr>
<tr>
<td>Dr. Gordon Ford, Dr. Stephen Field</td>
<td>Contributed to a publication on the state of the art treatment of chronic obstructive pulmonary disease</td>
<td>Annals of Internal Medicine</td>
</tr>
</tbody>
</table>
Education

The Division has developed a program of advanced fellowship training. We are dedicated to providing the highest quality of respiratory care, innovation and research in Canada. As the field of respirology advances, it has become clear that the only way we can meet our goals is to recruit faculty that possess highly specialized training in focused areas.

While there are outstanding opportunities to fund predominately research experiences (such as the Clinical Scholar Program in the Department of Medicine, which partners with the AHFMR or CIHR), the opportunities to support a more balanced, advanced clinical and academic experience are not available. With a balanced clinical and research training experience we hope to develop true clinical and academic excellence in many areas. It is for that purpose that the Division developed the Advanced Training Program.

The tremendous successes in this program include:

Dr. Charlene Fell working in the area of interstitial lung disease at the University of Michigan. Creation of a database for analysis of IPF patients and reported on her work at the 2007 American Thoracic Society meeting in a presentation entitled “The Prognostic Value of Serial Cardiopulmonary Exercise Testing in IPF”.

Dr. Naushad Hirani worked in pulmonary hypertension at the University of Bologna. Dr. Hirani participated in the day to day management of the most complex patients with pulmonary hypertension. He contributed to four research manuscripts and presented abstracts entitled “Effects of first-line bosentan therapy on survival in patients with pulmonary arterial hypertension” and “Sildenafil therapy for patients with inoperable chronic thromboembolic pulmonary hypertension” at the 2007 American Thoracic Society meeting. He also obtained a Master’s degree in Pulmonary Vascular disease through the University of Bologna under Professor Galie’s supervision.

Dr. Julie Jarand attended the University of Colorado and worked with Dr. Chuck Daley, receiving clinical and research training in nontuberculous mycobacteria.

Dr. Andrea Loewen worked with Dr. Magdy Younes and Dr. Pat Hanly in control of breathing and sleep apnea.
Innovations
A number of highly successful and novel projects have been initiated and have met with success. These projects have enhanced patient care and have increased the efficiency of our practice in respirology.

<table>
<thead>
<tr>
<th>Innovation &amp; Quality</th>
<th>Key Personnel</th>
<th>Outcome Measures and Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough Clinic 2/3rds of patients waiting more than 6 weeks</td>
<td>Dr. Stephen Field</td>
<td>*Primary objective is to shorten wait times 90% of patients are now seen within 3 weeks Reduced wait lists reduced for patients with more urgent problems</td>
</tr>
<tr>
<td>Rapid Follow Up Clinic</td>
<td>Dr. Doug Helmersen</td>
<td>*Primary objective to improve timely access for patients with complex problems *Prevent inpatient hospitalization and emergency department visits</td>
</tr>
<tr>
<td>Sleep Centre (CHR/U/C)</td>
<td>Dr. Pat Hanly</td>
<td>*Primary objective to increase patient access to specialty services, *Improve patient outcomes *Implement a quality assurance program for the administration of CPAP therapy</td>
</tr>
<tr>
<td>Sputum analysis</td>
<td>Dr. Richard Leigh</td>
<td>*Primary objective for assessing asthma patients *Demonstrated the majority of asthma patients have sputum eosinophilia *Therapy is suboptimal *Results led to reassessment of patient compliance or to a change in management</td>
</tr>
<tr>
<td>Thoracic Oncology Program</td>
<td>Dr. Alain Tremblay</td>
<td>*Primary objective to increase the number of patients seen *Full time NP and Clerk hired *Maintaining a nearly non-existent waitlist *Expand to rural areas by telehealth clinic</td>
</tr>
</tbody>
</table>

Dr. Jeff Mellor is the Co-director for the Department of Medicine Electronic Medical Record (EMIS) which was implemented in 2007.

Other members of the Division have implemented considerable innovations. These programs are changing the face of the practice of Respirology in the Calgary Health Region to the benefit of all the patients we serve.

Awards
The Division was recently awarded the Department of medicine quality improvement and safety award.

Dr. Karen Rimmer Life Balance Award
Dr. Gordon Ford Terry Groves award - Clinical Excellence
Dr. Martha Ainslie Golden Bull Award – Medical teaching
Dr. Kris Fraser CAME Certificate of Merit
Dr. Alain Tremblay Innovation Award – Department of Medicine
Dr. David Stather ACCP Sarcoidosis Research Foundation
Dr. Richard Leigh GSK/CIHR Professor of Inflammatory Lung Disease
Challenges and Future Directions

Over the next 5 years, we hope to have 1/3 of our members with a Geographic Full time appointment. We will need to recruit 3 members to replace GFT retirements and an additional 1 GFT faculty to establish this balance. To replace other retirements and provide a critical mass of respirologists at 4 sites (including the new South Campus), a total of 9 respirologists will need to be recruited over the next 5 years. The Division needs to pursue selective recruitment in areas of clinical need. These include Sleep Medicine, Lung Transplantation, Neuromuscular Diseases, Non-invasive Ventilation and several other clinical areas.

More Outpatient offices are needed. We are anticipating that the clinics being developed in the TRW building at FMC will result in improvements at the UCMC site.
Division of Rheumatology
Dr. Liam Martin – Division Chief

Administration

The Division of Rheumatology has 14 clinically active members. Members are divided into 3 categories which include, 6 Geographical Full Time, 2 Major part-time and 6 clinical members. We also have 2 Nurse Practitioners who provide clinical service. These services are provided at all the 3 adult hospital sites in the Calgary Health Region.

The members of our Division are involved in several areas of administrative activities including the following:

- Chair, Course 2
- Chair of the Evaluation Committee Course 2
- Member of the Faculty PGME Committee
- President of the MDERA Group
- President of the Foothills Medical Staff Association
- Member of Calgary and Area Physicians Association
- Member of the Medical Advisory Board CHR
- Member of the Provincial POSP Committee
- Membership of the Canadian College of Academic Rheumatologists

Clinical

We have 5 rheumatologists at the FMC site and 2 Nurse Practitioners who provide 19 half-day clinics per week with the support of 1 clinic nurse. Over 4000 patients attended over 16000 clinical visits at our Area 5A clinic at the FMC site over the past 12 months. Further 3 and 4 half-day clinics were provided by our biologic clinic nurses, who are funded by a research grant from Alberta Health and Wellness. As well, 500 patients are being treated with biologic agents for rheumatoid arthritis with 860 clinics.

At the Rockyview General site, we have 2 rheumatologists and 1 Nurse Practitioner (every second week) providing 8.5 clinics per week with the support of 1.5 full time clinic nurses. The Rheumatology Clinic supported over 1500 patients with 6000 visits.

We have 1 rheumatologist, along with a clinic nurse at the PLC site, who provides service to 350 patients with over 1400 visits per year in the outpatient clinic.
Innovations

The Central Triage Program continues to be successful and serves as a model for other Divisions who are in the process of developing the program. The program is managed by Dr. Susan Barr, Dr. Liam Martin, 1 Clinical Nurse Specialist, 2 unit clerks.

Referrals that are faxed directly to a rheumatologist’s office are forwarded to the Central Triage office. The number of referrals total on average of 100 per week and upon receipt are divided into priority groups with information supplied by our clinical nurse specialist.

We have managed to reduce wait times for patients by 30% during the first year of the program. From the perspective of available appointments for new patients we are now at a saturation point and foresee an increase of wait times for non-urgent patient reviews. This is due to a decrease in the number of rheumatologists who are able to accept new consults and an increase in the number of patients requiring chronic care.

We are addressing this issue by developing innovative approaches in reviewing certain new consults. The Soft Tissue Assessment Clinic is being developed and assessed in addressing some of our capacity problems.

Our 6 innovative clinics in our clinical practice include the following:

**Young Adults with Rheumatic Diseases (YARD)**
- Scheduled once per week at Area 5A at the FMC site
- 3 adult and 2 paediatric rheumatologists provide service
- Support of a clinical nurse specialist, 1 clinic nurse, medical social worker and physiotherapist
- Provision of medical, social and rehabilitation support for young adults
- Clinic visits saw 100 patients in 235 clinics

**EIA**
- Clinics are scheduled once per week at FMC and RGH sites
- 5 rheumatologists’ provide service
- Support of 1 clinic nurse, medical social worker and physiotherapist at every clinic
- Clinic visits saw 150 patients in 600 clinics

**Urgent Assessment Clinic**
- Currently clinics are held on a “ad hoc” basis
- Patients are seen at the clinic by a rheumatology resident and the rheumatologist on-call.

**Nurse Practitioner Clinic**
- Supported by the Central Triage system
- 4 half-day clinics are held at Area 5A at FMC, 1 half-day clinic at RGH every second week
- New patients totaled 170 and 325 follow-up visits were provided at the FMC site.
The Biologic Assessment Clinic

- Provides clinical and social support for patients with biologic therapies for rheumatoid arthritis
- 860 clinic visits saw over 500 patients
- Serves as a source for data that is utilized in research effectiveness and safety of biologic agents in the treatment of rheumatoid arthritis

The Soft Tissue Assessment Clinic

- Newly constructed clinic
- Provides assessment for patients with no apparent inflammatory rheumatic disorders
- Supported by 1 Nurse Practitioner, physiotherapist, under the direction of Dr. Liam Martin, who sees the patient.
- Significant problems that are found in a patient are then referred to a rheumatologist for further assessment
- This clinic will be assessed in the next 6 months to determine if this is an acceptable service.
Education

The Division of Rheumatology members provide teaching and learning opportunities for all levels of physicians in the Region.

We are involved in teaching undergraduate medical students in Course 2 (formerly known as MSK and Dermatology course). We provide over 30 hours of lectures and 120 hours of small group teaching in this course. We also act as preceptors for Med 340, (an independent research course for first year students) and Med 440, a 40 hour clinical shadowing course for second year students course.

We also provide preceptors for the horizontal course on communications to the 1st and 2nd year medical students as well as 30 hours per week of outpatient clinical experience to clinical clerks and 1 member.

Dr. Lewkonia oversees bedside teaching once per week to clerks who are undertaking their 12 week rotation in Internal Medicine.

Clinical teaching totals 30 hours per week to both the medical residents who rotate through our service and to Rheumatology trainees.

Several members participate in Continuing Medical Education events, both locally and nationally.

Lastly, we are involved in the teaching of Nurse Practitioner students and provide 6 hours per year of in-class teaching.

Research

We continue to be focused on the Pharmacovigilance Program (a prospective monitoring program for patients who are being treated with biologic agents) and the Canadian Scleroderma Registry (a multi-centered follow-up program to follow outcomes in patients with scleroderma).

Members of the Division published 23 peer reviewed articles, 13 non-peer reviewed, 13 book/chapters, 27 abstracts and presented 49 papers, posters, workshops and seminars.

In addition over $1.0M in research grant support was received.

While we are unable to list all members, we would like to highlight some of our research endeavors.
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<thead>
<tr>
<th>Name</th>
<th>Project Description</th>
<th>Funding Information</th>
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<tbody>
<tr>
<td>Dr. Susan Barr</td>
<td>Sex/gender influences on musculoskeletal health across the life span</td>
<td>Co-Investigator, CIHR New emerging Teams Grant $1,522,540 (2003-2008) (5 Year(s) $304,508) (Report Year Award)</td>
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<td>Dr. Susan Barr</td>
<td>Alberta Biologics for Inflammatory Arthritis Research Initiative</td>
<td>Co-Investigator, AHW/Institute of Health Economics $900,000 (2005-2008) (3 year(s) $216,000) (Report Year Award)</td>
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<td>Dr. Steve Edworthy</td>
<td>Alberta Medical Association (Investigator) Security and Privacy in Electronic Medical Records ($25,000)</td>
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<tr>
<td>Dr. Steve Edworthy</td>
<td>Lymphoma Risk:</td>
<td>A Consequence of Immune Suppression or Stimulation? Canadian Cancer Etiology Research, The Arthritis Society, McGill University Health Centre Research Institute (Co-Investigator) Network $140,000</td>
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<tr>
<td>Dr. M.J. Fritzler</td>
<td>Canadian Institutes of Health Research</td>
<td>Grant #10884 Golgi complex and Endosomal Autoantigens 5 year grant $107,000/year (2005-1010)</td>
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<tr>
<td>Dr. M.J. Fritzler</td>
<td>Canadian Institutes of Health Research</td>
<td>Grant #MOP-57674 GW proteins and GW bodies: Novel autoantigens and their application to ribonomics 1 year grant $100,000/year 2007-2008</td>
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<tr>
<td>Dr. L. Martin</td>
<td>Monitoring the safety and efficacy of biologic agents in the treatment of systemic rheumatic diseases.</td>
<td>Alberta Health and Wellness 2006-2010 $160,000 per annum</td>
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<tr>
<td>Dr. L. Martin</td>
<td>A randomized phase 3 double-blind controlled parallel group multi-centre study to evaluate the safety and efficacy of Rituximab (Mabthera, Rituxan) in combination with methotrexate compared to methotrexate alone in methotrexate-naive patients with active rheumatoid arthritis</td>
<td>Hoffman La-Roche 2006 – current $42,000</td>
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**PUBLICATIONS**

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<tr>
<th>Author</th>
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<tbody>
<tr>
<td>Barnabe C. Fahlan N.</td>
<td>Overlapping Clinical Features of Lupus and Leptospirosis</td>
<td>Clin Rheumatol 2008 (Epub, DOI 10.1007/510067-007-0823-7)</td>
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<td>fortin PR, Barr SG,</td>
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<td>Senecal JL, Zummer M,</td>
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<td>Edworthy S, Sibley J,</td>
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<td>Pope J, Ensworth, S</td>
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<td>Ramsay-Goldman R,</td>
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<td>Hanly JG.</td>
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<td>Blondin D, Zhang Z,</td>
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<td>Shidelor K, Hou H,</td>
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Challenges and Future Directions

Currently the Division has a very strong clinical presence with plans to improve our clinical services with innovative programs. We have recruited a clinical researcher, Dr. A. Cranney who will assist us in developing our clinical research profile.

We have 3 fellows in the program that we will recruit. One fellow is developing her interest in vasculitis, an area where we would like to improve our clinical and research capabilities. The other fellow is planning to pursue extra training in the use of ultrasound in joint assessment. These new additions will help us to maintain our clinical profile and increase our research profile in the coming years.

We have offered a research chair position to a very experienced and well published rheumatologist. His recruitment would provide the Division with another opportunity to improve our clinical research profile.

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As the above table shows, we will struggle to keep pace with the clinical and educational responsibilities that we have due to retirement of our aging members. Our numbers will remain fairly stable over the next 8 years if we continue to recruit and train 3 fellows every 2 years.

By 2016 more than half of the current 14 clinically active rheumatologists will be retired. We will need to recruit to provide service to the new South Health Campus. As well, we require the funds to develop alternative ways of delivering care as the number of residents in the city and region continue to grow and age.