



**UBC DEPARTMENT OF MEDICINE**

**2006**

**ANNUAL REPORT**



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## *Message from Dr. Graydon Meneilly*



*Graydon S. Meneilly, MD, FRCPC  
Eric W. Hamber Professor & Head  
Department of Medicine  
UBC & Vancouver Acute*

I am pleased to provide this overview for the 2006 annual report on behalf of the UBC Department of Medicine. This report is also available online at [www.medicine.ubc.ca](http://www.medicine.ubc.ca).

### **Overview**

The UBC Department of Medicine provides research, teaching and clinical services related to the nature, cause and prevention of adult diseases. We are the largest Department in the Faculty of Medicine and we consist of 16 divisions: Allergy and Immunology, Cardiology, Community Internal Medicine, Critical Care, Endocrinology, Gastroenterology, Geriatric Medicine, Hematology, Infectious Diseases, Internal Medicine, Medical Oncology, Nephrology, Neurology, Physical Medicine and Rehabilitation, Respiratory Medicine and Rheumatology.

A departmental review was held in October 2006. The primary emphasis of the review was to assess the quality, strength, programs and operations of the Department.

### **Members**

As you read through this document you encounter the many different aspects of our Department and the things we have achieved over the past year. I would like to take this opportunity to highlight some of the many wonderful accomplishments of our members. In particular I would like to highlight the contributions of Dr Paul Man, Associate Head of Medicine at UBC and Chair, Department of Medicine at Providence Health Care. He is absolutely integral to the function of the Department and all of our strategic initiatives.

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Recruitment and retention are a large part of our business. In 2006, we appointed 3 Assistant Professors, 4 Clinical Associate Professors, 31 Clinical Assistant Professors, 18 Clinical Instructors, 2 Adjunct Professors and 3 Associate Members, and we promoted 16 faculty members.

In 2006, our faculty received 5 CIHR Scholarship/Scientist awards, 17 Michael Smith Scholarships/Scientist awards, 7 CRC Scientist awards and 5 Scholarship/Scientist Awards from other peer reviewed agencies.

In 2006 the Department had several changes in divisional leadership. I am very pleased to announce the appointments of the following division heads:

- Dr. Eric Yoshida, Head, UBC Division of Gastroenterology – February 1, 2006
- Dr. Barry Kassen, Head, UBC Division of General Internal Medicine – May 1, 2006
- Dr. Barry Kassen, Acting Head, UBC Division of Community Internal Medicine – May 1, 2006
- Dr. Mark Fitzgerald, Head, UBC Division of Respiratory Medicine – July 1, 2006

In May 2006, Dr. John Fenwick stepped down from his role as Head, UBC Division of Critical Care Medicine, and Dr. Dean Chittock has taken over as Acting Head.

Dr. John Esdaile completed his second term as Head of the UBC Division of Rheumatology in October 2006. He is currently on a six month sabbatical at the Centre of National Research on Disability & Rehabilitation Medicine (CONROD), University of Queensland. Dr. Barry Koehler, Clinical Professor Emeritus, has taken over as Acting Head, UBC Division of Rheumatology.

I wish to express a sincere thank you to both Dr. Fenwick and Dr. Esdaile for all of their efforts on behalf of the department.

## **Awards**

The Department extends its warmest congratulations to these outstanding individuals who received the following Departmental awards: The Fay R. Dirks Awards for Excellence in Teaching were awarded to Drs. Anthony Fung (Cardiology) and Krishnan Ramanathan (Cardiology); The Martin M. Hoffman Awards for Excellence in Research were awarded to Drs. Jolanda Cibere (Rheumatology) and Andrew Sandford (Respiratory); The Donald M. Whitelaw Awards for Outstanding Grand Rounds were given to Drs. Anthony Chow (Infectious Diseases) and Peter Pare (Respiratory); The Master Teacher Awards were given to Drs. Victor Huckell (Cardiology) and John Onrot (Internal Medicine).

In addition, members of the department were recognized by the faculty and other bodies for their excellence in teaching and research. Some of the special honours and awards received by our members in 2006 are: Dr. G. B. John Mancini (Cardiology) was awarded the UBC Faculty of Medicine Lifetime Achievement Award; Dr. Del Dorscheid (Critical Care Medicine) was the recipient of a CIHR New Investigator Award for Glycomics of Airway Epithelial Repair; Dr.

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Anita Palepu (General Internal Medicine) was awarded the Boston University School of Public Health Distinguished Alumni Award; Dr. Yasser Abou Mourad (Hematology) received the New Investigator Award from the American Society for Blood and Marrow Transplantation; Dr. Julio Montaner, Director of BC Centre for Excellence in HIV/AIDS, became President-elect of the International AIDS Society and was also awarded a UBC Izaak Walton Killam Research Prize; Dr. Yu Tian Wang (Neurology) was awarded the Fellow of Royal Society of Canada and the Howard Hughes Medical Institute International Scholar; Dr. Russ O'Connor (Physical Medicine & Rehabilitation) received the Dr. Duncan Murray Teaching award and was appointed as Medical Manager for the 2010 Paralympics, Vancouver; Dr. John Esdaile (Rheumatology) was named the 2006 Kirkland Foundation Scholar, and was also appointed the Scientific Director and CEO of the Canadian Arthritis Network.

One of the Department's most important strategic initiatives is the creation of the Academic Enhancement Endowment Fund and the Academic Enhancement Fund competition process. These awards are provided in an effort to ensure greater protected research time for individuals undertaking meritorious research. This fund has taken on greater importance as the endowment has grown and as the awards have increased. The recipients of the Academic Enhancement Endowment Fund awards in 2006 were Drs. Michelle Fung (Endocrinology) and Kenneth Madden (Geriatric Medicine). Recipients are termed Departmental Scholars.

## **Clinical**

The foundation of all activities in a Department of Medicine is exemplary patient care. Maintaining the highest quality of care has been challenging due to resource constraints, but our members continue to provide excellent care to the citizens of Vancouver and the province of British Columbia. The Regional Medical Council has made some progress in this regard. Our efforts have resulted in an increment in medical beds and a regional stroke initiative. We are developing Medical Admission Wards and Diagnostic Treatment Units to help facilitate emergency flow and working on improvements in utilization management and discharge planning. We are beginning a major initiative to assess unmet demand for medical services in the region and the province.

## **Research**

Once again the department was extremely successful in attracting research support. The department received \$28,297,611 in peer reviewed grants and \$13,502,690 in non-peer reviewed grants.

The number of high profile peer reviewed papers by members of the department continues to increase. The department published more than 900 peer reviewed papers in the last year in journals of the highest impact including the New England Journal of Medicine, JAMA and many others. These research contributions highlight the fact that many groups within the department are among the best in the world in their area of expertise.

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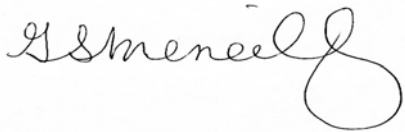
## Teaching

Our medical school will double in size in the next few years and we have implemented a unique model of distributed education. Our undergraduate program is a distributed program with satellite offices in Chilliwack, Prince George and Victoria. Our postgraduate training program continues to thrive and grow, with a record 98 residents in the core program. Our program is now the second largest Internal Medicine Training Program in Canada. We continue to attract the highest quality trainees from around the country.

## Summary

In closing I would like to take this opportunity to once again acknowledge the contributions of all faculty and staff and to thank them for their hard work, outstanding achievements and dedication to the success of the Department of Medicine.

Sincerely,

A handwritten signature in cursive script, appearing to read "G. S. Meneilly". The signature is written in black ink on a white background.

Graydon S. Meneilly, MD, FRCPC  
Eric W. Hamber Professor & Head  
UBC Department of Medicine





## MISSION STATEMENT

We, the members of the Department of Medicine of the University of British Columbia, will work with all our partners to provide the highest possible standard of excellence in patient care, teaching and research. We will pursue this mission while emphasizing open communication and ethical behavior, and while recognizing that it is a privilege to provide responsible and innovative stewardship of human, financial and all other resources. We will always:

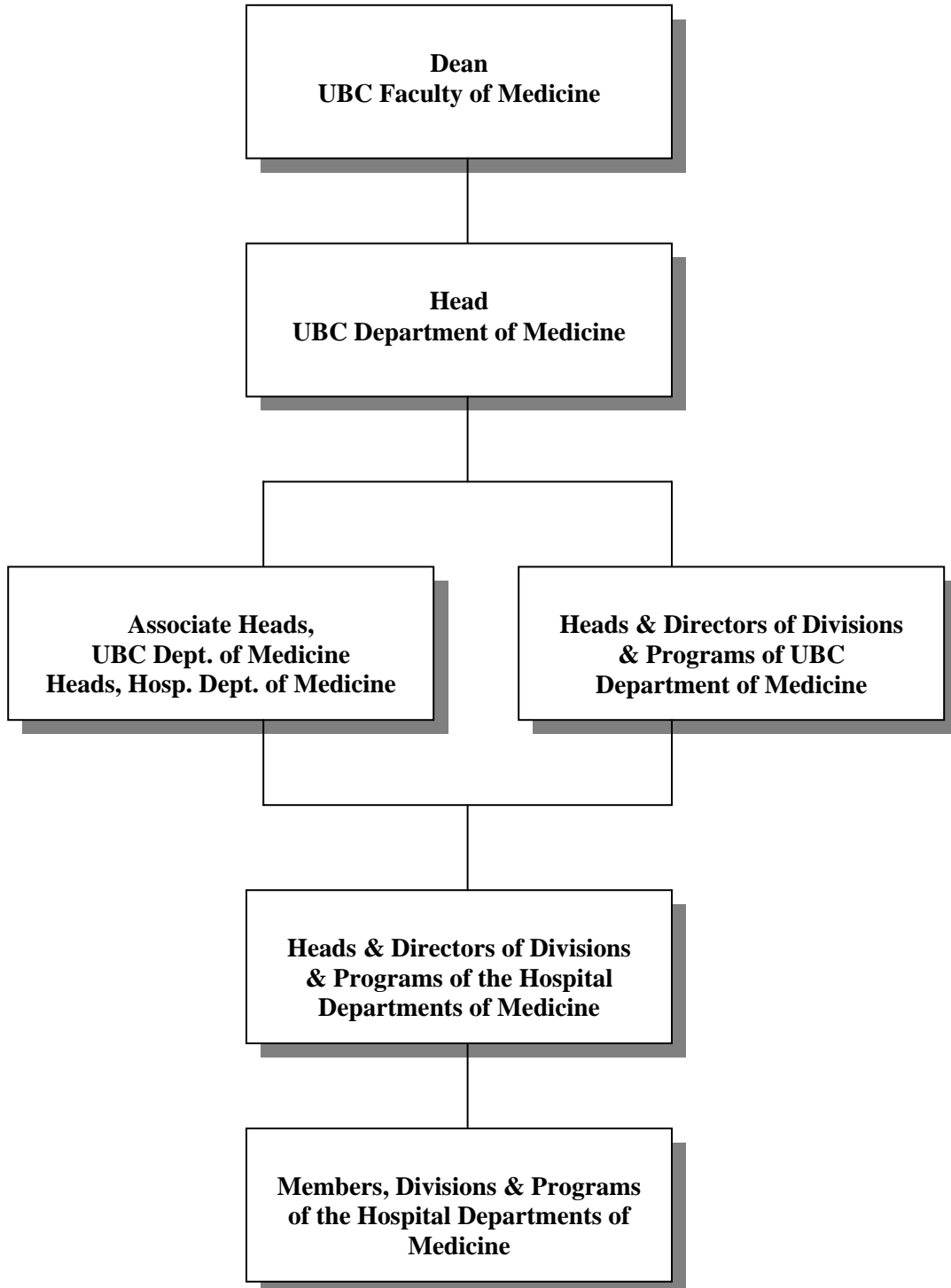
- respect the dignity, individuality and needs of our patients,
- strive to discover new knowledge that will advance state-of-the-art care,
- ensure effective and innovative teaching of our students,
- optimize our organization to promote both professional and personal fulfillment,
- value the efforts and achievements of teams and individuals who work to face the challenges of modern medicine.

These activities will ensure the respect of our peer organizations and recognition as a world-class Department of Medicine.



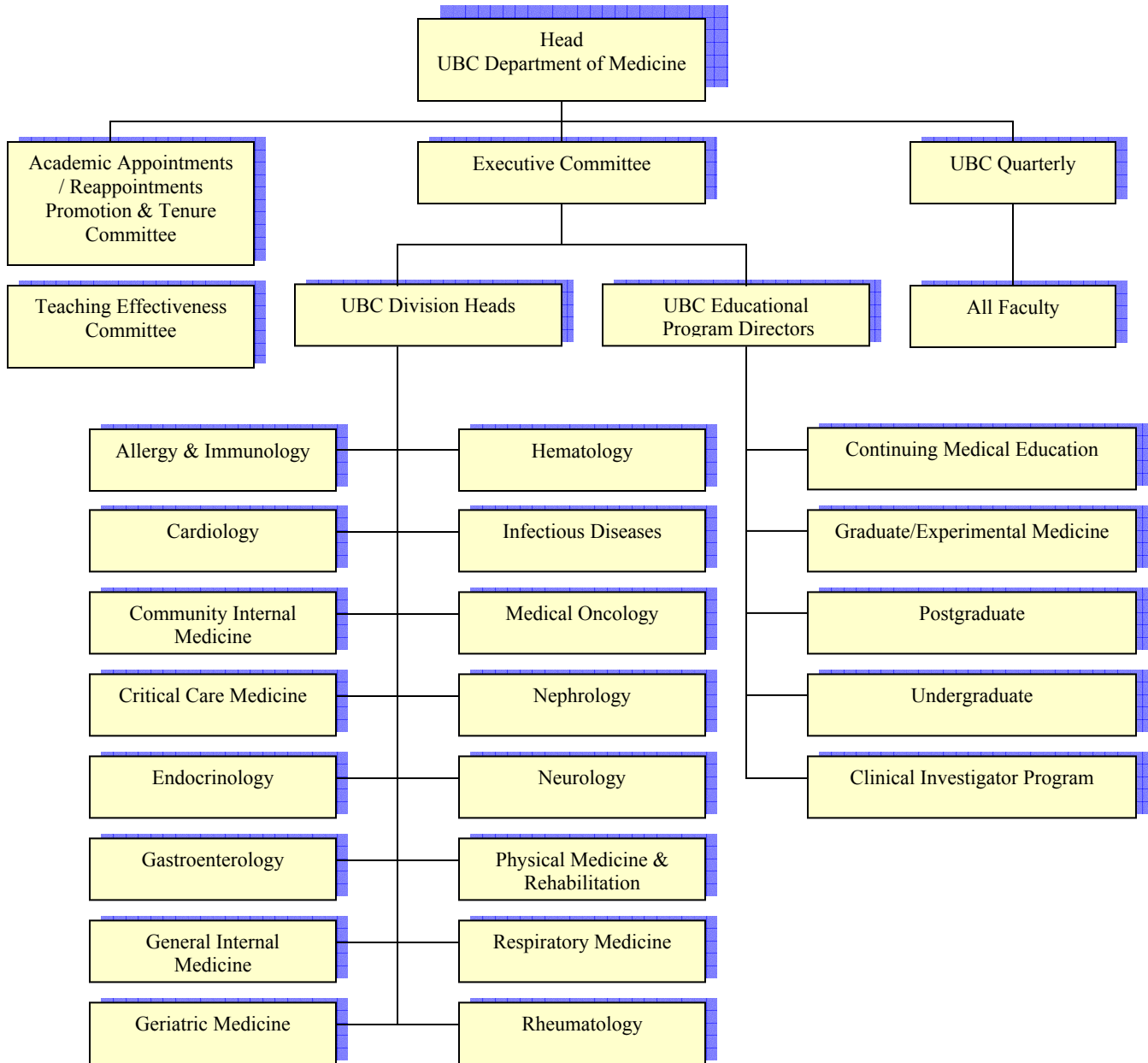
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# ORGANIZATION CHART



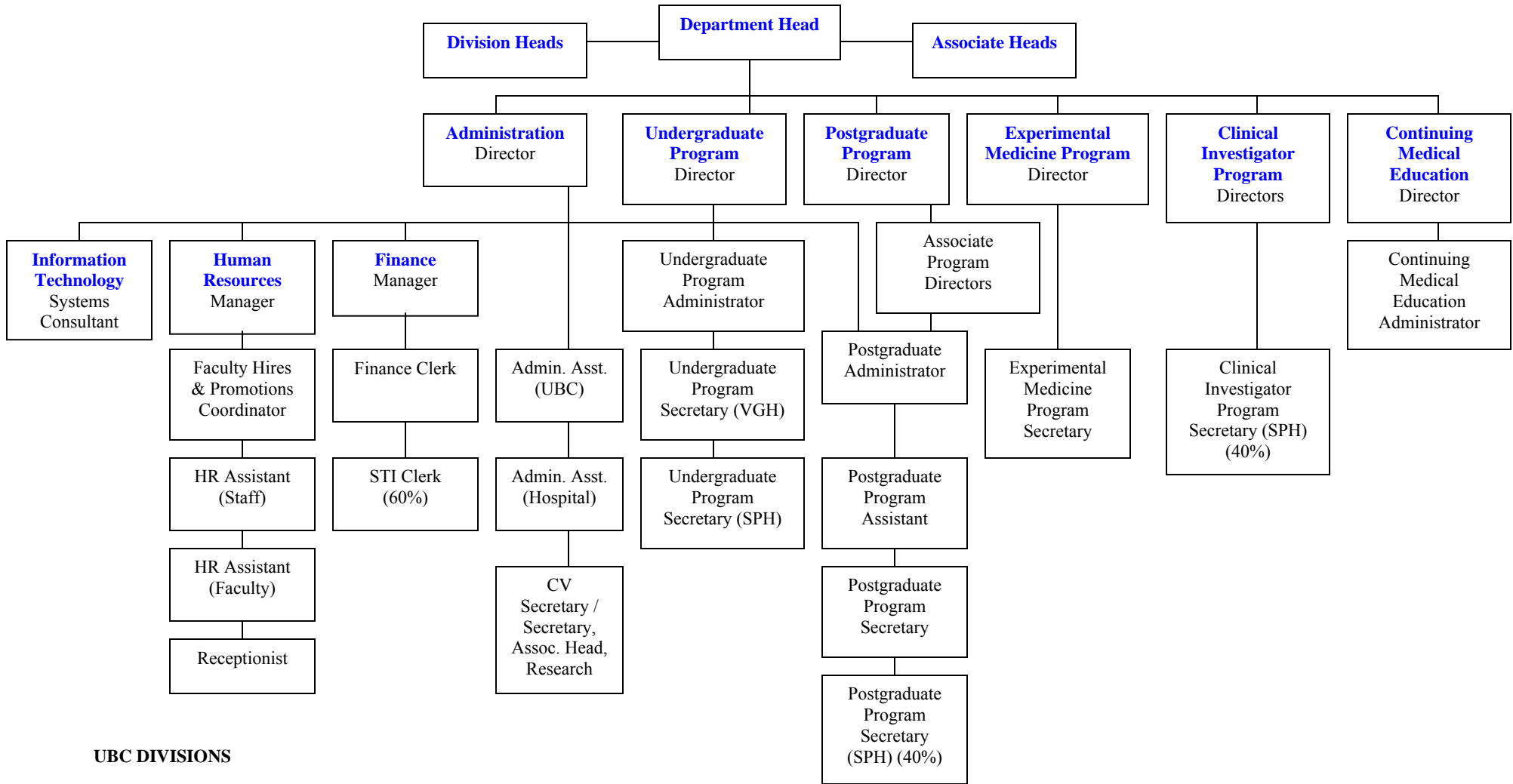


# UBC DEPARTMENT OF MEDICINE COMMITTEE STRUCTURES





**UBC DEPARTMENT OF MEDICINE – ADMINISTRATION OFFICE**



**UBC DIVISIONS**

Allergy & Immunology  
 Cardiology  
 Community Internal Medicine

Critical Care Medicine  
 Endocrinology  
 Gastroenterology

General Internal Medicine  
 Geriatric Medicine  
 Hematology

Infectious Diseases  
 Medical Oncology  
 Nephrology

Physical Med & Rehab  
 Respiratory Medicine  
 Rheumatology





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**UBC DEPARTMENT OF MEDICINE COMMITTEES**



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## DEPARTMENT HEADS, ASSOCIATE HEADS, UBC DIVISION HEADS, EDUCATIONAL PROGRAM DIRECTORS & ASSOCIATE DIRECTORS

### DEPARTMENT HEADS

Graydon S. Meneilly, MD, FRCPC  
Eric W. Hamber Professor & Head  
Department of Medicine, UBC & VGH

S. F. Paul Man, MD, FRCPC  
Chair, Department of Medicine  
Providence Health Care

### UBC ASSOCIATE HEADS

Dr. Michael Barnett, Associate Head of Medicine, Vancouver Acute  
Dr. S. F. Paul Man, Associate Head of Medicine, Providence Health Care  
Dr. Doris Doudet, Associate Head Research, Vancouver Acute (*Jan 1 – August 31, 2006*)  
Dr. Peter Pare, Associate Head Research, Providence Health Care

### UBC DIVISION HEADS

Allergy & Immunology	Dr. Robert Schellenberg
Cardiology	Dr. Chris Buller
Community Internal Medicine	Dr. Barry Kassen ( <i>Acting</i> ) ( <i>May 1, 2006 -</i> )
Critical Care Medicine	Dr. John Fenwick ( <i>Jan 1 – May 30, 2006</i> )
	Dr. Dean Chittock ( <i>Acting</i> ) ( <i>June 1, 2006 -</i> )
Endocrinology	Dr. David Thompson
Gastroenterology	Dr. Urs Steinbrecher ( <i>January 1 – 31, 2006</i> )
	Dr. Eric Yoshida ( <i>February 1, 2006 -</i> )
General Internal Medicine	Dr. Iain Mackie, ( <i>Acting</i> ) ( <i>Jan 1 – April 30, 2006</i> )
	Dr. Barry Kassen ( <i>May 1, 2006 -</i> )
Geriatric Medicine	Dr. Janet McElhaney
Hematology/Bone Marrow Transplantation	Dr. Michael Barnett
Infectious Diseases	Dr. Neil Reiner
Medical Oncology	Dr. Susan O'Reilly
Nephrology	Dr. Paul Keown
Neurology	Dr. Howard Feldman
Physical Medicine & Rehabilitation	Dr. Theo Van Rijn
Respiratory Medicine	Dr. Paul Man ( <i>Acting</i> ) ( <i>Jan 1 – June 30, 2006</i> )
	Dr. Mark Fitzgerald ( <i>July 1, 2006 -</i> )
Rheumatology	Dr. John Esdaile ( <i>Jan 1 – October 31, 2006</i> )
	Dr. Barry Koehler ( <i>Acting</i> ) ( <i>November 1, 2006 -</i> )

### EDUCATIONAL PROGRAM DIRECTORS & ASSOCIATE DIRECTORS

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Clinical Investigator Program Directors	Dr. Anita Palepu Dr. Adeera Levin
Continuing Medical Education Director	Dr. G. B. John Mancini
Graduate Studies Program in Experimental Medicine Director	Dr. Vince Duronio
HIV/AIDS Research Program Director	Dr. Julio Montaner
Postgraduate Education Program Director	Dr. J. Mark Roberts
Associate Directors	Dr. Roger Wong Dr. Rose Hatala Dr. Barry Kassen
Undergraduate Education Program Director	Dr. Grant Stiver
Associate Directors	Dr. Jim Dunne, <i>3<sup>rd</sup> year &amp; CTU, VGH</i> Dr. Jim Busser, <i>CTU, VGH</i> Dr. Abeer Jamal, <i>4<sup>th</sup> year</i> Dr. Janet Kushner-Kow, <i>Expansion &amp; New Programs</i>

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## RESEARCH



*Doris J. Doudet*  
*Professor & Associate Head*  
*(January 1 – September 1, 2006)*

The focus of the past year was to gather information from junior faculty members regarding their career paths. Dr. Doudet spent time interviewing all junior GFT faculty members in the Department to obtain an update on the current status of each individual member, giving advice as to future courses of action, gaining insight to junior faculty members' level of satisfaction with existing mentoring practice, and obtaining suggestions and feedback for the new mentoring program spearheaded by Dr. Norman Wong. This also provided some insight to the common issues and concerns faced by junior faculty in combining professional, research and family life. This exercise also led to the recognition of the less than optimal knowledge and understanding that junior faculty have of the actual processes for Reappointment and Tenure at the Department, Faculty and University levels. Although the University has a list of defined procedures in its handbook, the length and dryness of the writing discourages most junior faculty to carefully read it. To compensate, an abbreviated and lay language version of the various steps one's application undergoes will be posted shortly in the Research Guide in the Departmental website.

A concern unanimously expressed was statistics, from basic to sophisticated. As a result, a survey of the Divisions revealed that a majority would like to have a readily available DVD or web-based course covering basic principles, most commonly used, dos and don'ts in a variety of conditions, resources. The Department is currently investigating the realization of such a custom-made course by a UBC biomedical statistician. All suggestions are welcome.

Dr. Doudet resigned her position as Associate Head, Research on September 1, 2006 before leaving for a year long sabbatical in Denmark. The position is currently vacant.



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## COMMITTEE FOR APPOINTMENTS, REAPPOINTMENTS, PROMOTION AND TENURE

Chair: Dr. G. S. Meneilly, Professor  
Vice-Chair: Dr. S. F. Paul Man, Professor (Vice-Chair as of July 1, 2006)  
Administrative Secretary: Jeannie Brown

Dr. Yossef Av-Gay, Associate Professor, Infectious Diseases	July 2006 to December 2006
Dr. Tony Bai, Professor, Respiratory Medicine	July 2006 to December 2006
Dr. Michael Barnett, Clinical Professor, Hematology	July 2006 to December 2006
Dr. John Cairns, Professor, Cardiology	January 2006 to December 2006
Dr. Paul Hoskins, Clinical Professor, Medical Oncology	January 2006 to December 2006
Dr. Simon Huang, Clinical Associate Professor, Rheumatology	January 2006 to December 2006
Dr. Barry Kassen, Clinical Professor, General Internal Medicine	July 2006 to December 2006
Dr. Paul Keown, Professor, Nephrology	January 2006 to December 2006
Dr. Nasreen Khalil, Clinical Professor, Respiratory Medicine	January 2006 to December 2006
Dr. G. B. J. Mancini, Professor, Cardiology	January 2006 to December 2006
Dr. Janet McElhaney, Professor, Geriatric Medicine	July 2006 to December 2006
Dr. Nevin Murray, Clinical Professor, Medical Oncology	January 2006 to December 2006
Dr. Donald Ricci, Clinical Professor, Cardiology	January 2006 to December 2006
Dr. Robert Schellenberg, Professor, Allergy & Immunology	January 2006 to December 2006

This dedicated group of committed Departmental members is charged with facilitating the career advancement of our members while upholding consistent and rigorous standards as set out by UBC. As usual, this Committee invested a great deal of thoughtful energy to support the additions and promotions listed below. We are very proud of the following:

### NEW APPOINTMENTS

#### Adjunct Professor

Grigg, Michael – Infectious Diseases  
Ostermann, Joachim – Neurology

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Associate Member

Copes, Ray  
Hamm, Doug  
Sheldon, Les – Geriatric Medicine

Assistant Professor

Kerr, Thomas – Infectious Diseases  
Nandan, Devki – Infectious Diseases  
Traboulee, Anthony – Neurology

Clinical Instructor

Bashir, Khalid – Community Internal Medicine  
Bressler, Brian – Gastroenterology  
Cummins, Nora – Community Internal Medicine  
Dyck, Chadwyn – Community Internal Medicine  
Fava, Craig – Critical Care Medicine  
Hart, Jason – Medical Oncology  
Kang, Anna – Community Internal Medicine  
Koziol, Kathie  
McLeod, Kevin – Community Internal Medicine  
Pansegrau, Gary – Medical Oncology  
Rao, Sanjay – Medical Oncology  
Rosenbaum, Debbie  
Shapira, Stacey – Gastroenterology  
Townsend, Tiffany – Neurology  
Wilk, Lucie – Rheumatology  
Wojtowska, Ewa – Community Internal Medicine  
Yee, Adrian – Medical Oncology  
Yelle, Carole-Anne – Critical Care Medicine

Clinical Assistant Professor

Atkinson, Kenneth – Gastroenterology  
Buckley, Alan  
Chan, Albert  
Cuff, Darcy  
Filbey, James – Physical Medicine & Rehabilitation  
Gordon, Ann  
Guzman, Jaime  
Hargrove, Gaylene  
Holland, Stephen  
Karim, Mohamud – Nephrology  
Katz, David – Neurology  
Keshmiri, Mehdi – Community Internal Medicine  
Kim, Seung – Allergy & Immunology  
Le, Lyly – Medical Oncology  
MacKean, Lynne – Physical Medicine & Rehabilitation



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Main, Christopher – Community Internal Medicine  
Matossian, Sebouh – Community Internal Medicine  
McDonald, David – Community Internal Medicine  
McWilliams, Annette – Respiratory Medicine  
Nair, Pavarthi – Cardiology  
Neufeld, Peter – Nephrology  
Priestman, B. Anne – Endocrinology & Metabolism  
Rupka, Dennis  
Saly, Viera  
Sanders, Bruce  
Taylor, Susan – Community Internal Medicine  
Wadge, Sara – Community Internal Medicine  
Yang, Tung Chuo – Community Internal Medicine  
Youakim, Sami  
Yun, John – Medical Oncology  
Zalunardo, Nadia – Nephrology

Clinical Associate Professor

Kollmannsberger, Christian – Medical Oncology  
Simkus, Gerald  
Sparks, Patricia  
Sullivan, Stephen – Community Internal Medicine

**PROMOTIONS**

Professor

Mayo, John – Cardiology  
Ryan, C. Frank – Respiratory Medicine

Clinical Assistant Professor

Blackwell, Margaret  
Broady, Raewyn – Hematology  
Costantino, Anthony – Neurology  
Hawley, Philippa – General Internal Medicine  
Henderson, William – Critical Care Medicine  
Roberts, Mark – General Internal Medicine  
Song, Kevin – Hematology  
Tsang, Peter – Hematology  
Watterson, John - Rheumatology

Clinical Associate Professor

Dahl, Marshall – Endocrinology & Metabolism  
Ronco, Juan – Critical Care Medicine  
Shenkier, Tamara – Medical Oncology

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Clinical Professor

Kassen, Barry – General Internal Medicine

Wilson, Kenneth – Medical Oncology

**REAPPOINTMENTS**

Assistant Professor

Cherkasov, Artem – Infectious Diseases

Chi, Kim – Medical Oncology

Chia, Stephen – Medical Oncology

Lacaille, Diane – Rheumatology

Madden, Kenneth – Geriatric Medicine

Steiner, Theodore – Infectious Diseases

Tai, Isabella - Gastroenterology

**EMERITUS STATUS**

Chan, Robert – Infectious Diseases



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## TEACHING EFFECTIVENESS OFFICE

Dr. James Busser	Chair; Member, UBC Division of General Internal Medicine
Mrs. Jennifer Golinski	Administrator; Undergraduate Education, UBC Department of Medicine
Ms. Katya Leonardia	Program Assistant, Undergraduate Education, UBC Department of Medicine
Ms. Amy Poon	Assistant to Department Head's Secretary, UBC Department of Medicine

### **Reports to:**

Committee for Appointments, Reappointments, Promotions and Tenure

### **Functions:**

1. Provides Faculty member with "Guidelines" for producing necessary back-up documentation to Teaching Dossier.
2. Meets with Faculty member to discuss necessary back-up documentation and the process entailed for the teaching and education component of promotion/tenure/reappointment.
3. Liaises with various program offices: Undergraduate, Postgraduate, Continuing Medical Education, Graduate Studies to obtain information regarding contributions to education, including teaching effectiveness, of candidate. Where necessary, requests additional peer review of teaching.
4. Reviews teaching dossier, back-up documentation, peer review and prepares draft report for Committee for Appointments, Reappointments, Promotions and Tenure.
5. Forwards draft report to Faculty member to ensure that feedback appears accurate and representative, and that important information has not been omitted.
6. Finalizes report and forwards to Committee for Appointments, Reappointments, Promotions and Tenure.

In the year 2005, the Teaching Effectiveness Committee prepared 28 letters on behalf of GFT and Clinical Faculty. Subsequent promotions for these faculty have included:

- (1) Professor
- (1) Clinical Professor
- (6) Clinical Assistant Professor
- (1) Clinical Associate Professor

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Additionally, eight letters were prepared for re-appointments.

In the year 2006 we met with another 42 faculty, and have prepared 42 letters to support their review and/or consideration of promotion.

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## **DIVISION REPORTS**



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## ALLERGY & IMMUNOLOGY



***Dr. R. Robert Schellenberg***  
***Professor & Head***

### **Faculty Members**

Professor & Head	Schellenberg, Dr. Robert	SPH
Clinical Professor	Wong, Dr. HC George	VA
Clinical Associate Professor	Stark, Dr. Donald	SPH
Clinical Assistant Professor	Kim, Dr. Seung	VA
Clinical Instructor	Kanani, Dr. Amin	Vancouver

### **Divisional Overview**

Our division is involved in providing clinical teaching in allergy and immunology at all levels. This includes major initiatives in patient education, CME programs for physicians, and elective rotations for residents and medical students. We are currently working to establish a training program at UBC, a major commitment for a small division with limited resources. The need for an additional training program in our discipline in Western Canada was highlighted by the external review of our division in December 2006. The benefits to the country in addition to British Columbia were mentioned. Increased exposure of trainees should aid in recruitment to our subspecialty which, in a recent national survey of physicians in Canada, had one of the highest levels of professional satisfaction. Dr. Donald Stark chairs the Nucleus Committee of Allergy and Clinical Immunology for the Royal College and will champion this cause. Dr. Robert Schellenberg is vice-chair of the examination committee for our subspecialty and as such has intimate knowledge of the needs and expectations for a training program.

An additional major initiative is the development of a specialized clinic for Primary Immune Deficiency patients. Goals are to have a defined clinic where these patients can have specialized teaching and training for the initiation of home therapy with replacement immunoglobulin. Such a facility would enhance patient care while decreasing the requirement for hospital resources. Drs. Kanani, Stark and Schellenberg are actively pursuing this in collaboration with the outpatient nursing coordinator and the blood bank administrator at St. Paul's Hospital. The initial proposal is to undertake a pilot project in the health region with expansion provincially when proven benefits are demonstrated.



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We welcome Dr. Seung Kim as a community member of our division. Dr. Kim has an active practice in Burnaby and has been very obliging in taking residents into his clinic and providing excellent teaching in this outpatient setting. All our members are actively involved in providing this exposure to students and residents who take our elective rotation, which provides ideal exposure to the clinical problems dealt with in our subspecialty.

## **Teaching**

All members of the Division are actively involved in teaching students, residents, community physicians and lay persons.

Dr. Schellenberg provides an introductory lecture to Medicine I students on the basic mechanisms of allergic inflammation, and also teaches the Pathology 521 course. All members actively participate in case-based subspecialty teaching seminars for Med III / IV students and provide individual office-based teaching of students who have chosen an elective rotation in the subspecialty. In addition, each member teaches in the Clinical Skills block for Med I students and conducts Bedside teaching sessions with Med II students.

The month-long elective rotation for residents in Internal Medicine and its subspecialties has become increasingly popular in recent years. Members commit a half to a full day per week of their office practice for each resident and Dr. Schellenberg has one on one teaching sessions two half days each week with the resident, reviewing basic and clinical topics of relevance.

Major initiatives have been undertaken in community medical education to physicians, other health care professionals and to the lay public. CME programs organized by Dr. George Wong through the auspices of the UBC Community Programs are given in various communities in British Columbia and the Northwest Territories. These have received excellent evaluations and are highly appreciated by physicians in outlying areas. Each member contributes to these programs.

Despite semi-retirement, Dr. Michael Mandl has continued his asthma education program initiated through the Health Transition Fund to raise awareness and specific information in management of asthma in communities in BC. Five geographical sites have been targeted for evaluation of the effectiveness of this intensive education program to the public.

Dr. George Wong has developed specific expertise in evaluation of complementary and alternative medicine practices and has presented a number of interesting papers on these aspects at meetings in the USA and Canada, as well as to the BC Qualified Acupuncturists and Traditional Chinese Medicine Practitioners Association. He is a committee member of the Complimentary and Alternative Practices in Allergy Committee of the American Academy of Allergy, Asthma and Immunology (AAAAI) and involved in this organization's adverse reaction to drug and biological committee as well as is a member of the BCMA committee on allied health and alternative therapies.

Dr. Amin Kanani is a member of the Jeffrey Modell Foundation of Canada, an organization that promotes awareness of primary immune deficiency with health care providers and the lay public. He has organized a local Immunology Journal Club that brings together pediatric and adult

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immunologists to foster interaction and share knowledge and the development of needed laboratory testing. He and Dr. Schellenberg have been involved in adding the “Ten Warning Signs for Primary Immune Deficiency” to the pamphlet “Do Bugs Need Drugs”, a highly successful initiative in BC and Alberta developed by Dr. Mary Carson that reviews signs of infections and general considerations for health care providers. This collaboration has been very fruitful and further aspects of joint teaching sessions are being discussed.

All members have been actively involved in providing teaching seminars in various communities in British Columbia. Examples include Grand Rounds presentations at Kelowna General, Surrey Memorial and Royal Jubilee Hospitals on topics of immune deficiency and management of difficult asthma.

### **Research**

The members at St. Paul’s hospital have a major interest in management of primary immune deficiency and have initiated a number of research projects as well as interactions with the lay organizations, Canadian Immune Deficiency Patient Organization and the Jeffrey Modell Foundation. Dr. Amin Kanani is the principal investigator on a grant-in-aid (co-investigators Dr. Stark and Dr. Schellenberg) evaluating the quality of life and health outcome parameters of patients with primary immunodeficiency using two different dosing regimens of IVIG to determine optimal dosing requirements. Preliminary results suggest very interesting findings that may form the basis of modifications to present clinical recommendations (presented by Dr. Kanani at the AAAAI annual meeting in February 2007).

Dr. Stark is the principal investigator in a study evaluating a new IV immunoglobulin product and he has submitted a unique proposal (Dr. Kanani and Schellenberg are co-investigators) to assess subcutaneous administration of the IVIG product which would allow home-based therapy.

Dr. Wong is conducting studies assessing the use and potential harmful effects of herbal and Chinese medicines.

### **Clinical Services**

All members are actively involved in providing clinical consultative services in Allergy and Immunology to the community. Dr. Mandl has outreach clinics in Dease Lake, Stewart, Hazelton, Bella Bella, Campbell River, Parksville and Bamfield. Dr. Stark provides outreach clinics in Prince George and Sechelt. He has been active with the hospitals in establishing protocols for the management of latex allergy in hospitals. Dr. Wong has had a specific interest in complimentary medicine practices and the potential harmful effects of specific treatments.

A major initiative at St. Paul’s Hospital to improve the care of patients with primary immunodeficiency is being led by Drs. Kanani, Stark and Schellenberg in conjunction with Debbie Laflamme (Supervisor of Outpatient Services) and Darryl Gouthro (Manager of the Blood Bank). This entails the establishment of an outpatient clinic and registry to provide service to these patients and initiate home subcutaneous or intravenous immunoglobulin therapy. The

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goal of this project is to have a provincial centre and resource for all patients with primary immune deficiency and link registries with others across Canada and globally.

### **National and International Initiatives**

Drs. Stark and Schellenberg are very involved with the national programs for Allergy and Clinical Immunology.

Dr. Stark chairs the Nucleus Committee for Clinical Immunology and Allergy of the Royal College of Physicians and Surgeons of Canada and is a Past-President of the Canadian Society of Allergy and Clinical Immunology.

Dr. Schellenberg completed his 2-year term as president of the Canadian Society of Allergy and Clinical Immunology in October 2004 and its Board of Directors in October 2006. He is also the deputy chair of the Royal College Examination Committee for this subspecialty and was the program director for the annual scientific meetings of the Canadian Society of Allergy and Clinical Immunology for 2005 and 2006. In addition, he is a member of the Medical Advisory Committee of the Canadian Immune Deficiency Patient Organization.

Dr. Stark is a member of the Board of Directors for the Canadian Foundation for Allergy and Clinical Immunology, a charitable organization of which Dr. Stark was the founder.

All members are actively involved in local, national and international committees dealing with their areas of interest.

### **Future Direction**

A major initiative of the division is the development of a Comprehensive Care Program for patients with Primary Immune Deficiency in British Columbia. We are working collaboratively with groups across the country to establish a registry of these patients for improved care and opportunities for multi-centred research initiatives. Locally we are working to have a specific out-patient clinic where management can be better coordinated, especially as we move to home immunoglobulin replacement therapy. We are the first adult centre to initiate this and are developing a business plan to the Ministry of Health to make this a provincial resource that would allow better standardized care at lower cost.

The initiative to develop a Royal College accredited teaching program in our subspecialty and evaluate means of increasing exposure to medical students is being actively pursued. Due to our limited numbers and the expanding requests for elective rotations in our subspecialty, we plan to increase our membership by adding excellent clinical faculty from the community. A number already contribute significantly to our ongoing teaching programs that involve both pediatric and adult programs.

# CARDIOLOGY



***Dr. Christopher E. Buller***  
***Professor & Head***

## Faculty Members

Professor & Head	Buller, Dr. Christopher	SPH/VA
Professor	Cairns, Dr. John	VA
Professor	Kerr, Dr. Charles	SPH
Professor	Mancini, Dr. G B John	VA/SPH
Professor	Mayo, Dr. John <sup>1</sup>	VA
Professor	Rabkin, Dr. Simon	VA
Assistant Professor	Humphries, Dr. Karin	SPH
Clinical Professor	Bernstein, Dr. Victoria	VA
Clinical Professor	Dodek, Dr. Arthur	SPH
Clinical Professor	Hamburger, Dr. Jaap	VA/SPH
Clinical Professor	Huckell, Dr. Victor	VA
Clinical Professor	Penn, Dr. Ian	VA
Clinical Professor	Ricci, Dr. Donald	VA
Clinical Professor	Webb, Dr. John	SPH
Clinical Associate Professor	Carere, Dr. Ronald	SPH
Clinical Associate Professor	Fung, Dr. Anthony	VA
Clinical Associate Professor	Gin, Dr. Kenneth	VA
Clinical Associate Professor	Ignaszewski, Dr. Andrew	SPH
Clinical Associate Professor	Kiess, Dr. Marla	SPH
Clinical Associate Professor	Macdonald, Dr. Ian	SPH
Clinical Associate Professor	Thompson, Dr. Christopher	SPH
Clinical Associate Professor	Yeung-Lai-Wah, Dr. John	SPH
Clinical Assistant Professor	Aymong, Dr Eve	SPH
Clinical Assistant Professor	Chan, Dr. Sammy	SPH
Clinical Assistant Professor	Heilbron, Dr. Brett	SPH
Clinical Assistant Professor	Isserow, Dr. Saul	VA
Clinical Assistant Professor	Jue, Dr. John	VA
Clinical Assistant Professor	Lee, Dr. Pui Kee	VA
Clinical Assistant Professor	Moss, Dr. Robert	SPH
Clinical Assistant Professor	Nair, Dr. Parvathy	VA
Clinical Assistant Professor	Rabinowitz, Dr. Alan	SPH

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Clinical Assistant Professor	Ramanathan, Dr. Krishnan	SPH/VA
Clinical Assistant Professor	Saw, Dr. Jacqueline	VA
Clinical Assistant Professor	Straatman, Dr. Lynn	SPH
Clinical Assistant Professor	Wong, Dr. Graham	VA
Clinical Instructor	Munt, Dr. Bradley	SPH
Clinical Instructor	Tung, Dr. Stanley	SPH
Adjunct Professor	Lear, Dr. Scott	SPH
Professor (Emeritus)	Mizgala, Dr. Henry	VA
Associate Professor (Emeritus)	Henning, Dr. Hartmut	
Clinical Professor (Emeritus)	Boone, Dr. John	SPH
Clinical Professor (Emeritus)	Kavanagh-Gray, Dr. Doris	
Clinical Professor (Emeritus)	Peretz, Dr. Dwight	
Clinical Professor (Emeritus)	Shaw, Dr. Melville	
Clinical Professor (Emeritus)	Walters, Dr. Max	

<sup>1</sup> Joint tenure appointment 50:50 with Department of Radiology

## **Divisional Overview**

The UBC Division of Cardiology consists of 37 active faculty (including 7 full-time faculty, and 30 clinical faculty distributed over two large tertiary programs at St. Paul's Hospital and Vancouver Acute (including UBC site). This number includes two new recruits to the Division during 2006; Dr. John Mayo (who shares a joint tenure appointment with the Department of Radiology) and Dr. Parvathy Nair. Eight additional members enjoy emeritus, honorary or adjunct status. In 2006, Dr. Christopher Buller entered his third year as Head, UBC Division of Cardiology and Sauder Family Heart & Stroke Foundation Chair in Cardiology, as well as Head, Division of Cardiology, Vancouver Acute and Dr. Andy Ignaszewski (Clinical Associate Professor) was appointed as Head, Division of Cardiology for St. Paul's Hospital.

The UBC Division of Cardiology provides a comprehensive range of tertiary and quaternary cardiology sub-specialty services and programs, including ambulatory and inpatient consultative cardiology, specialized clinics including heart function, cardiac intensive care, electrodiagnostics, cardiac ultrasound, interventional cardiology, electrophysiology, nuclear cardiology, adult congenital heart disease, cardiac transplantation and ventricular assist, atherosclerosis risk reduction and cardiac rehabilitation, and advanced cardiac imaging.

## **Teaching**

### **Undergraduate**

Identifying a dedicated individual to assume overall responsibility for undergraduate teaching was a goal reported in 2005. The Division is pleased to confirm it was able to complete recruitment to this position in early 2006 with the appointment of Dr. Parvathy Nair, as the Undergraduate Medical Education Director. Dr. Nair brings formal expertise in medical education, educational metrics and teaching through simulation technology and provides the following report for 2006:

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Whether students choose to be general physicians or specialists, a foundation in the cardiovascular sciences and clinical examination is an essential part of their skill set. To ensure students are prepared for their future clinical practice, the Division has taken an active and integral role in the undergraduate curriculum. In the past year, the Division has contributed over 170 hours in bedside clinical skills teaching, seminars, and problem-based tutoring as well as an additional 35 hours in undergraduate OSCE examinations. The Division has also recognized the importance of early exposure to cardiology practice and its role in mentoring undergraduate students by accommodating over 25 elective students on the inpatient services, such as CCU, and in cardiologists' offices. Faculty continue to play an important part in the development of curricular content as well as recruiting volunteer patients for clinical skills teaching. As the medical school expands, and the scope of cardiology practice increases, the Division recognizes that its contribution to the undergraduate program will increase. The Division is committed to its leadership role in undergraduate teaching using evidence-based teaching methods and assessment tools, as well as the incorporation of newer technologies, such as clinical simulation, to impart cardiovascular knowledge and skills. In this respect, the Division has actively recruited and supported faculty who have an academic interest in medical education to ensure the Division will have a leadership role in cardiovascular education.

### **Postgraduate**

The UBC Postgraduate Program in Cardiology (Ken Gin, Director, Krishnan Ramanathan Associate Director) continues to expand with 6 Ministry funded residents and 8 externally funded residents. In 2006, the Division itself funded one additional resident using internal resources, and negotiated the creation of another 3-year position through partnership with the Healthy Heart Society. In all, our program enjoys 14 core residents in cardiology distributed over the three-year Royal College Program.

Academic aspects of the program continue to strengthen with an extensive weekly curriculum of structured bedside teaching, internal and guest faculty lectures, resident-led presentations, and journal club reviews of contemporary literature, comprising 6—10 hours of structured teaching weekly. Exposure to cardiac radiology has been enhanced, with the cross appointment of Dr. John Mayo from Radiology. Research mentoring has been enhanced by the appointment of two hospital-based postgraduate research directors, Drs. John Jue (VGH) and Sammy Chan (SPH). The program has raised over \$20,000 to support resident research. At the 2006 Canadian Cardiovascular Society Congress we witnessed the largest number of presentations by the Cardiology fellows.

A Royal College Internal Review highlighted the many strengths of the program with only minor deficiencies noted. The surveyors thought the program was in excellent shape for the formal Royal College Review to be held in February 2007.

All UBC candidates who took the Royal College examination in Cardiology were successful. Moreover, all of our core program graduates from 2005 have secured positions for subspecialty training or staff positions.

The subspecialty programs continue to include Interventional Cardiology, Electrophysiology, Echocardiography and Heart Function/Transplant and advanced cardiac imaging.

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## Continuing Medical Education

### Internal Rounds

Across sites, the Division of Cardiology presents a rich curriculum of regular lectures and rounds. Cardiology Grand Rounds is presented weekly at each hospital. In addition, a variety of city-wide and hospital-based rounds are held regularly as follows:

- Interventional Cardiology (weekly, city-wide)
- Combined Cardiology/Cardiac Surgery (weekly, both sites)
- M&M (weekly at SPH, monthly at VH)
- Echocardiography (weekly, VGH)
- Resident Noon rounds (weekly, SPH)
- Research Rounds (bi-weekly, SPH)
- Journal Club (monthly, city-wide)

### Distinguished Speakers in Cardiovascular Medicine

2006 saw the third year of the Distinguished Speakers in Cardiovascular Medicine series held monthly during the academic year. Hosted jointly with the UBC Division of Cardiac Surgery, this program is directed by Drs. Ken Gin and Andrew Ignaszewski and brings prominent cardiovascular academics to Vancouver for 1 or 2 days of focused activity and interaction including research seminars, resident teaching, and the *Distinguished Speaker Lecture* itself. A broad range of tertiary and community cardiovascular specialists and researchers attend these lectures. They afford an important opportunity for basic scientists, clinical and academic physicians, cardiac surgeons, as well as faculty and staff from pharmacy and other allied health disciplines to meet and interact.

A key goal of this guest lecture series is to maintain complete academic independence with respect to the choice of speakers and topics. Funding it, however, requires industry support. To resolve this paradox, the cardiac pharmaceutical and device industry was approached at large by the Divisional leadership to provide shared funding without any input regarding content. In 2006, 10 industry partners supported Distinguished Speakers through this arms length funding arrangement and we were fortunate in hosting 7 truly distinguished speakers during the period.

### Course & Convention Leadership / Selected Lectures and Presentations

#### Dr. Eve Aymong:

- Canadian Cardiovascular Congress 2006: Workshop Presenter – Women in Cardiovascular Sciences
- Canadian Cardiovascular Congress 2006: Moderator for Oral Abstract Presentations

#### Dr. Christopher Buller:

- The 15<sup>th</sup> Annual Whistler Course (January 2006) - Christopher Buller, Donald Ricci and Ian Penn, Course Co-Directors: This 3-day course aimed at Interventional Cardiologists and allied Cardiac Catheterization laboratory staff from across Canada was held at Chateau Whistler. The curriculum emphasizes advances in technical and technological aspects of the specialty. Faculty included both UBC and other leading Canadian and US interventionalists.
- Janus IX Meeting, Whistler (January 2006) – Faculty Member
- CTO Summit, New York (February 2006) – Faculty Member

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- Satellite Symposium “New Concepts in ACS” Beyond 2000 (XII), CCS, Vancouver (October 2006) – Co Chair

**Dr. Ronald Carere:**

- The 8<sup>th</sup> Annual Excellence in Interventional Cardiology (December 2006) - Course Co – Director with Dr Eric Cohen, University of Toronto. This 3-day course for Interventional Cardiologists is attended by Interventional Cardiologists from across Canada. The curriculum emphasizes novel topics relevant to interventional cardiology including advances in evidence-based practice and public policy challenges.

**Dr. Kenneth Gin:**

- Canadian Cardiovascular Congress 2006- Local Arrangements Committee Chair

**Dr. Jaap Hamburger:**

- Co-director, Transcatheter Cardiovascular Therapeutics 2006, Cardiology Live Transmissions, Washington DC.
- Co-director of the Canadian Working Group for Coronary IVUS and Physiology, 2001 to present.
- Director of curriculum for simulation based postgraduate education and research in interventional cardiology - Center of Excellence of Surgical Education and Innovation (CESEI), at VGH.
- Founder and Medical Director of CardiABC, a UBC approved program for development and management of interventional cardiology clinical trials.
- On behalf of the Division of Cardiology at VGH, Dr. Hamburger collaborates with the Provincial Health Authority Service towards the creation and implementation of an ongoing, prospective quality assessment and evaluation program for the Interventional Cardiology Program.

**Dr. Karin Humphries:**

- National Forum for Young Investigators in Circulatory and Respiratory Health - Steering Committee Member 2004-2006

**Dr. John Jue:**

- Canadian Society of Echocardiography meeting – Vancouver, April 2008: Local planner Member of Planning Committee.

**Dr. Charles Kerr:**

- Canadian Cardiovascular Society Annual Meeting - Chair - responsible for organization of the Canadian Cardiovascular Congress 2006, the largest annual medical meeting in Canada.

**Dr. G.B.J. Mancini:**

- American College of Cardiology National Meeting - Co Chairman. "Predictors of Long-Term Outcome After Acute Myocardial Infarction", Atlanta, Georgia, March 14, 2006

**Dr. John Mayo:**

- Practical Radiology at Whistler, February 9, 2006. “Myocardial Function, Role of MRI”.
- 2. Icapture Imaging Symposium, Vancouver, March 4, 2006. “Cardiac MR Imaging”
- 8<sup>th</sup> Annual UBC Respiratory Update, Whistler, March 4, 2006. “An approach to Chest Radiograph Interpretation”.
- 9<sup>th</sup> Annual Medicine in Sunpeaks, An interactive course for Primary Care Physicians, March 13, 2006. “High Tech Radiologic Imaging”, “Getting the most from a Chest Radiograph”.
- 60<sup>th</sup> Annual Pacific Northwest Radiological Society Meeting, Vancouver, April 29, 2006, “Practical Approach to the management of lung nodules”.
- American Roentgen Ray Society Meeting, Vancouver, May 4, 2006, “CT Angiography



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of the pulmonary arteries”.

- Canadian Association of Radiologists Meeting, Montreal, October 23, 2006, “CT guided thoroscopic resection of the growing sub-centimeter pulmonary nodule”.
- Radiological Society of North America 91st Scientific Assembly and Annual Meeting, Chicago IL November 26-December 1, 2006. “Multidetector CT of Pulmonary Arteries, Heart and Thoracic Aorta”

**Dr. Simon Rabkin:**

- International Society of Heart Research - Indian Chapter, Chennai, India January 2006, Topic: Cardiac cell death – Invited Speaker
- Invited Speaker: Maduri Medical Society, Maduri India January 2006, Topic Cardiovascular Risk
- Hot Topics in Cardiology (April 2006) - UBC Division of Cardiology CME Committee - Chair
- International Society of Hypertension 2006, Program member, Chair Session

**Dr. Krishnan Ramanathan:**

- American College of Cardiology Scientific Session in Atlanta, 2006 – Panelist, discussing Renal Revascularization: *Whom and how to revascularize.*
- Canadian Cardiology Society Conference in Vancouver, BC October 2006 - Panelist discussing *Cardiovascular Risk in South Asians: Mechanisms and Prevention Strategies.*
- Canadian Cardiology Society Conference in Vancouver, BC October 2006 - Faculty Member at the Medtronic Interventional Cardiology symposium

**Dr. Jacqueline Saw:**

- VGH Carotid Stent Course: Course director and speaker
- VGH Live Case Symposia for Canadian Cardiovascular Congress: Live case presenter/operator
- Canadian Cardiovascular Society Peripheral Arterial Disease (PAD) Consensus Committee: Primary Panel

**Dr. John Webb:**

- Various invited presentations given at major cardiology and cardiac surgical meetings in over 20 cities in Canada, France, Germany, Italy, Spain and the United States.
- Satellite transmissions included live case broadcast to major meetings in New York and Las Vegas as well as lectures to various sites in Italy.
- Canadian Cardiovascular Congress – very successful St. Paul’s transcatheter valve workshop.

## Research

**Dr. Eve Aymong** has ongoing collaborations with Vancouver investigators on several studies and has participated in the development of several protocols. She has developed a new relationship with members of iCAPTURE to obtain pilot data in patients with acute myocardial infarction with a broader research plan under development. In the latter half of the year she joined the Ethics Review Board for St. Paul’s Hospital and continues as a reviewer for several cardiology journals and meetings.

**Dr. Victoria Bernstein** continues to be actively involved in research. Ongoing studies include: STICH; Magnesium study - Assessment of i/v magnesium for decrease in atrial arrhythmias after heart surgery; BEAUTIFUL study - Ivabradine vs. placebo CAD with LV dysfunction; ONTARGET - Telmisartan/Ramipril or combination in high risk cardiac patients; AF-CHF- Rate

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control vs. rhythm control in patients with LV dysfunction and paroxysmal AF; AUDITOR - Rimobant in the regression of arteriosclerosis disease. Studies completed include: SIMPATICO- Immune modulation in patients with severe intermittent claudication; ACCLAIM - Immune modulation in patients with class III & IV CHF; IMAGINE - Use of Quinapril in early post operative patients undergoing CABG; RUTH - Assessment of Raloxifene in women with ASHD; HOPE TOO; AMADEUS. Dr. Bernstein has served on numerous adjudication committees. These include SAVE; CARE; HOPE; PRAISE; COPERNICUS; HOPE TOO; ACCLAIM and IMAGINE. She is on the advisory board to Servier and Sanofi-Aventis.

**Dr. Christopher Buller** is active in numerous clinical trials and in outcomes research. His primary research focus in recent years has been through his executive involvement in the NIH/NHLBI funded Occluded Artery Trial testing the late open artery hypothesis for patients with recent myocardial infarction. The primary endpoint results of this trial were presented at the November 2006 American Heart Association Scientific Sessions and simultaneously published in the New England Journal of Medicine. The ancillary angiographic substudy (TOSCA-2) of which Dr. Buller was Co-Principal Investigator was presented during the same AHA Session and simultaneously published in Circulation. As a member of the OAT team, funding for long term follow up of patients enrolled in OAT and TOSCA-2 has recently been awarded by NIH/NHLBI. Dr. Buller remains the Canadian PI for the NIH/NHLBI FREEDOM trial which has now enrolled more than 200 patients across 14 Canadian centres.

**Dr. John Cairns** led efforts of colleagues from VH, St Paul's, C&W and BCCA to apply to MSFHR for the creation of the BC Clinical Research Technology Platform. Lead efforts of colleagues from the 4 Vancouver teaching hospitals to develop the concept of the Pacific Clinical Research Consortium, and to apply to the CFI/CIHR competition for clinical research infrastructure.

**Dr. Ron Carere's** research interests are predominantly in the area of population based and outcomes research and in clinical interventional cardiology. This includes use of the BC Cardiac Registry in determining population rates of cardiac procedures, exploring access issues and projections for procedure demand. He is a collaborator in several projects with other Canadian groups including APPROACH in Alberta and CCORT centered at ICES in Toronto. He is a co-investigator with Dr McManus and others in the Genome BC project seeking non invasive markers for transplant rejection and with Dr Scott Lear in telehealth.

**Dr. Sammy Chan** is active in clinical trials and mechanistic research. His area of interest is preventive cardiology, endothelial function and endothelial progenitor cells. He is the St. Paul's Hospital site investigator for the CRESCENDO study investigating the potential role of Rimobant in reducing adverse cardiovascular outcomes. He was awarded a 2 year grant in aid from the Heart & Stroke Foundation of BC and Yukon for a proposal involving aging, endothelial progenitor cells and endothelial function.

**Dr. Anthony Fung** Dr. Fung initiated the BRIEF-PCI trial in 2005. This is a double blind randomized trial comparing a brief infusion of eptifibatide versus prolonged infusion in preventing ischemic events following percutaneous coronary intervention. By December, 2006, more than 400 patients were enrolled.

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**Dr. Ken Gin** has served as reviewer for a number of journals during 2006: Journal of American Cardiology; Thorax; Canadian Journal of Cardiology; Journal of Emergency Medicine; as well as serving as abstract reviewer for the Canadian Cardiovascular Society. Dr. Gin has been the Primary Investigator on multiple studies including Timi 25/Extract; Prevention of MI Early Remodeling (PREMIER); Atrial Fibrillation Clopidogrel Trial with Irbesartan for Prevention of Vascular Events (ACTIVE); Aggressive Reduction of Inflammation Stops Events (ARISE); Comprehensive rimonabant evaluation study of cardiovascular endpoints and outcomes (CRESCENDO). In addition, Dr. Gin serves as a member on several steering committees including Magnesium for the Prevention of Atrial Arrhythmias after Cardiac Surgery (MPAACS); Validation of Chest Pain: Rule out ACS Rule; Aminophylline in and out of hospital brady/PEA onset (ABBA) and the Canadian Outpatient Self Monitoring Study.

**Dr. Jaap Hamburger** is centrally involved in translational research addressing myocardial repair by autologous bone marrow stem cells in both small (mouse) and large (pig) animal models. This project operates in collaboration with the Terry Fox laboratory (BC Cancer Agency), the Jack Bell Laboratory and iCAPTURE. During 2005 new imaging results indicated the presence of connexin 43 protein in transplanted BMSC, thus suggesting a mechanism for cell to cell communication in regenerated myocardial tissue.

A second translational project, in collaboration with Dr. K. Qayumi, was initiated under the title "The use of Trans Guidewire Therapy for reduction of reperfusion injury during direct PCI". The animal phase of this project established the safety and feasibility of a trans guidewire strategy aimed at blocking reactive oxygen species formation during reperfusion of acutely occluded coronary arteries.

**Dr. Karin Humphries'** areas of interest include sex/gender differences in CVD presentation, treatment and outcomes; health services research focused on secondary prevention; population-based rates of treatment, including PCI, CABG, and pharmacological therapy; and atrial fibrillation. Dr. Humphries has led B.C.'s team of contributors to the Canadian Cardiovascular Outcomes Research Team (CCORT) project and GENESIS - Gender and Sex Differences in Cardiovascular Disease - and Inter-disciplinary Capacity Enhancement Team funded by CIHR. A growing area of interest for Karin is investigator-driven randomized controlled trials. With her advanced theoretical and extensive practical knowledge, she supports and informs many such initiatives within the Division. As Principal Investigator, Dr. Humphries presently holds a *Scholar Award* from the Michael Smith Foundation, a New Investigator Award from the Canadian Institutes of Health as well as funding from the Heart and Stroke Foundation and CIHR

**Dr. John Jue** continues to add to his echo database which currently contains 85,000 studies. Current research work includes aortic stenosis and pulmonary hypertension; aortic stenosis regression and statins (Astronomer study); tissue strain in Fabry's and Hypertensive patients; pericardial fat in a Fijian population with metabolic syndrome; and Tissue Doppler following conversion of Atrial Fibrillation.

**Dr. Charles Kerr** is a clinical electrophysiologist and carries out an active research program in cardiac arrhythmia management. His main area of interest has been atrial fibrillation (AF). He has directed the Canadian Registry of Atrial Fibrillation since 1990. CARAF I has followed 1100

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patients from their initial diagnosis of AF over 10 years, providing insight into progression of disease and clinical and laboratory outcomes. CARAF II has followed a more recent cohort to more carefully evaluate medical therapy provided by community physicians. He is also involved in drug trials of new antiarrhythmic and antithrombotic agents, as well as research trials of pacemakers and defibrillators. Research funding awarded in 2006:

- Canadian Registry of Atrial Fibrillation. St. Jude Medical (\$51,000)
- Canadian Registry of Atrial Fibrillation. SanofiAventis (\$83,000)

**Dr. G. B. John Mancini** has been active in clinical trials through his Cardiovascular Imaging Research Core Laboratory (CIRCL) which provides measurements of endothelial dysfunction (brachial artery ultrasound), carotid ultrasound, quantitative coronary intravascular ultrasound and quantitative coronary angiography(QCA). In addition, Dr. Mancini has expanded his research interests to include both clinical and molecular projects attempting to unravel the interplay between pulmonary diseases and cardiovascular events. Clinical projects assessing the impact of Chronic Positive Airway Pressure on carotid atherosclerosis and endothelial dysfunction in patients with Obstructive Sleep Apnea are underway. Cellular and molecular projects assessing the effects of statins and angiotensin receptor blockers on animal models and in-vitro cellular models of lung injury have been published recently. The NHLBI asked for a presentation of the clinical implications of this work at a specially convened conference in Bethesda, Maryland in the fall. The ACROSS-Cypher® trial assessing the efficacy of sirolimus eluting stents in chronic total occlusions was started in 2005 and will be completed in 2007. The results of the OAT trial were recently showcased in the late-breaking clinical trials sessions of the AHA and published simultaneously in the NEJM. An ancillary study to OAT called TOSCA2 was also published simultaneously in Circulation. CIRCL has completed the QCA analyses for the now published WEST study and two other trials (SMARTFED, and STREAM). The M-CHAT carotid ultrasound study, under the stewardship of Dr. Scott Lear, was also completed and a follow-up grant from the CIHR has been awarded.

**Dr. Parvathy Nair** was recruited from Toronto to the Division in February 2006. Her area of research interest lies in medical education; specifically in the areas of technical skills assessment and the use of simulation technology in cardiology training. She is presently doing her Master's thesis in the use of simulation in the instruction of cardiovascular clinical skills in the undergraduate curriculum. She has also published in the area of assessment of echocardiography skills in cardiology trainees, and has written grants for further projects in this novel research arena. She has an active role in echocardiographic research, particularly in the area of stress echocardiography and the assessment of valvular heart disease.

**Dr. Simon Rabkin** continues to pursue his interest in Nitric oxide in cardiovascular disease and also Metabolic syndrome. The research is aimed at unifying concepts for coronary and systemic vascular regulation and cardiac function through the signaling molecule nitric oxide(NO). Cardiomyocyte viability is key to cardiac function after an acute myocardial infarction. The pathways by which NO alters cardiomyocyte cell viability or alters blood pressure regulation are being investigated. How these factors affect cardiac valvular structure leading to valvular heart disease are also being explored.

**Dr. Krishnan Ramanathan** has helped to further strengthen clinical research within the Division of Cardiology. He is currently mentoring several medical students, General Internal

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Medicine residents and Cardiology residents with their research projects. He is spearheading a local study with now over 400 patients to determine if a genetic basis exists for premature coronary artery disease among South Asians. Dr Ramanathan is also the principal cardiology representative in the randomised control trial comparing current care in a multiple clinics versus care in a novel Cardiac, Diabetic Kidney care clinic. The result of his research has seen him strengthen collaboration within the Department of Medicine, Harvard University and The New York Scholl of Medicine. His experience in clinical trial has led to his inclusion on Steering / Operations Committees, Data and Safety Monitoring Boards and Writings Committees.

**Dr. Jacqueline Saw** arrived as a recruit from the Cleveland Clinic in 2004. She has research interests in several areas of cardiovascular medicine. She is the PI of 2 locally designed studies. Aspirin and clopidogrel resistance is being evaluated in a substudy of BRIEF-PCI (a locally developed multicenter RCT). The ELAPSE study is evaluating the development of resistance to long-term clopidogrel administration, which has completed patient enrollment since starting in 2005. She was also involved in evaluating the interaction of clopidogrel and statin in a posthoc analysis of CHARISMA, and also evaluating the PCI outcomes of patients with peripheral arterial disease in a pooled analysis. Dr. Saw is also involved in local outcome studies evaluating both co-morbidities and therapies in patients undergoing percutaneous carotid artery stenting.

**Dr. John Webb** is Director of Interventional Cardiology Research at St. Paul's hospital. The newly developed procedures of percutaneous transarterial and transapical off-pump aortic valve implantation have generated considerable interest. St. Paul's Hospital has the first and largest experience worldwide for these new procedures as well as other procedures under development. Physicians from a large number of countries visited St. Paul's to observe transcatheter valve procedures. During 2006 there were approximately 16 peer reviewed articles published with another 5 accepted for publication.

**Dr. Graham C. Wong** is active in clinical trials of acute coronary care with a particular focus on optimizing epicardial reperfusion. He is also interested in population-based outcomes following mechanical and pharmacological reperfusion for ST elevation myocardial infarction. Dr. Wong is currently the principal investigator for the inflammatory markers substudy of the BRIEF PCI study comparing an abbreviated versus a standard infusion of eptifibatide following percutaneous coronary intervention. Dr. Wong sits on the National Steering Committee for the GRACE 2 Registry of acute coronary syndromes. He currently heads the Clinical Trials Group for the Coronary Care Unit at VGH. In 2006 he was appointed Co-Chair of VCH Regional STEMI Committee.

**Dr. John Yeung** has a major research interest in the mechanisms of clinical arrhythmias and in developing the techniques for both mapping and ablating complex myocardial arrhythmic circuits. As a result of his work, St. Paul's Hospital Electrophysiology Laboratory is recognized as a Centre of Excellence for the use of the 3D mapping system. It is thus a training centre attracting international cardiac electrophysiologists interested in this field. He continues to evaluate the modulation of vagus nerve inputs to the left atrium in patients who undergo linear pulmonary vein ablation for atrial fibrillation. Other interests include the role of implantable cardioverter defibrillator (ICD) devices and biventricular pacing (cardiac re-synchronization).

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**VGH Division of Cardiology Research Awards** – In 2006, the VGH Division of Cardiology in conjunction with the VGH and UBC Hospital Foundation established a semi-annual award competition targeting pilot projects led by VGH Division members. Applications are received January 1<sup>st</sup>, and July 1<sup>st</sup> and are reviewed by the Research Review Committee comprised of Drs. John Cairns, John Mancini and Donald Ricci. During the first year, 4 awards were assigned from 9 applications.

**Advanced Cardiac Imaging** – Through the cooperative efforts of the Departments of Cardiology and Radiology the Advanced Cardiac Imaging Program has completed installation of a HDX update to the 1.5 Tesla Cardiac Capable MRI scanner at VGH. This update adds 16 channel parallel imaging, advanced cardiac gating technology and advanced cardiac analysis software to this scanner purchased in 2001, returning it to a state of the art piece of equipment. Following this upgrade, completed in late December 2006, we have performed 13 cardiac scans representing an approximate doubling of our previous average cardiac volume. The majority of these studies were performed for the assessment of; myocardial viability, myocardial mass, Arrhythmogenic Right Ventricular Dysplasia (ARVD), great vessel dimensions. The first draft of the Business Case for the Advanced Cardiac CT scanner has been reviewed and is under revision. Part of the business case process required a Request for Information (RFI) from the 4 major cardiac CT vendors (Toshiba, Philips, GE, Siemens). These meetings, held in November, provided a large amount of cutting edge information regarding the operational and purchase parameters for this scanner. It is anticipated that a Request for Purchase (RFP) document for an advanced cardiac CT scanner will be issued in the next 3 months.

There are ongoing discussions at SPH between radiology, nuclear medicine and cardiology to further develop this field. Dr Jen Ellis from radiology is being supported by PHC and her department to do an additional 6 months of MRI training directed at the complex congenital heart disease. A successful clinical collaboration with Dr John Mawson from the department of radiology at BC Women's and Children's is also in place

### ***Administration***

Dr. Christopher Buller, Head UBC Division of Cardiology

Dr. Andy Ignaszewski, Head Division of Cardiology, St. Paul's Hospital

Dr. Ron Carere, Regional Director Cardiac Sciences Program, Vancouver Coastal Health

### ***Clinical Sub-Program Leadership***

- **Healthy Heart Program (risk reduction and rehabilitation)**
  - Andrew Ignaszewski\*\* Saul Isserow\*
- **Cardiac Electrodiagnostics**
  - Marla Kiess\*\* John Jue\*
- **Acute Coronary Care**
  - Alan Rabinowitz\*\* Graham Wong\*
- **Interventional Cardiology & Cardiac Catheterization**
  - John Webb\*\* Anthony Fung\*

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- **Cardiac Ultrasound**
    - Christopher Thompson\*\* John Jue\*
  - **Heart Function and Cardiac Transplantation**
    - Andrew Ignaszewski\*\*
  - **Adult Congenital Heart Disease**
    - Marla Kiess\*\*
  - **Arrhythmia Management**
    - Charles Kerr\*\*
  - **Clinical & Consultative Cardiology**
    - Saul Isserow\*

\*\* SPH Director \*VGH Director

### **Special Honours and Awards 2006**

Dr. Eve Aymong

- European Society of Cardiology – Best abstract presentation – Diabetes and CAD.

Dr. Victoria Bernstein

- Prince of Good Fellows, BCMA

Dr. Arthur Dodek

- Vice President, College of Physicians and Surgeons of BC

Dr. Anthony Fung

- VGH Division of Cardiology Research Award July 2006
- UBC Department of Medicine – Fay R. Dirks Award for Excellence in Teaching 2006 (Vancouver Hospital)

Dr. Brett Heilbron

- Achieved Level 3 certification (ACCF/ AHA) in Coronary CT angiography.

Dr. Victor Huckell

- UBC Department of Medicine – Master Teacher Award 2006 (Vancouver Hospital)

Dr. Karin Humphries

- CIHR New Investigator Award (2006-2011)

Dr. Andy Ignaszewski

- Head, Division of Cardiology St. Paul's Hospital
- UBC Department of Medicine – Howard B. Stein Master Teacher Award 2005-06

Dr. Charles Kerr

- Chair, Provincial Advisory Panel on Cardiac Health
- Vice-president (President Elect), Canadian Cardiovascular Society

Dr. G. B. John Mancini

- UBC Faculty of Medicine Lifetime Achievement Award

Dr. Simon Rabkin

- ISH 2010 meeting – President
- Canadian Guidelines for the Management of Hypertension - Chair Pharmacologic management of hypertension in patients with cardiovascular disease
- Canadian Diabetes Association Guidelines for management of Diabetes 2006 - Member section diabetes and coronary artery disease

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Dr. Krishnan Ramanathan

- VGH Division of Cardiology Research Award July 2006
- VGH Division of Cardiology Research Award November 2006
- UBC Department of Medicine – Fay R. Dirks Award for Excellence in Teaching 2006 (St. Paul's Hospital)

Dr. Jacqueline Saw

- VGH Division of Cardiology Research Award July 2006

Dr. John Webb

- American College of Cardiology, Catheterization and cardiovascular intervention committee member
- Canadian Association of Interventional Cardiology, executive
- Health Canada, Scientific advisory committee on cardiovascular devices, core member

Dr. Graham Wong

- UBC Department of Medicine - Shelley Naiman for Clinical Teacher of the Year Award 2006



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## COMMUNITY INTERNAL MEDICINE



***Dr. Barry Kassen***  
***Clinical Professor &***  
***Acting Head***

### **Faculty Members**

Clinical Professor & Acting Head	Kassen, Dr. Barry	SPH
Clinical Professor	Mitenko, Dr. Paul	Nanaimo
Clinical Professor	Sullivan, Dr. Stephen	Victoria
Clinical Assistant Professor	Ayotte, Dr. Brian	Shuswap Lake
Clinical Assistant Professor	Baillie, Dr. Hector	Nanaimo
Clinical Assistant Professor	Bashir, Dr. Khalid	Prince George
Clinical Assistant Professor	Gill, Dr. Shavinder	Abbotsford
Clinical Assistant Professor	Keshmiri, Dr. Mehdi	Abbotsford
Clinical Assistant Professor	MacRitchie, Dr. Donald	Prince George
Clinical Assistant Professor	Main, Dr. Chris	Salmon Arm
Clinical Assistant Professor	Maung, Dr. Tun	Abbotsford
Clinical Assistant Professor	McDonald, Dr. Donald	Victoria
Clinical Assistant Professor	Min, Dr. Simon	Abbotsford
Clinical Assistant Professor	Richmond, Dr. Allister	Chilliwack
Clinical Assistant Professor	Sherk, Dr. Peter	Victoria
Clinical Assistant Professor	Wadge, Dr. Sara	Sechelt
Clinical Assistant Professor	Williams, Dr. Dave	Abbotsford
Clinical Assistant Professor	Yang, Dr. T.C.	Vancouver
Clinical Instructor	Auersperg, Dr. Edward	Maple Ridge
Clinical Instructor	Broder, Dr. Sarah	Penticton
Clinical Instructor	Caswell, Dr. Sherri	Richmond
Clinical Instructor	Cummins, Nora	Vancouver
Clinical Instructor	Dyck, Dr. Chadwyn	Penticton
Clinical Instructor	Ervin, Dr. Francis (Frank)	Maple Ridge
Clinical Instructor	Holmes, Cheryl	Kelowna
Clinical Instructor	Kang, Dr. Anna	Burnaby
Clinical Instructor	Kenyon, Dr. Michael	Nanaimo
Clinical Instructor	Kincade, Dr. David	Penticton
Clinical Instructor	Lai, Dr. Kevin	Nanaimo
Clinical Instructor	Skinnider, Dr. Doug	Victoria
Clinical Instructor	Son, Dr. Wai Kon	Chilliwack

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Clinical Instructor	Sunderwood, Dr. Jennifer	Campbell River
Clinical Instructor	Walker, Dr. Shannon	Penticton
Clinical Instructor	Winkler, Dr. Lawrence	Nanaimo
Clinical Instructor	Wojtowska, Ewa	Vancouver
Clinical Instructor	Wong, Dr. Steven	Richmond
Clinical Instructor	Zaidel, Dr. Patrick	Burnaby

### **Division Overview**

The UBC Division of Community Internal Medicine (CGIM) has recently been established by the UBC Department of Medicine. Presently this group is in its formative stages and is comprised of 36 members.

Prior to the establishment of this Division, there has been no representation within the department for this geographically widely dispersed group of physicians. Currently, the CGIM is represented by an Acting Head, who although having worked previously in the community, is a full-time member of the University GIM group.

Initially private funding to support community representation was explored; however, this initiative was not successful.

The Community Internal Medicine Division is made up of internists who practice outside the teaching sites of the UBC system in Vancouver. Therefore, the group consists of community general internists in urban settings (Richmond, Vancouver, etc), suburban settings (Maple Ridge, Langley, etc) and other areas in the province (Nanaimo, Penticton, Kamloops and Kelowna). Furthermore, internists at the distributed sites of Victoria and Prince George fall into this group.

To date, the efforts have been to recruit and credential (obtain faculty appointment) members to the CGIM division.

There has been direct contact with many members but to date there has been no formal meeting of all the members, and no organizational advancement of the membership.

Members have diverse clinical interests and activities. The common interest of CGIM is of medical education. The membership has members who act in leadership roles in medical journal publications, medical societies (provincially and nationally), involved with non-medical activities (fiction writing) and CME, which is a large component of educational activities for this group. CME is done at sponsored (industry events), grand rounds and other venues. Dr. Steve Wong of Richmond is very active in CME involving in computers and technical advances to support physicians' medical practices.

### **Teaching**

Teaching is a fundamental activity to this group. All members teach at both the undergraduate and postgraduate levels (in Internal Medicine). Members also teach Internal Medicine to other disciplines including family practice residents and residents from different Royal College specialties.

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Some members have been involved for many years while others have recently joined the faculty. Some members are active in a teaching capacity every month while others only interact with medical students and resident trainees on an occasional basis.

The group's cohesiveness is defined by its relationship to undergraduate program and postgraduate program in Internal Medicine.

### **Research**

Research to date has not been a focus of this group but will be an area for future faculty development.

### **Clinical Services**

The members of this group provide the Internal Medicine care to their respective communities. These activities include consultation to hospitals and outpatient groups, intensive care medicine, acute coronary care unit, pacemaker clinics, dialysis, perioperative and emergency services. In short, this group provides the entire spectrum of Internal Medicine services (in most communities) The CGIM group's activities are absolutely essential to the function of all acute care facilities.

### **Administration**

The CGIM represents different health regions – Vancouver Island Health, Fraser Health, Vancouver Coastal, Interior Health and Northern Health Authority.

The members of the CGIM division are involved in the medical administration for the various hospitals and health care regions. There are some members who are active nationally in the Royal College, with oral and written examinations in Internal Medicine, as well as promoting the development and the values of General Internal Medicine in Canada.

The medical school expansion is integral to the promotion of this division. The capacity to develop new training sites and new training directions is a primary focus of the CGIM Division's teaching program.

### **Future Directions**

There are many challenges and therefore many opportunities. The initial challenge is to organize a physically disparate division in order to have an administrative structure that provides a sense of "group" cohesiveness. This is an ongoing activity that will be facilitated by site leaders who share the same goals.

The prime future direction is to promote educational strategies and innovative learning opportunities at the different sites. It would be the aim of the CGIM Division to identify and evaluate the different strategies, and to potentially publish in this area.

Another important goal, perhaps the most important for the CGIM Division, is to provide an experience to trainees in GIM activities and to promote this practice and lifestyle to our trainees. These activities will serve to address the critical shortage of generalist physicians and may assure Canadians that there will be future general internists to live and work in their communities.

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It is important to establish Community General Internal Medicine training sites that have trainees on a full-time basis. This would aid program innovation and development as well as assure faculty stability. We are developing such activities in several sites and will work toward expanding this in the future. As well, it will be important to develop “academic” site leaders and provide to these faculty appropriate administrative and financial support.

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## CRITICAL CARE MEDICINE



***Dr. Dean Chittock***  
***Clinical Assistant Professor & Head (Acting)***

### Faculty Members

Clinical Assistant Professor & Acting Head	Chittock, Dr. Dean	VGH
Professor	Russell, Dr. James	SPH
Professor	Walley, Dr. Keith	SPH
Associate Professor	Dodek, Dr. Peter	SPH
Assistant Professor	Dorscheid, Dr. Delbert	SPH
Clinical Associate Professor	Ronco, Dr. Juan	VA
Clinical Associate Professor	Tsang, Dr. John	SPH
Clinical Assistant Professor	Dhingra, Dr. Vinay	VA
Clinical Assistant Professor	Fenwick, Dr. John	VA
Clinical Assistant Professor	Forrest, Dr. David	VA
Clinical Assistant Professor	Grant, Dr. Gregory	SPH
Clinical Assistant Professor	Henderson, Dr. William	VA
Clinical Assistant Professor	Keenan, Dr. Sean	SPH
Clinical Instructor	Craig, Dr. Katherine	VA
Clinical Instructor	Fava, Dr. Craig	Richmond
Clinical Instructor	Isac, Dr. George	VA
Clinical Instructor	Yelle, Dr. Carole-Anne	Richmond

### Divisional Overview

The UBC Division of Critical Care Medicine is multidisciplinary in structure, with 18 faculty members, all qualified critical care specialists from Medicine, Surgery, Anaesthesia and Emergency Medicine backgrounds participating in patient care at St. Paul's Hospital, Royal Columbian Hospital, Richmond General Hospital, Nanaimo Regional Hospital and Vancouver General Hospital. The Division continued to expand in 2006 with the addition of Dr. Morad Hameed, Dr Craig Fava, and Dr Carole-Anne Yelle as new faculty members. The two-year Critical Care Medicine subspecialty-training program is fully accredited and has also expanded

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to accept three trainees per year. The Research Program in Critical Care Medicine is comprehensive, spanning from molecular and cellular biology through large animal models to clinical research in critically ill adults. The basic science research program is based in the Cardiopulmonary Laboratories at St. Paul's Hospital. The clinical research program is focused in the intensive care units of St. Paul's Hospital, Royal Columbian Hospital and Vancouver General Hospital.

## **Teaching**

The University of British Columbia Adult Critical Care Medicine Training Program, under the direction of Dr. Katherine Craig, continued at the British Columbia Children's, St. Paul's and Vancouver General Hospitals. In 2006 there were 7 trainees in the Adult Critical Care Medicine Fellowship Training Program. The ICU rotations for speciality residents from Medicine, Anaesthesia and Surgery continued to be highly rated at both St. Paul's and Vancouver Hospital. Under the direction of Dr. Vinay Dhingra, participation in the SCCM Critical Care Support Course continues to be expanded to include core residents from all UBC Departments as well as hospitalists and rapid response team members.

The third annual Canadian Critical Care Conference was again held this year in Whistler. The program, chaired by Dr. Dean Chittock, was a great success, with increasing international attendance.

## **Research**

The Research Program in Critical Care Medicine is comprehensive, spanning from molecular and cellular biology through large animal models to clinical research in critically ill adults. The basic science research program is based in the Cardiopulmonary Laboratories at St. Paul's Hospital. The clinical research program is focused in the intensive care units of St. Paul's, Royal Columbian and Vancouver General Hospital.

The basic science research program continues to investigate corticosteroid and ischemia/reperfusion induced airway epithelial cell apoptosis (Dr. Dorscheid), stem cell repair of RSV induced airway injury (Dr. Dorscheid), the molecular and cellular biology of leukocyte induced myocardial dysfunction in septic shock (Dr. Walley), immunomodulation in the treatment of sepsis and acute lung injury (Drs. Russell and Walley) and mathematical modelling of tissue oxygen uptake (Dr. Walley). A new and exciting change in the direction of some of the basic science research has occurred in the area of Genomics of Critical Care (Russell, Walley).

Dr. Russell is a Co-investigator of a CIHR gene environment grant to study haplotypes of susceptibility genes in cardiac, pulmonary and vascular disease (\$2,756,473 over 5 years). In addition, translational research studies examining the association of genotype with phenotype in SIRS in the critically ill, SIRS after cardiopulmonary bypass, in ARDS and in acute lung injury are being undertaken (Russell, Walley). Work also continues examining the mechanism of hypoxemia, blood flow, and redistribution of ventilation in acute pulmonary thromboembolism (Dr. Tsang).

The clinical research program remains strong at St. Paul's, Royal Columbian and Vancouver General Hospitals with studies on the role of genotype and phenotype in sepsis and systemic

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inflammatory states (Drs. Walley and Russell), clinical trials and epidemiology of organ dysfunction in critical illness (Dr. Russell), exercise induced hypoxemia (Dr. Russell), glucose control and outcomes in the critically ill (Drs. Dhingra, Chittock, Ronco, Dodek, Henderson), recognition, quantification and treatment of delirium in the ICU (Dr. Chittock), the role of organizational factors and organizational culture in outcomes of critical care (Drs. Dodek, Keenan and Henderson), role of non-invasive ventilation in critical illness (Dr. Keenan), effect of sedation and agitation on duration of mechanical ventilation (Dr. Chittock), adrenal function in sepsis (Drs. Fenwick, Chittock and Ronco), communication and decision making in end of life care (Dr. Dodek), ventilator associated pneumonia (Drs. Dodek, Keenan), fluid resuscitation in septic shock (Dr. Chittock), patient safety teams and determinants of outcome in ICU (Drs Dodek, Chittock and Keenan), vasopressin in septic shock (Drs. Russell, Walley, Chittock and Ronco) and blood transfusion and cerebral oxygenation in head injury (Drs. Chittock and Fenwick). We are also working in association with the Victorian Trauma Foundation, ANZAC Research Foundation, WA Institute for Medical Research and National Health & Medical Research Council to participate in a multicentre, prospective trial of early decompressive craniectomy in patients with severe traumatic brain injury (Ronco).

A significant amount of activity and accomplishments occurred this year in the clinical research activities of the division. A pivotal, multicentre, randomized controlled trial of vasopressin vs. norepinephrine in septic shock (VASST Trial) has completed recruitment and has been submitted for publication to the New England Journal of Medicine (Russell, Walley, Chittock, Ronco).

A Canadian Critical Care Trials Group (CCCTG) trial of diagnostic techniques for ventilator associated pneumonia was completed and published in the New England Journal of Medicine (Drs Dodek, Keenan, Chittock). The division was successful in obtaining a \$3 million grant from CIHR to run a multicentre trial examining glucose control in the ICU (Drs. Dhingra, Henderson, Chittock, Ronco, Dodek). We also received over \$4M from CIHR for The PROphylaxis for ThromboEmbolism in Critical Care Trial (Chittock, Dodek, co-applicants ).

Health Services research has become a focus of some members of the group, led by Dr. Dodek. (Dodek, Chittock, Keenan, Hameed). Work in this new area of concentration is funded from various sources including: Michael Smith Foundation for Health Research—Investigative Teams Program ICU Patient Safety Team (Dodek, Chittock, Keenan) Canadian Institutes for Health Research—Partnerships for Health System Improvement for The Relationship between Organizational Culture and Family Satisfaction in Critical Care (Dodek, Chittock, Keenan). Canadian Patient Safety Institute the Impact of Sleep Deprivation, Circadian Misalignment, and Sleep Inertia on Patient Safety in the Intensive Care Unit- A Patient Simulator Study (Dodek, Ronco). Canadian Patient Safety institute; Critical Care Vital Signs Monitor: A scorecard for safe and effective patient care in the ICU (Chittock). Canadian Institutes for Health Research—Team Planning Grant for Society Determinants of Trauma Risk and Outcome (Hameed, Dodek, Chittock)

## **Clinical Services**

The ICUs at St. Paul's and Vancouver Hospital continued to experience an increase in occupancy and workload with over 1700 admissions at the two sites. The ICUs at St. Paul's Hospital and Vancouver General Hospital have continued to grow, reaching 15 and 27 beds in size respectively. Division members from St. Paul's, Vancouver General and Richmond General

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Hospitals participated as members of the Regional Critical Care Council and continue to develop and implement strategies to improve the delivery of critical care services within the region.

### **Future Directions**

The divisional outlook has never been brighter. Our research capacity and productivity is expanding and we expect that this trend will continue. Collaboration between sites has been increasing and continued increases in collaboration for the next year is expected and desired. The clinical service aspect is undergoing major change with regionalization. Increased cross site clinical coverage is occurring and bringing greater collaboration between individuals. The CCM fellowship program continues to expand and we expect that with greater clinical workload, that expansion of the program at VGH and SPH will occur. We also hope to recruit an academic intensivist with an interest in medical education to help expand our role in medical education at the undergraduate and postgraduate level. Under the direction of Dr. Vinay Dhingra, the Division will continue to expand the implementation of the SCCM Fundamentals in Critical Care Medicine Support Course as part of the core residency training program. It is anticipated that the SCCM course will, in the future, become a successful CME activity within the Department of Medicine, attracting critical care providers from around the province. We continue to develop simulator models for the teaching of technical and patient management skills to critical care trainees. The Division continues to explore ways to obtain increased recruitment of both clinical and basic science researchers to expand our research capacity and collaborations.

### **Special Honours and Awards**

Dr. Dean Chittock was appointed Head (acting) of the Division of Critical Care Medicine as well as the Medical Director of the VGH site ICU. He continues to serve as organizer and session moderator at the Canadian Critical Care Conference, Whistler, BC.

Dr. Vinay Dhingra, as PI of the SUGAR trial, was awarded a \$3 million grant from CIHR to run a multicentre clinical trial across Canada examining the effect of tight glycemic control in the critically ill.

Dr. Peter Dodek continues his work on the executive of the Canadian Critical Care Trials Group. He has received several grant awards to pursue his research in the area of patient safety in the ICU.

Dr. Del Dorscheid was an invited speaker at the 2006 VanSeaPort Annual International Respiratory Research Conference, Timberline Lodge, Mt Hood, Oregon. Dr. Dorscheid was the recipient of a Canadian Institutes of Health Research **New Investigator Award** for Genomics of Airway Epithelial Repair.

Dr. Morad Hameed received the AD Forward Postgraduate Faculty Teaching Award Department of Surgery, University of British Columbia.

Dr George Isac participated in a Pro/Con Debate – The trial/role of ECMO is/is not standard of care in centers that offer it. At the Canadian Critical Care Conference. Whistler, BC. Feb. 24, 2006.



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Dr. Sean Keenan was appointed Head, Department of Critical Care Medicine, Royal Columbian Hospital. He was also an invited speaker at the, The Toronto Critical Care Medicine Symposium, Toronto, Ontario, and the American Thoracic Society Annual Meeting, San Diego, California.

Dr. Juan Ronco was promoted to Clinical Associate professor and continues as the Vice Chair, Examination Board in Critical Care Medicine, Royal College of Physicians and Surgeons Canada. Examiner & Member of the Board of Examiners in Internal Medicine, Royal College of Physicians and Surgeons of Canada.

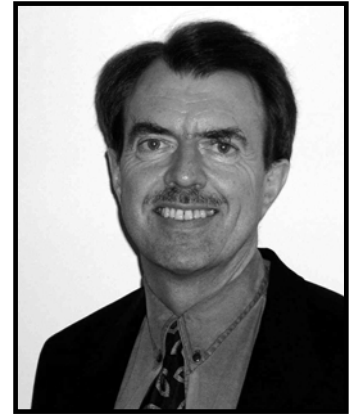
Dr. Jim Russell was an invited speaker at the 35<sup>th</sup> Critical Care Congress, Society of Critical Care Medicine. San Francisco, Ca, USA. January 9, 2006, the 26th Brussels Emergency and Intensive Care Medicine Conference, Brussels, Belgium; March , 2006, the American Thoracic Society, San Diego, CA. May 22, 2006, the European Society of Intensive Care Medicine, Barcelona, Spain, September 25, 2006, and the Toronto International Symposium on Acute Care, Toronto, Ontario. October 25, 2006. He published, *Management of sepsis* in the New England Journal of Medicine. Congratulations are also in order for finishing a pivotal, multicentre, randomized controlled trial of vasopressin vs. norepinephrine in septic shock (VASST Trial) which has completed recruitment and has been submitted for publication to the New England Journal of Medicine

Dr. Keith Walley was an invited speaker at the 26<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine. Belgium, Brussels, March 22-24<sup>th</sup>, 2006 as well as for the 10<sup>th</sup> Annual Program, The Key West Meeting, 2006 Outcomes, Cardiovascular and Vascular Surgery: Neurobehavioral Assessment, Physiologic Monitoring and Cerebral Protective Strategies. Key West, Florida, May 17-20<sup>th</sup>, 2006.

Dr. Walley continues as Senior Faculty Member, Faculty Appointments, Reappointments, Promotion and Tenure Committee, UBC Faculty of Medicine. He is a Distinguished Scholar, Michael Smith Foundation and Member, Michael Smith Foundation for Health Research, Research Advisory Council, and Clinical Research Evaluation Committee.

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## ENDOCRINOLOGY



***Dr. David Thompson***  
***Clinical Assistant Professor & Head***

### Faculty Members

Clinical Assistant Professor & Head Professor	Thompson, Dr. David	VA
Clinical Associate Professor	Prior, Dr. Jerilynn	VA
Clinical Associate Professor	Dahl, Dr. Marshall	VA
Clinical Assistant Professor	Tildesley, Dr. Hugh	SPH
Clinical Assistant Professor	Bebb, Dr. Richard	SPH
Clinical Assistant Professor	Elliott, Dr. Thomas	VA
Clinical Assistant Professor	Gill, Dr. Sabrina	SPH
Clinical Assistant Professor	Kendler, Dr. David	VA
Clinical Assistant Professor	Kreisman, Dr. Stuart	SPH
Clinical Assistant Professor	Miller, Dr. David	Victoria
Clinical Assistant Professor	Priestman, Dr. Barbara	New Westminster
Clinical Assistant Professor	Sirrs, Dr. Sandra	VA
Clinical Assistant Professor	Wallace, Dr. Clarissa	VGH
Clinical Instructor	Fung, Dr. Michelle	VA
Clinical Instructor	Johnson, Dr. Michelle	SPH
Clinical Instructor	Kong, Dr. Jason	VA
Clinical Instructor	Mase, Dr. Robert	SPH
Associate Member	Bondy, Dr. Greg	SPH
Associate Member	Rothstein, Dr. Ralph	BC Children's Hospital
Associate Member	Stewart, Dr. Laura	BC Children's Hospital
Associate Member	Lefebvre, Dr. Yvonne	SPH
Adjunct Professor	Finegood, Dr. Diane	Burnaby
Professor (Emeritus)	Dawson, Dr. Keith	VA
Associate Professor (Emeritus)	Cairns, Dr. Alexander	
Clinical Professor (Emeritus)	Wilkins, Dr. Graeme	VGH

### Division Overview

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2006 was a stable year for the UBC Division of Endocrinology, consolidating our growth from the past several years. Meeting the increased demand for clinical services in all areas remains a challenge as does the increased teaching requirement at all levels. A new faculty member was recruited in 2006 to join the division next year. The number of research studies continues to grow, increasingly linking basic science with clinical trials. The best way to integrate new faculty members at distant sites with the division in Vancouver remains an area of discussion.

## **Teaching**

### **Undergraduate**

The major responsibilities of the division at present are to provide tutors and materials for the PBL course offered at the beginning of medical school as well as opportunities for students in their senior years to take electives in endocrinology. Some division members serve as attending physicians on CTU and are involved in teaching internal medicine to clinical clerks. Careful planning is required to provide endocrinology instruction in sites where there are no endocrinologists in practice.

### **Postgraduate**

The UBC division is currently training a total of five fellows in endocrinology, the largest number the division has ever had. One fellow has had a unique program created that will result in a dual certification in endocrinology and nuclear medicine. We anticipate an increased number of funded positions for endocrinology fellows to be created with the medical school expansion. VGH and SPH provide rotations for core internal medicine residents every month. Careful planning is required to provide a thorough grounding in the principles of endocrinology within the constraints of a one-month rotation. The demand for rotations in endocrinology will increase with the increased number of internal medicine residents that will accompany the medical school expansion. We are currently planning how to best meet this increased demand.

### **Community**

Our division provides an increasing number of educational activities to community physicians. We run annual courses such as the Diabetes Directors Symposium and BC Endocrine Days as well as participating in departmental courses such as the Annual Reviews of Internal Medicine. Division members continue to provide a large number of invited lectures to community physicians across the province. Dr. Prior has a very active web-site that allows people all over the world to learn about her research in the area of women's health.

### **Committees**

Dr. Dahl serves on committees for the Canadian Medical Association as well as the Medical Services Commission of British Columbia.

Several division members are involved in the preparation of the 2008 Canadian Diabetes Association's Clinical Practice Guidelines: Dr. Thompson (Chair Diabetes in Pregnancy section, steering committee), Dr. Dawson (aboriginal issues, steering committee), Dr. Tildesley (insulin therapy in type 1) and Dr. Bebb (erectile dysfunction)

Dr. Sirrs is on the national committee for Fabry's disease.

Several division members serve as expert reviewers for medical journals and national grants competitions.

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## **Research**

Research presentations by our residents and fellows at the Resident Research Day continue to be highly with several awards, including for best overall presentation. Most division members are involved in a number of areas of clinical research with the major ones listed below:

Dr. Dawson: diabetes care in First Nations communities, clinical trials  
Dr. Elliott: clinical trials, President of the BC Endocrine Research Foundation  
Dr. Fung: islet cell transplantation, inpatient diabetes care delivery  
Dr. Kong: diabetes in pregnancy, clinical trials  
Dr. Sirrs: adult metabolic disease, lipid disorders  
Dr. Prior: women's health, osteoporosis  
Dr. Dahl: diabetes health care delivery, inpatient diabetes care  
Dr. Thompson: islet cell transplantation, diabetes in pregnancy  
Dr. Bebb: male reproductive health  
Dr. Tildesly: diabetes care, clinical trials  
Dr. Kreisman: thyroid disease, cystic fibrosis and diabetes  
Dr. Gill: women's health  
Dr. Kandler: osteoporosis  
Dr. Johnson: pituitary disease

## **Clinical Services**

The Division of Endocrinology provides consulting services to Vancouver General, St Paul's and BC Women's hospitals. We also are involved in a number of specialized, multidisciplinary outpatient clinics:

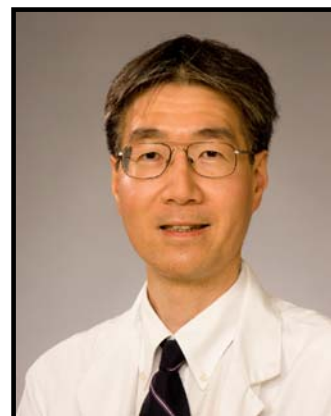
Diabetes: Vancouver General, St Paul's, BC Women's  
Lipid: St Paul's  
Osteoporosis: Women's  
Adult Metabolic: Vancouver General

## **Future Directions**

The division will be focusing on expanding the activities described above as well as recruiting new members to meet the increased teaching requirements needed for the medical school expansion. The search committee for the new division head in 2007 has been reviewing potential candidates.

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## GASTROENTEROLOGY



***Dr. Eric Yoshida***  
***Associate Professor & Head***

### Faculty Members

Associate Professor & Head	Yoshida, Dr. Eric	VA
Professor	Freeman, Dr. Hugh	VA
Professor	Steinbrecher, Dr. Urs	VA
Associate Professor	Salh, Dr. Baljinder Singh	VA
Assistant Professor	Tai, Dr. Isabella	VA
Clinical Professor	Halparin, Dr. Lawrence	SPH
Clinical Associate Professor	Byrne, Dr. Michael	VA
Clinical Associate Professor	Gray, Dr. James	VA
Clinical Associate Professor	Kwan, Dr. Peter	VA
Clinical Associate Professor	Pearson, Dr. David	Victoria
Clinical Associate Professor	Weiss, Dr. Alan	VA
Clinical Assistant Professor	Amar, Dr. Jack	SPH
Clinical Assistant Professor	Atkinson, Dr. Kenneth	RCH
Clinical Assistant Professor	Enns, Dr. Robert	SPH
Clinical Assistant Professor	Erb, Dr. Siegfried	VA
Clinical Assistant Professor	Singh, Dr. Ranjit	Victoria
Clinical Assistant Professor	Telford, Dr. Jennifer	SPH
Clinical Assistant Professor	Whittaker, Dr. J.	SPH
Clinical Instructor	Bressler, Dr. Brian	SPH
Clinical Instructor	Chatur, Dr. Nazira	VA
Clinical Instructor	Fishman, Dr. Martin	RGH
Clinical Instructor	Lam, Dr. Eric	SPH
Clinical Instructor	Ramji, Dr. Alnoor	SPH
Clinical Instructor	Shapira, Dr. Stacey	RCH
Associate Member	Buckley, Dr. Alan	Victoria
Associate Member	Gill, Dr. Sharlene	BCCA
Associate Member	Holland, Dr. Stephen	Victoria
Associate Member	Koziol, Dr. Kathie	Victoria

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Associate Member	McManus, Dr. Bruce	SPH
Associate Member	Yik, Dr. Kwok	RCH
Visiting Associate Professor	Gomez-Munoz, Dr. Antonio	VA
Associate Professor (Emeritus)	Anderson, Dr. Frank	VA
Associate Professor (Emeritus)	MacDonald, Dr. Walter	BCCA
Clinical Professor (Emeritus)	Chaun, Dr. Hugh	SPH
Clinical Professor (Emeritus)	Stordy, Dr. Stanford	SPH

## **Divisional Overview**

The UBC Division of Gastroenterology consists of the faculty of two main teaching hospitals, Vancouver Acute (Vancouver General Hospital and UBC Hospital), and St. Paul's Hospital (Providence Healthcare). As well, we have faculty in distributed sites. These sites include Richmond General Hospital, as well as Royal Columbian Hospital in the Lower Mainland and the Victoria and Vancouver Island Hospitals. The faculty consists of GFT as well as Clinical Faculty Association members. We have associate members who were appointed by the Associate Dean of distributed sites as well as associate members who have areas of academic interest in common with the Division of Gastroenterology. We also have four emeritus faculty and one visiting faculty member.

## **Clinical Services**

Full clinical in-patient and out-patient services are provided at the teaching hospitals as well as the distributed hospital sites. In particular, the main teaching hospitals, Vancouver General Hospital and St. Paul's Hospital are provincial quaternary hospitals and are the main destinations for patient transfers from community hospitals throughout BC and the Yukon Territories via BC Bedline and the "Life, Limb or Transplant" policy. Specialized therapeutic endoscopy consisting of ERCP, both diagnostic and therapeutic, is offered as a clinical service at the Vancouver General Hospital, St. Paul's Hospital and Royal Columbian Hospital. The specialized modalities of endoscopic ultrasound and capsule endoscopy are available at St. Paul's Hospital but are not available at the Vancouver General Hospital. Endoscopic ultrasound is available at the BC Cancer Agency Vancouver Clinic and is performed by VGH faculty with cross-appointments (Dr. Alan Weiss and Dr. Michael Byrne). As well, the Division is involved in clinical and academic activity with the British Columbia Transplant Society and the British Columbia Cancer Agency (PHSA). The BC Hepatitis Program, which is a partnership of the BC Centre for Disease Control and the UBC Division of Gastroenterology, is actively involved in clinical related to viral hepatitis and liver disease. It is located within the Division of Gastroenterology's block in the Diamond Health Care Centre of the Vancouver Hospital. The St. Paul's' Hospital group, Pacific Gastroenterology Associates, also offers specialized out-patient care in viral hepatitis.

## **Teaching**

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## **Undergraduate**

The Division of Gastroenterology is an active participant in the GI Block of the 2<sup>nd</sup> year undergraduate curriculum (FMED). Division members provide lectures to the undergraduate class as well as participate as preceptors in the problem-based learning sessions as well as the hepatology seminars. Drs. Peter Kwan, Nazira Chatur and Eric Yoshida have been Block Chairs for FMED 424.

The division members at both the St. Paul's Hospital and Vancouver General Hospital sites have also been actively involved in 3<sup>rd</sup> and 4<sup>th</sup> year undergraduate selectives. Clinical instruction at both the bedside and out-patient clinics is offered to the undergraduate class yearly. Dr. Nazira Chatur is currently the Undergraduate Program Director for Gastroenterology.

## **Postgraduate**

The Division of Gastroenterology has a strong Gastroenterology fellowship training program. The core program consists of two senior GI Fellows, Drs. Iman Zandieh and Pongphob Intaraprasong and two junior GI fellows, Dr. Justin Shah and Dr. Joanna Law. The training program has many applicants both internally and externally each year and competition for GI fellowship positions has become increasingly fierce. Dr. Peter Kwan is the Program Director and Dr. Nazira Chatur is the Associate Program Director. In addition to the Program Director and the Associate Program Director, there is a Fellowship Training Committee which includes representation from both teaching hospitals and the community. As well, there is a trainee representative. The training committee members include Drs. Iman Zandieh (Fellow), Alnoor Ramji, Eric Lam, Bill Salh, Marty Fishman and Eric Yoshida. In February 2007, the GI fellowship training program was reviewed by the Royal College and received full accreditation. Next year's trainees are Drs. Hin Hin Ko and Darin Krygier.

The Division of Gastroenterology offers specialized training programs beyond the core Royal College Gastroenterology Fellowship Program. For many years we have had the liver transplantation and hepatology training program based at the Vancouver General Hospital in association with the BC Transplant Society. The current transplant Hepatology Fellows are Dr. Ian Cadden (Belfast, Ireland), and Dr. Wichian Apiratpracha (Bangkok, Thailand). The Division of Gastroenterology also has a formal therapeutic endoscopy training program. Drs. Rob Enns and Mike Byrne are the co-directors. All the therapeutic endoscopists of St. Paul's Hospital and Vancouver General Hospital are involved in this including Drs. Eric Lam, Jennifer Telford, Urs Steinbrecher and Alan Weiss. A non-therapeutic endoscopist division member will serve in an advisory role. Dr. Eric Yoshida was appointed by Drs. Enns and Byrne for this year. The therapeutic endoscopy training program will involve diagnostic and therapeutic ERCP and endoscopic ultrasound.

## **Experimental Medicine**

Dr. Bill Salh co-ordinates the gastroenterology aspects of the experimental medicine program at UBC. The program involves graduate students registered in experimental medicine as well as summer students and post-doctoral fellows.

## **Continuing Medical Education**

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The UBC Division of Gastroenterology has organized several CME conferences. Dr. Rob Enns organizes the annual GI Forum held in the fall which has been well attended and received favourable evaluations. The UBC Division of Gastroenterology also organized the 11<sup>th</sup> Annual Digestive Diseases Week Review for sub-specialists. This was also very well attended and received favourable comments from attendees. Drs. Jim Gray and Alan Weiss organized the bi-annual “Hot Topics in Gastroenterology” conference for primary care physicians which was reasonably well attended. The BC Hepatitis Program co-organized the “Update in Hepatitis B” conference with the BC Centre for Disease Control. This was also well attended and well received.

Many of our division members have participated in regional and national CME events including the Canadian Digestive Diseases Week and the Canadian Association for the Study of Liver (CASL) annual meeting. Numerous CME lectures were provided for local organizations such as the Canadian Liver Foundation, Chinese Canadian Medical Society, Gut Club, as well as local hospital rounds.

### **Clinical Academic Special Programs**

The UBC Division of Gastroenterology members are involved in many specific and specialized clinical academic programs. Dr. Alan Weiss is a member of the BC Cancer Agency Hepatoma Program. Both Dr. Weiss and Dr. Sigfried Erb are involved in multi-disciplinary hepatoma rounds which involve the UBC Division of Gastroenterology, the UBC Division of General Surgery, and the Vancouver General Hospital Department of Interventional and Abdominal Radiology. This multi-disciplinary group is involved in clinical decision making for hepatoma cases referred from communities throughout the province. It is also involved in clinical research in the area of liver cancer.

Drs. Erb, Steinbrecher and Yoshida (Medical Director) are members of the Liver Transplant Program of the BC Transplant Society. This provincial program provides clinical care to post-liver transplant recipients, assessment of end-stage liver disease patients referred to the Transplant Society, as well as administrative leadership both at a provincial and national level and both clinical/basic science research in the field.

The BC Hepatitis Program, which is a partnership of the BC Centre for Disease Control and UBC Division of Gastroenterology, is situated within the Division of Gastroenterology’s block in the Diamond Health Care Centre of the Vancouver Hospital. Its members include Drs. Erb, Steinbrecher, Kwan, Weiss, and Yoshida (Director of the BC Hepatitis Program). The BC Hepatitis Program staff includes Ms. Jo-Ann Ford (Associate Director), Ms. Cindy Cheong-Lee (Assistant Director), Ms. Barbara Chick (hepatitis nurse), Ms. Ann Tkachuk (hepatitis nurse) and Mrs. Winnie Chan (research assistant). The program is involved in clinical care and patient teaching in the area of viral hepatitis and liver disease. The BC Hepatitis Program is actively involved in clinical research with industry sponsored clinical trials and non-industry sponsored clinical studies. There are close collaborative research partnerships with BCCDC and the UBC Virology Laboratory. The BC Hepatitis Program is actively involved in continuing education at all levels and has organized CME events. It is also involved actively in nursing education and is part of the UBC Faculty of Pharmaceutical Sciences PharmD program with preceptorship of clinical rotations as well as the provision of formal class lectures. At the national level, Ms. Jo-



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Ann Ford is the current President of the Canadian Association of Hepatology Nurses and Dr. Eric Yoshida is the President-Elect of the Canadian Association for the Study of Liver (CASL). The BC Hepatitis Program has been involved with the Canadian Liver Foundation and Ms. Ford serves on the National Board of Directors.

## **Research**

The faculty of the Division of Gastroenterology are very involved in both clinical and basic science research. Drs. Salh, Steinbrecher and Tai are actively involved in basic science research programs supported by national and provincial granting agencies including CIHR, HSFC, CCFC, and the Canadian Society for Intestinal Research (CSIR). Clinical research is very strong within the Division of Gastroenterology and appears to be expanding. Dr. Rob Enns has a clinical trials unit located at the Pacific Gastroenterology Associates office block. Dr. Enns is also actively involved in non-industry clinical research and has developed outstanding clinical research expertise in capsule endoscopy and therapeutic endoscopy. He has published many publications this year in these areas. Dr. Brian Bressler, who has recently joined the Division, is establishing a clinical research program in inflammatory bowel disease. Dr. Hugh Freeman continues to be a prolific author of many clinical research papers in inflammatory bowel disease and celiac disease. The BC Hepatitis Program and the Liver Transplant Program of the BC Transplant Society have been very active in clinical research both in industry sponsored clinical trials and non-industry sponsored clinical studies. The areas of clinical research have encompassed: liver disease, viral hepatitis, liver transplantation as well as solid organ transplantation and donation. The Division of Gastroenterology at Vancouver General Hospital also has some non-hepatology industry-sponsored clinical trials ongoing under the leadership of Dr. Jim Gray. It is expected that clinical research will continue to expand at both the main teaching hospitals and is a major strength of the division

## **Special Honours, Awards and Distinctions**

### **Service to the University and the Community**

Many Division members serve on UBC, BCMA and other provincial committees and many Division members have served as reviewers of numerous Canadian and international peer-review journals and grant funding agencies. Both Drs. Rob Enns and Eric Yoshida are Associate Editors of the Canadian Journal of Gastroenterology (official journal of the Canadian Association of Gastroenterology and the Canadian Association for the Study of Liver). Dr. David Pearson is also on the Editorial Board of the Canadian Journal of Gastroenterology. Drs. Michael Byrne, Hugh Freeman and Eric Yoshida are on the Editorial Board of the World Journal of Gastroenterology. Drs. Byrne and Yoshida are also on the Editorial Board of the Internet Journal of Gastroenterology. Dr. Michael Byrne is an Editorial Consultant for the Physicians Information and Education Resource (PIER) published by the American College of Physicians. Dr. Hugh Chaun is Governor of Western Canada of the American College of Gastroenterology. Dr. Hugh Chaun also serves as the Secretary General of the Bachus Internal Society of Gastroenterology and is the Chair of the Governing Board of the Canadian Digestive Health Foundation. Dr. Michael Byrne is a member of the National Endoscopy Committee of the Canadian Association of Gastroenterology. Dr. Eric Yoshida is a member of the Membership Committee and Nomination Committee of the Canadian Association for the Study of Liver as well as the President-Elect of the organization. He is also an Independent Member of the

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Governing Board of the Canadian Association for the Study of Liver. Drs. Nazira Chatur, Peter Kwan and Marin Fishman are examiners for the Western Canadian Trainee Examinations in Gastroenterology (preparatory examination for the Royal College of Physicians and Surgeons specialist examination in gastroenterology). Dr. Urs Steinbrecher is the Chair of the CIHR Metabolism Grant Panel and Chair of the Heart and Stroke Foundation of BC and Yukon Research Committee. He is also the Chair of the AHFMRA Clinical Investigative Review. Dr. James Gray is President of the BC Society of Gastroenterology.

### **Special Honours and Awards**

Dr. Nazira Chatur was the recipient of the UBC Clinical Faculty Teaching Award. Dr. Eric Yoshida was a co-author and therefore co-recipient, along with the other co-authors, of two awards for “Best Paper”. The first was the DR. CN Williams/ABR Thomson Award from the Canadian Journal of Gastroenterology for “Best Original Research Paper”; the second was for Publication Award for “Best Review Article” from the Canadian Society of Hospital Pharmacists BC Chapter.

### **Special Tributes**

In remembrance of the outstanding teaching contributions of the late Dr. Donald M. Carr, who was our beloved colleague and clinician, the Division of Gastroenterology at Vancouver General Hospital created the Donald M. Carr Teaching Award to be given to the “Best VGH Faculty Teacher” as selected by the GI fellows, medical residents and medical students rotating through gastroenterology. The inaugural winner was Dr. W.C. Peter Kwan.

In honour of his outstanding contributions to Gastroenterology at UBC and throughout the Province of British Columbia, the UBC Gastroenterology Fellows created the Dr. Hugh Chaun Mentorship Award. The UBC GI Fellows backdated the inaugural award to 2005, which was the year of Dr. Chaun’s retirement. Dr. Chaun was named the inaugural recipient. Dr. Eric Yoshida was named the recipient for 2006.

### **Trainee Awards**

The annual AstraZeneca Canada Gastroenterology Medical Residents Award was given to Drs. Hin Hin Ko and Corey Gabana (SPH Hospital Site) and Drs. Darin Krygier and Myriam Farah (Vancouver General Hospital site). Drs. Henry Chung and Jin Kee Ho were the Chief Gastroenterology Fellows for 2005-2006 and received plaques from the Division for their outstanding service.

### **Future Directions**

From a clinical perspective, there are many challenges facing the Division, including dwindling out-patient resources, and an increasing demand for in-patient admissions both via the Emergency Department and inter-hospital transfers via BC Bedline. In particular, the VGH Division is attempting to persuade its hospital to acquire endoscopic procedures and technologies (eg. endoscopic ultrasound, luminal stenting etc) that are considered standard of care elsewhere but are not provided for at that institution.

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Academically, there has been great progress towards enhanced collegiality and co-operation between the two main teaching hospitals, the Vancouver General Hospital and St. Paul's Hospital. It is anticipated that collaboration between these two institutions will increase in the near future. The Division will also work towards including the distributed sites, including Royal Columbian Hospital, into this academic milieu. Lastly, the Division hopes to enhance future collaborations with other Departments within the Faculty of Medicine (including the Department of Surgery, the Department of Radiology and Division of Pediatric Gastroenterology), with other Divisions within the Department of Medicine, and with other health-care institutions within BC and the rest of Canada.

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## GENERAL INTERNAL MEDICINE



***Dr. Barry Kassen***  
***Clinical Professor & Head***

### Faculty Members

Clinical Professor & Head	Kassen, Dr. Barry	SPH/VA
Professor	Birmingham, Dr. Laird	SPH
Professor	Page, Dr. Gordon	VA
Professor	Wright, Dr. James	VA
Assistant Professor	Khan, Dr. Nadia	SPH
Associate Professor	Palepu, Dr. Anita	SPH
Clinical Professor	Mackie, Dr. Iain	VA/SPH
Clinical Associate Professor	Hatala, Dr. Rose	SPH
Clinical Associate Professor	Kennedy, Dr. James	SPH
Clinical Associate Professor	Magee, Dr. Laura	BCWH/SPH
Clinical Associate Professor	Onrot, Dr. John	SPH
Clinical Assistant Professor	Arseneau, Dr. Richard	SPH
Clinical Assistant Professor	Busser, Dr. James	VA/SPH
Clinical Assistant Professor	Dunne, Dr. James	VA/SPH
Clinical Assistant Professor	Ma, Dr. Irene	VA/SPH
Clinical Assistant Professor	Ong-Lam, Dr. May	SPH
Clinical Assistant Professor	Perry, Dr. Thomas	VA
Clinical Assistant Professor	Roberts, Dr. James Mark	VA
Clinical Assistant Professor	Wakefield, Dr. Robert	VA
Clinical Assistant Professor	Ward, Dr. John	SPH
Clinical Instructor	Chan, Dr. Alex Chong Hen	SPH
Clinical Instructor	Cunningham, Dr. Kenneth	SPH/LGH
Clinical Instructor	Deutscher, Dr. Timothy	Nanaimo
Clinical Instructor	Duke, Dr. Stephen	Victoria
Clinical Instructor	Hawley, Dr. Phillipa	BCCA
Clinical Instructor	Lysyshyn, Dr. Mark	SPH
Clinical Instructor	McKay, Dr. Rhonda	SPH
Clinical Instructor	Purkiss, Dr. Susan	BCWH
Clinical Instructor	Rosenbaum, Dr. Debbie	VA
Professor (Emeritus)	Paige, Dr. Bruce	VA
Professor (Emeritus)	Schulzer, Dr. Michael	VA

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Associate Professor (Emeritus)	Rangno, Dr. Robert	SPH
Associate Professor (Emeritus)	Sanders, Dr. Harvey †	North Vancouver
Associate Professor (Emeritus)	Studney, Dr. Donald	VA

† deceased January 2007

### **Divisional Overview**

In the previous report submitted by Dr. Iain Mackie, there was no distinction between Community GIM and University-based GIM. There is now a separate entity, Community GIM and a separate report will describe it.

The UBC Division of General Internal Medicine has 29 faculty, which participate in activities at BC Women's and Children's Hospital, BC Cancer Agency, Vancouver Acute and St. Paul's Hospital. The specific site activities are varied. All members do not participate in all activities, nor do they necessarily participate at all sites. Our members are involved with Palliative Care (Dr. P. Hawley heads the program at the Vancouver Cancer Agency), Maternal-Fetal Medicine (Drs. L. Magee and S. Purkiss at BC Women's and Children's Hospital), as well as multiple programs and disciplines which include HIV care (Drs. Iain Mackie, Jake Onrot and Mark Lysyshyn), Eating Disorders (Drs. Laird Birmingham and Mark Lysyshyn), Addiction Medicine (Drs. Alex Chan and Mark Lysyshyn), Heart Failure Clinic (Dr. Mark Roberts) and UBC Sports Medicine (Dr. Mark Roberts) at St. Paul's Hospital and Vancouver Acute.

Basic to all the division is the provision of General Internal Medicine consultation (and ongoing care) provided by the membership. This may take place in an inpatient setting (clinical teaching unit), an outpatient setting (clinic, etc) or in both.

Amongst our membership, the GIM physicians provide expertise, core teaching and research in Addiction Medicine, Pain Management, Eating Disorders, Hypertension, HIV Management, Drug and Poison Control and Hemochromatosis. A division member is also involved in Scleroderma research and patient management.

Some of our members are involved in providing community-based care work in rural and urban settings, at times being responsible for Intensive Care Units as a prime clinical function (Drs. Ken Cunningham, Jane McKay, Rose Hatala).

Our members are program leaders in medical education, research and administration and are recognized locally and nationally in these areas.

Our membership has an emphasis on medical informatics and has strong well-recognized leadership in these areas. Dr. Ric Arseneau (development of web eval, etc), Dr. J. Busser (development of CTU Tracker) and Dr. Ken Cunningham (online medical grand rounds) are the active members, currently.

### **Teaching**

The core element for the UBC Division of GIM is teaching. Dr. Mark Roberts is director of the Department of Medicine UBC Postgraduate Program and is supported by 3 co-directors, two of

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which are in the division. Recently Dr. Rose Hatala (and now Dr. Irene Ma) has the portfolio of evaluation and Dr. Kassen has the portfolio of community rotations and distributed site development (Victoria and Prince George).

Dr. Roberts heads the CTU at Vancouver General Hospital (VGH) and Dr. Kassen at St. Paul's Hospital (SPH). With the expansion of the undergraduate students at the distributed sites, all undergraduate students in Vancouver are taught at VGH or SPH. All of the postgraduate training in CTU's and GIM clinics is done as well at these sites.

Trainees are also mentored in eating disorders, pain management, HIV and addiction medicine. We have a strong program in palliative care and maternal-fetal medicine (using a mentorship model). The CTU faculty is instrumental in the International Medical Graduate Program in both training and evaluation.

Drs. Jim Busser and Jim Dunne are current leaders in the Undergraduate Clerkship Program and are directors of this program at VGH and SPH respectively.

New initiatives have been adopted through the research and subsequent implementation of tools such as mini-cex (research and subsequent implementation in evaluation in the CTU setting) and pioneering the use of simulations in medicine (Dr. Irene Ma and Dr. Barry Kassen). The latter program will teach central line insertion (and will use this opportunity to study and publish in this area), as well as promote learning and evaluation using simulation models.

Our group is involved in CME in the university and in the community.

### **Research**

Research is done at all sites but the major sites for our research activities has been SPH and BC Women's Hospital and involves a core group of funded researchers with dedicated time for these activities. Dr. Anita Palepu is the senior researcher whose interest is in urban health and is a Michael Smith Foundation for Health Research Senior Scholar. She is widely published been an invited speaker to national and international meetings. Dr. Nadia Khan is very active in social determinants of cardiovascular disease. She has received many prestigious supporting grants including CIHR and Michael Smith Awards, and has received the CIHR New Investigator Award, the Genesis Scholar Award and the SPH Physician Scholar Award. She has a CIHR operating grant exploring gender and ethnic differences in patients with hypertension. Dr. Khan as well is a member of the Canadian Hypertensive Society Education and Research Group. She also serves as a scientific committee member of the Heart and Stroke Foundation Trainee Award Program.

Dr. Laura Magee continues her research in maternal-fetal medicine, concentrating on hypertension in pregnancy using randomized clinical trial methodology. She is supported by major grants from CIHR and holds a Michael Smith Foundation for Health Research Scholar Award and has been highly productive and widely recognized as a leader in her field.

Medical education research is a focus for Drs. Rose Hatala, Iain Mackie, Mark Roberts and Barry Kassen. Recently this group was awarded a Stemmler Grant (from the National Board of

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Medical Examiners from the USA) and completed this national study. There have been presentations and soon to be publications from this work. This group has also published their experience with the development of a quality improvement process for postgraduate first year trainees, and have been awarded a Royal College Grant to continue this work.

Dr. Irene Ma has a research interest in ethnicity in health care delivery and recently has begun an interest in medical education.

Dr. Alex Chan is involved in a national study in heroin use (NAOMI Study).

Dr. Laird Birmingham is active in eating disorders research and publishes extensively in this area.

### **Administration**

Members of the division play key roles in administration locally, provincially and nationally.

Drs Nadia Khan, Iain Mackie and Barry Kassen are on the Executive of the Rocky Mountain Review Course (a University of Calgary Internal Medicine initiative).

Dr. Anita Palepu is director of the Clinical Investigator Program, the Director of the GIM Fellowship Program and resigned last year as Associate Editor from the Canadian Medical Association over editorial interference by the CMA. She is currently involved in the launch of a new open access general medical journal called Open Medicine [http://www.open\\_medicine.ca](http://www.open_medicine.ca). She is the President-Elect of the International Society of Urban Health and is the Chair of the Health Services Research Committee Career Awards Program at the Michael Smith Foundation for Health Research.

Drs. Bob Rangno and Tom Perry are members and active leaders in the UBC Therapeutics Initiatives –Education group.

Dr. Mark Roberts is CTU Director at VGH, Postgraduate UBC Director, a member of the GIM Fellowship Training Committee and a member of the Oral Examination Board of the Royal College in Internal Medicine.

Dr. Rose Hatala is research director for the Internal Medicine Examination Committee for the RCPC, an active member of the Oral Board in Internal Medicine and a member of the Faculty Development Group in the Faculty of Medicine. Dr. Hatala as well mentors researchers in medical education (in various departments).

Dr. Irene Ma is a new associate program director postgraduate medicine and in charge of evaluation and development of simulations in learning.

Dr. Jim Busser is clerkship director (VGH) and Dr. Jim Dunne is clerkship director (SPH). Dr. Dunne is director of the Scleroderma Clinic at SPH.

Dr. Laird Birmingham is head of the Eating Disorders Program at UBC.

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Dr. Jim Kennedy is Director of the Hospitalist Program at Providence Health (St. Paul's Hospital and Mt. St. Joseph Hospital).

Dr. Tom Perry directs the undergraduate program at UBC Site and is a member of the Therapeutics Initiative.

Dr. Jane McKay is director of Ambulatory Care at SPH. Dr. Jim Busser has this position at VGH.

Dr. Barry Kassen is UBC division head, SPH division head, Vancouver Acute division head, Associate head Department of Medicine SPH, Acting Division Head Community Internal Medicine, CTU Director SPH, Associate Program Director (Core Internal Medicine), Representative to Rocky Mountain and Canadian Society of Internal Medicine, Governor of British Columbia for the American College of Physicians, member of the UBC Internal Review Committee, Chair of the Provincial Albumin working Group, chair of the Internal Medicine Examination Committee (RCPSC), member of the Working Group in General Internal Medicine (RCPSC), member of the Evaluation Committee (RCPSC) and member of the Health and Policy Committee (RCPSC).

### **Future Directions**

The division has been working very actively on an alternate funding system and sees this as a key component to fulfill its mandate. Innovation in health care delivery as well as education are the directions this would support.

The continued emphasis on our medical education goals, as well as support of the distributed sites (Victoria and Prince George), will continue to be a divisional aim.

A regional approach to Internal Medicine with equal emphasis at both major general teaching hospital (VGH and SPH) and a recruitment strategy that would see the acquisition of clinical and research faculty at VGH and BC Women's Hospital is a top priority.

There is a current emphasis on reorganizing the ambulatory medicine program at St. Paul's Hospital and VGH to promote academic as well as a clinical relevant service to the hospitals and communities.

The research component of our members needs to be promoted and celebrated by the division of Internal Medicine, the faculty of the department of medicine and the appropriate research affiliates.

Finally, the division of Internal Medicine needs to take a leadership role in producing and advocating for more general internists for the university and community of British Columbia. The division of Internal Medicine is committed to this goal and sees this as one of its primary aims.



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### **Special Honours and Awards**

Dr. Anita Palepu was awarded the Boston University School of Public Health Distinguished Alumni Award.

Dr. Dr. Stephan Van Eeden received the MSFHR Senior Scholarship Award.

Dr. Jim Busser was awarded the Bobby Miller Award for Excellence in Teaching at Vancouver General Hospital.

Dr. Ric Arseneau received the Tong Prize in Entrepreneurship from Simon Fraser University.

Dr. Alex Chan was awarded the Graeme Copland Award for Clinical Teacher at St. Paul's Hospital

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## GERIATRIC MEDICINE

***Dr. Janet E. McElhaney***  
***Professor & Head***



### **Faculty Members**

Professor & Head	McElhaney, Dr. Janet	SPH
Professor	Meneilly, Dr. Graydon	VA/SPH
Assistant Professor	Madden, Dr. Kenneth	VA
Clinical Associate Professor	Adler, Dr. Reva	VA
Clinical Associate Professor	Dian, Dr. Larry	VA
Clinical Associate Professor	Martini, Dr. Janet	SPH
Clinical Assistant Professor	Chung, Dr. Maria	SPH
Clinical Assistant Professor	Hill, Dr. Amanda	VA
Clinical Assistant Professor	O'Connor, Dr. Peter	St. Mary's
Clinical Assistant Professor	Pillay, Dr. Shunmoogam (Willie)	SMH
Clinical Assistant Professor	Rauscher, Dr. Christopher	VA
Clinical Assistant Professor	Wong, Dr. Roger	VA
Clinical Instructor	Barnett, Dr. Kim	SPH
Clinical Instructor	Bater, Dr. Marilyn	Royal Jubilee
Clinical Instructor	Bell, Dr. Kathryn	VA
Clinical Instructor	Cook, Dr. Wendy	SPH
Clinical Instructor	King, Dr. Kim	Nanaimo
Clinical Instructor	Kushner-Kow, Dr. Janet	St. Vincent's
Clinical Instructor	Lee, Dr. Philip	SPH
Clinical Instructor	Malone, Dr. Marilyn	VA
Clinical Instructor	Menezes, Dr. Janice	SPH
Clinical Instructor	Petrossian, Dr. Caroline	SPH
Clinical Instructor	Ranchod, Dr. Hetesh	Mount St. Joseph
Clinical Instructor	Williams, Dr. Dorothy	Victoria
Associate Member	Sheldon, Dr. Leslie	Mt. St. Joseph's
Professor (Emeritus)	Beattie, Dr. B	VA

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## **Divisional Overview**

The Division of Geriatric Medicine currently has 15 faculty members within Vancouver Acute (VA) and Providence Health Care (PHC) and 4 faculty members in distributed sites. The Division provides a wide range of clinical services across these sites, including active geriatric consultation services, in-patient acute care for elders (ACE), geriatric activation and assessment beds, geriatric day hospitals and multiple outpatient clinics. Clinical services provided as an outreach to the community are gradually being integrated into the Community Health Centers of VCH. The strategic plan for the Division is moving forward under the Responsive Acute Care for Elders (RACE) initiative and will continue to support and implement processes of care that improve outcomes of seniors accessing the acute care system. A collaborative partnership has been established with other health disciplines within VCH under the Vancouver Initiative To Add Life to Years (VITALiTY), which received a team development grant from the BC Network for Aging Research (a network of the Michael Smith Foundation for Health Research). The Division's major areas of research emphasis are in health services research and active research programs in diabetes, dementia, osteoporosis, falls prevention, cardiovascular disease, inflammation, immunosenescence and vaccination provide a foundation for the scholarship and service that will promote health, wellness and independence for seniors in the community of Vancouver Coastal Health and British Columbia.

Promotions within the Division included Dr. Phil Lee appointed as Assistant Professor (tenure track), Dr. Roger Wong promoted to Clinical Associate Professor, and Dr. Janet Kushner-Kow promoted to Clinical Assistant Professor.

## **Teaching**

### **Undergraduate**

Dr. Janet Kushner-Kow is the Representative for the undergraduate teaching program for the UBC Division of Geriatric Medicine and also has a role in the medical school expansion that went live in September 2005. She has recently revised the undergraduate curriculum for second year bedside teaching in Geriatric Medicine and is also actively involved in the Brain and Behaviour Week in PBL.

### **Postgraduate**

Dr. Kushner-Kow has been appointed as Vice Chair for the Royal College of Physicians and Surgeons Examination Board in Geriatric Medicine, and Chair of the Continuing Education Committee for the Canadian Geriatrics Society. Under the leadership of Dr. Janet Kushner-Kow, our training program received full accreditation from the Royal College of Physicians and Surgeons of Canada. The Division was lauded in the review process for its advocacy on behalf of seniors in our community. Dr. Roger Wong provided educational materials for the UBC Department of Medicine Postgraduate Medical Education Health Advocate Seminar Series. All Division members continue to be actively involved in the teaching of internal medicine residents and fellows in the principles of the care of the frail elderly, including the clinical teaching units and noon rounds for medical residents. Case-based scenarios created by Drs. Reva Adler and Janet Kushner-Kow continue to be used in inter-professional educational programs for geriatrics throughout British Columbia. Dr. Roger Wong is Associate program director, postgraduate

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medical education, Department of Medicine UBC. The postgraduate program includes two residents, including one gulf state resident, and one resident will start in July 2007.

### **Continuing Medical Education**

In 2006 the Division members were active participants in numerous CME events including programs in osteoporosis, falls and fractures, dementia, diabetes and other topics. The Division Seminar Program takes place weekly during the academic year, ably directed by Dr. Phil Lee. The Division will host the 2007 Summer Institute on Aging under the leadership of Dr. Janet Kushner-Kow with the participation of all Division members.

### **Research**

Dr. Meneilly continues his research program in diabetes in the elderly and is also actively involved in the islet transplant program. Dr. Ken Madden has made great strides with his CIHR grant; a randomized, controlled trial of aerobic, strength to measure its effect on arterial stiffness and the cardiovascular control measures that prevent syncope during upright tilt is underway. Dr. Madden is also Co-Applicant another CIHR grants in a related area and received a salary award from the Department of Medicine Academic Enhancement Fund. Dr. Phil Lee received a St. Paul's Hospital Foundation Physician Scholar Award to study delirium in hospitalized older adults and develop his research program in Vancouver. Dr. McElhaney has established her research program on immunologic correlates of protection against influenza with CIHR funding for an international collaboration with European influenza vaccine developers, an industry-sponsored, investigator-initiated influenza vaccination study, and continued work on her NIH-funded research at the University of Connecticut. Dr. Wendy Cook has started a Fall and Fracture Prevention Clinic at St. Paul's Hospital and plans to develop her own independent research program in this area. Dr. Reva Adler has been invited to the Presidents Office, Republic of Rwanda, Conference of Women Parliamentarians, Kigali Rwanda, and the U.S. State Department, Division of Intelligence and Research: Tools for Genocide Prevention, and was a Key Note Speaker, University of Washington, Division of Forensic Nursing, Annual Conference, Genocide Prevention in Rwanda. This work was conducted under a Fulbright scholarship over the past three years and she is also funded by the Vancouver Foundation to study access to health services for older immigrants to Canada. Dr. Roger Wong continues to conduct research in medical education, investigating the role of electronic academic detailing in teaching medical concepts to physicians and developing a new curriculum to enhance competency in quality improvement among internal medicine residents supported by a grant from the Royal College of Physicians and Surgeons of Canada. Dr. Beattie is involved in multiple research projects related to dementia and is Chair of the Research Policy Committee for the Alzheimer Society of Canada and the BC Network for Aging Research, and a member of the CIHR Gender, Sex and Health Committee. Dr. Hill is involved in interventions and health care delivery research in the areas of management of congestive heart failure and delirium, and has developed a pre-printed order set for the management of delirium. In this next year, the Division will set up a peer-mentoring group to promote collaboration within the Division and to integrate our research expertise with others in the health research community.

### **Clinical Services**

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At both PHC and VA, clinical activities continue to increase. At VGH, Acute Care of the Elderly units increased to 69 beds. A pilot of the proposed Responsive Acute Care for Elders (RACE) Unit at St. Paul's Hospital was successfully conducted during July and August of 2006 and plans continue to develop this unit as a model of interprofessional collaborative practice with training opportunities for all health care disciplines. The Division also looks forward to the reopening of the Sub-Acute for Frail Elderly (SAFE) unit in the newly renovated Centennial Pavilion and is actively involved in patient assessment and management at the VGH STAT Centre that is co-located at the same site. A collaboration between VGH and SPH has extended geriatric outreach network to most of the Community Health Centers within Vancouver Community Health.

### **Administration**

Dr. Janet McElhaney continues as the Head, Division of Geriatric Medicine for both UBC and PHC, and the PHC Physician Program Co-Director for Elder Care Program with responsibilities in geriatric and rehabilitation medicine at three PHC sites. In the last year, she has also been appointed as the Regional Medical Director for the Seniors Population Continuum for Vancouver Coastal Health. At VA, Dr. Meneilly will be re-appointed as Chair of the Department of Medicine at both VA and UBC. Dr. Larry Dian is the VA Division Head for Geriatric Medicine. Dr. Janice Menezes is the Physician Operations Leader at St. Paul's. Dr. Reva Adler is Medical Director of the VGH STAT Centre. Dr. Amanda Hill continues in her role as Medical Director, Community and Specialty Medicine. Dr. Roger Wong continues his roles as Medical Director, Geriatric Consultation Program and Medical Manager, ACE unit at VA. Dr. Maria Chung is Medical Director, UBC Hospital.

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## HEMATOLOGY



***Dr. Michael Barnett***  
***Clinical Professor & Head***

### **Faculty Members**

Clinical Professor & Head	Barnett, Dr. Michael	VA/BCCA
Professor	Humphries, Dr. Richard Keith	BCCA
Professor	Lansdorp, Dr. Peter	BCCA
Professor	Schrader, Dr. John	VA
Associate Professor	Smith, Dr. Clayton	VA
Clinical Professor	Ballem, Dr. Penny	
Clinical Professor	Hogge, Dr. Donna	VA/BCCA
Clinical Professor	Nevill, Dr. Thomas	VA/BCCA
Clinical Associate Professor	Benny, Dr. W.	VA
Clinical Associate Professor	Forrest, Dr. Donna	VA/BCCA
Clinical Associate Professor	Nantel, Dr. Stephen	VA/BCCA
Clinical Associate Professor	Shepherd, Dr. John	VA/BCCA
Clinical Associate Professor	Sutherland, Dr. Heather	VA/BCCA
Clinical Associate Professor	Toze, Dr. Cynthia	VA/BCCA
Clinical Associate Professor	Vickars, Dr. Linda	SPH
Clinical Assistant Professor	Broady, Dr. Raewyn	VA
Clinical Assistant Professor	Leitch, Dr. Heather	SPH
Clinical Assistant Professor	Li, Dr. Charles	SPH
Clinical Assistant Professor	Song, Dr. Kevin	VA
Clinical Assistant Professor	Tsang, Dr. Peter	VA
Clinical Instructor	Foltz, Dr. Lynda	New Westminster
Clinical Instructor	Galbraith, Dr. Paul	SPH
Clinical Instructor	Lavoie, Dr. Julye	VA
Clinical Instructor	Leger, Dr. Chantal	SPH
Clinical Instructor	Petraszko, Dr. Tanya	VA
Clinical Instructor	Sreenivasan, Dr. Gayatri	VA
Clinical Instructor	Zypchen, Dr. Leslie	VA
Associate Member	Coupland, Dr. Robert	VA
Associate Member	Eaves, Dr. Connie	BCCA
Associate Member	Horsman, Dr. Douglas	BCCA
Professor (Emeritus)	Eaves, Dr. Allen	VA/BCCA

## **Divisional Overview**

The UBC Division of Hematology includes 29 staff and 3 associate staff members based at the Vancouver General Hospital (VGH), the Vancouver Cancer Centre (VCC) and the Terry Fox Laboratory (TFL) of the British Columbia Cancer Agency, St. Paul's Hospital (SPH), Royal Columbian Hospital and UBC. In 2006, laboratory research programs at TFL and UBC achieved peer-reviewed operating support of \$1.2 million and CFI equipment funds of \$110,000 and clinical research at VGH and SPH brought in \$1 million. There were a total of 34 peer-reviewed publications. Training and patient care remained at the forefront of clinical activities. Trainees in the Division as a whole included 5 Hematology fellows, 9 Leukemia/BMT fellows, 13 laboratory post-doctoral fellows and 9 graduate students.

## **Teaching**

### **Undergraduate**

This was the 8<sup>th</sup> year of the Blood & Lymphatics Block in the Problem Based Learning course.

### **Postgraduate**

A total of 29 Residents in the Internal Medicine Program took hematology-based electives during the past year. These were one or two month blocks spent on the Hematology Consultation Service at VGH or SPH.

### **Subspecialty Training**

Four General Hematology fellows were based at VGH. Rotations included the General Hematology Consultation Service, Leukemia/BMT Service, Blood Transfusion Service, Cell Separator Unit, Out-patient Clinics and Hematopathology. Rotations were also taken at SPH, VCC, BC Women's and Children's Hospital. These positions were filled by Dr. Luke Chen, Dr. Hatoon Ezzat, Dr. Carolyn Owen, Dr. Jessie Shustik and Dr. Paul Yenson. After completion of training in the summer, Dr. Owen was awarded a Lady Tata Memorial grant to fund a research fellowship at St. Bartholomew's Hospital, London.

### **Leukemia/Bone Marrow Transplantation Fellowship**

The Leukemia/BMT Program had six positions available for clinical training in the management of patients with leukemia and those undergoing hematopoietic stem cell transplantation. These positions were filled by Dr. Yasser Abou Mourad, Dr. Fat-hia Al Qurashi, Dr. Dharma Choudhary, Dr. Genevieve Gallagher, Dr. David Irvine, Dr. Prabodh Das, Dr. Hilary O'Leary, Dr. Maryse Power, and Dr. Khaled Ramadan.

### **Postdoctoral Training**

Division Members conducting bench research at the TFL and UBC trained 13 postdoctoral fellows, of whom 8 were PhD's and 5 were MD's.

### **Doctoral Training**

The Terry Fox Lab accommodated 9 graduate students and 14 research and co-op students.

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## **Continuing Medical Education**

Division Members attended numerous national and international meetings both as speakers and attendees.

## **Research**

Clinical research involved hematological malignancies, apheresis, thrombosis and HIV/AIDS. As well as in-house studies, significant contributions were made to national and international trials. Collaborative research in grant tolerance was conducted at the Jack Bell Research Centre. Laboratory research based at the TFL involved the regulation of normal and malignant hematopoietic cell growth and differentiation with special emphasis on the myeloid leukemias, Hox genes and telomeres. The molecular characterization of regulatory pathways was the focus at UBC.

Dr. Allen Eaves retired after 25 years as Director of the TFL. The international renown of this group is a reflection of his major contribution as an administrator and advocate for research.

## **Clinical Services**

The clinical services at VGH/VCC and SPH continued to cope with a high workload in terms of both inpatient and outpatient activities.

Dr. Charles Li joined the General Hematology group at VGH after 8 years at SPH. Dr. Khaled Ramadan was appointed as a staff hematologist at SPH. Dr. Yasser Abou Mourad joined the senior staff of the Leukemia/BMT group at VGH/VCC.

The in-patient activity of the Leukemia/BMT group was consolidated on T15 ward at VGH by transfer of beds from VCC. The administrative and academic offices of the Division of VGH were relocated to the Diamond Health Care Centre (10<sup>th</sup> floor).

## **Administration**

A number of individuals completed terms of office:

- ◆ Dr. Allen Eaves – Director of TFL (1981-2006) – see above
- ◆ Dr. Linda Vickars – Head of Hematology, SPH (1994-2006)
- ◆ Dr. Stephen Nantel – Head of General Hematology, VGH (1996-2006)
- ◆ Dr. Charles Li – Block Chair, Blood & Lymphatics Undergraduate Curriculum (1998-2006)
- ◆ Dr. Penny Ballem – Deputy Minister of Health (2001-2006)

Dr. Vickars deserves much credit for developing the group at SPH. Dr. Nantel gave sterling service as Head of General Hematology at VGH. Dr. Li provided diligent stewardship of Undergraduate teaching activities. Dr. Ballem served the MOH with distinction for a 5 year term.



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Dr. Peter Tsang became Head of General Hematology at VGH. Dr. Michael Barnett assumed leadership (in an acting capacity) of the SPH group. Dr. Clayton Smith (Director of the Leukemia/BMT Program at VGH and VCC), Dr. Stephen Nantel (Director of the Clinical Practice Unit for Hematology/BMT at VGH), Dr. Barrett Benny (Director of the Cell Separator Unit at VGH) and Dr. Peter Tsang (Director of the Hematology Training Program) continued in leadership positions.

### **Future Directions**

The major initiatives over the next few years will be to:

- ◆ Sustain a Hematology Clinical Trials Unit (established with donated funds)
- ◆ Enhance translational research in hematological malignancy
- ◆ Establish a clinical research group in thrombosis
- ◆ Create fellowships in areas other than Leukemia/BMT
- ◆ Unify the VGH/VCC and SPH components of the Division

### **Special Honours and Awards**

**Dr. Donna Hogge** - Robert and Alma Moreton Lectureship in Oncology, Scott and White Clinic, Temple, Texas, November 2006.

**Dr. Yasser Abou Mourad** – New Investigator Award, American Society for Blood and Marrow Transplantation, February 2006.

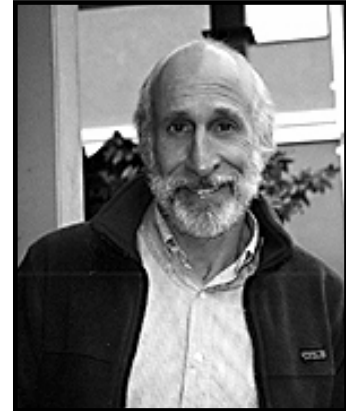
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## INFECTIOUS DISEASES

*Dr. Neil E Reiner*  
*Professor and Head*

*Dr. H Grant Stiver*  
*Professor and Assistant Head*

*Dr. Mark Tyndall*  
*Associate Professor & Head*  
*St. Paul's Division of Infectious Diseases*



### Faculty Members

Professor & Head	Reiner, Dr. Neil	VA
Professor	Bowie, Dr. William	VA
Professor	Brunham, Dr. Robert	BCCDC
Professor	Montaner, Dr. Julio	SPH
Professor	Stiver, Dr. H.	VA
Associate Professor	Av-Gay, Dr. Yossef	VA
Associate Professor	Phillips, Dr. Elizabeth	SPH
Associate Professor	Tyndall, Dr. Mark	SPH
Assistant Professor	Hmama, Dr. Zakaria	VGH
Assistant Professor	Kerr, Dr. Thomas	SPH
Assistant Professor	Nandan, Dr. Devki	VA
Assistant Professor	Steiner, Dr. Theodore	VA
Assistant Professor	Cherkasov, Dr. Artem	VA
Clinical Professor	Burdge, Dr. David	BCW
Clinical Professor	Chan, Dr. Robert	SPH
Clinical Professor	Phillips, Dr. Peter	SPH
Clinical Professor	Rekart, Dr. Michael	BCCDC
Clinical Assistant Professor	Harrigan, Dr. Paul	SPH
Clinical Assistant Professor	Montessori, Dr. Valentina	SPH
Clinical Assistant Professor	Moore, Dr. David	SPH
Clinical Assistant Professor	Press, Dr. Natasha	SPH
Clinical Assistant Professor	Wood, Dr. Evan	SPH
Clinical Instructor	Mirzanejad, Dr. Yazdan	Surrey
Clinical Instructor	Reynolds, Dr. Robert	VA
Associate Member	Isaac-Renton, Dr. Judith	BCCDC
Associate Member	Jewesson, Dr. Peter	VA
Associate Member	Marra, Dr. Fawziah	BCCDC
Associate Member	McMaster, Dr. W.	C&W Health Centre

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Associate Member	McElhane, Dr. Janet	SPH
Associate Member	Money, Dr. Deborah	BCW
Associate Member	Patrick, Dr. David	BCCDC
Visiting Scientist	Papavinasasundaram, Dr. Kadambavanasundaram	VA
Visiting Scientist	Soualhine, Dr. Hafid	VA
Adjunct Professor	Grigg, Dr. Michael	VA
Adjunct Professor	Sanghera, Dr. Jasbinder	Vancouver
Professor (Emeritus)	Chow, Dr. Anthony	VA
*inactive member / Assistant Professor	de Haan, Dr. Marie	VA

## Divisional Overview

Faculty in the Division of Infectious Diseases oversee patient care, education and research activities at three teaching hospitals located at Vancouver General (VGH), St. Paul's (SPH) and BC Children's & Women's Hospitals, and at the BC Centre for Disease Control. The growth and achievements of the previous years have produced not unexpected challenges in terms of infrastructure and resources. Efforts are ongoing to recruit new clinician scientists for several positions including an Infectious Diseases Transplant Specialist to become Director of a BC Transplant and Immunocompromised Host in Infectious Diseases Program. This is a new Program which has been proposed to Vancouver Coastal Health Authority. Late in the year there was a setback in planning with Vancouver Coastal Health for academic replacement space which is needed by 2008 to relocate the VGH Division of Infectious Diseases.

The celebration of Dr Tony Chow's retirement this year brought a moving mixture of joy, pride and the awareness of how much he will be missed. His extraordinary accomplishments over 27 years with UBC included building a strong academic Division, developing the MD/PhD and TRID programs for the Faculty of Medicine, as well as his exceptional clinical, teaching and research. Dr Chow as well as Dr Robert Chan, who also retired from UBC this year, will be highly valued Emeriti Faculty. Dr. Chan has been recognized repeatedly for his stellar record as a clinician and teacher at SPH. Other changes included the departures of Dr Michael Grigg, who left the Division to take on an exciting research position with the NIH in Washington, and Dr Elizabeth Phillips who moved to Perth, Australia.

## Teaching

Teaching continues to be a major strength of the Division of Infectious Diseases. Members of the Division make substantial contributions to the education of undergraduate and postgraduate students, residents and fellows from the Faculty of Medicine. Twenty visiting undergraduate and postgraduate medical students and residents representing most Canadian medical schools, and one from Japan took their elective training in Infectious Diseases at VGH and SPH this year.

## Undergraduate:

The Division's significant commitment to medical undergraduate teaching includes the highly regarded Host Defense Infection Block in the Problem Based Learning course. Clinical

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Clerkship Half Days and inpatient rotations are also highly regarded by students. Dr. Grant Stiver continues his significant contribution to the Program as Director of Undergraduate Education for the Faculty of Medicine and Dr Bill Bowie is the Undergraduate Supervisor for the Division of Infectious Diseases .

**Postgraduate:**

Under the program leadership of Dr Natasha Press (and Dr Valentina Montessori during Dr Press' mat leave), inpatient and outpatient training was provided to 53 residents from Medicine, Anaesthesia, Dermatology, ICU, Medical Microbiology, Neurology, and Surgery at St. Paul's and Vancouver General Hospital. Additionally, six R4/R5 trainees and clinical fellows participated in the two year Infectious Diseases Subspecialty Training Program. The ID Residency Training Program continues to provide high quality clinical and research training to prepare residents for a career as infectious diseases specialists. Since completing ID subspecialty training in 2005, Dr. Mark Hull has been enrolled in the Masters in Health Care and Epidemiology Program through the Clinical Investigator Program.

Infectious Diseases Faculty supervised 15 Post Doctoral Fellows at research laboratories at VGH, UBC CDC and in clinical research at St. Paul's Hospital.

**Graduate Students:**

Infectious Diseases Faculty supervised at least 20 graduate students during the year. The students are affiliated with the Experimental Medicine Program and Departments such as Laboratory Medicine and Microbiology and Immunology and Medical Genetics.

**MD/PhD Program**

The UBC MD/PhD Program is jointly administered by the Faculty of Medicine and the Faculty of Graduate Studies. This integrated combined degree Program prepares the students to pursue a research-intensive track of residency and postdoctoral training in a specialty or discipline of their choice, ultimately leading to an independent clinician-investigator career. The program enrolled 13 trainees during 2006, engaging in a wide range of research including: cancer, cardiovascular disease, lipid metabolism, infectious disease pathogenesis, gene mutations and chromosomal abnormalities, host defense mechanisms, and social factors that determine access to health care. MD/PhD students have won prestigious awards such as the Canadian Society for Clinical Investigation's Young Investigator Best Basic Science Presentation Award, BC Research Institute for Children's and Women's Health PhD Trainee Research Award, Vancouver Coastal Health Research Institute Outstanding Trainee Award, CIHR-UBC Strategic Training Program for Translational Research in Infectious Diseases MD/PhD Studentship Award, and Michael Smith Foundation for Health Research Doctoral Trainee Incentive Awards. In 2006 Dr. Chow stepped down as Director of the Program coincident with his retirement.

Dr. Lynn Raymond has been formally appointed as the new Director. <http://www.med.ubc.ca/mdphd>.

**CIHR Strategic Training Program for Translational Research in Infectious Diseases (TRID)**

The overall objective of this Training Program is to increase Canada's research capacity in the field of Infectious Diseases, particularly in areas of key importance identified by the CIHR Institute of Infection and Immunity. TRID has brought together basic, clinical and population-

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based researchers, and has created unparalleled opportunities for translational and trans-disciplinary research training not available from classical training programs. TRID has a multidisciplinary Faculty drawn from both clinical and basic science departments with a common interest in infectious diseases, microbiology and public health. In 2006 the Program administered 39 TRID studentships, 5 PhD and 1 MD/PhD awards, and 5 postdoctoral research fellowships. TRID trainees published 43 peer-reviewed manuscripts, and presented 123 papers at national and international conferences. TRID held a well-attended thematic research symposium “Antibiotic Resistance and Solutions: Resistance is Futile!”. Among the 33 students who recently completed their undergraduate degrees, 13 (39%) have entered medical school, 16 (48%) have entered graduate studies and 4 (12%) have entered the biotechnology sector. <http://cmdr.ubc.ca/trainingprogram>.

## **Research**

Recognition of the quality of the highly active and innovative research programs undertaken by Division faculty at all sites is illustrated by the total grant funding awarded for the year has risen to an unprecedented \$8.2 M. Division members, Neil Reiner, Art Cherkasov, Robert Brunham, and Robert McMaster are overseeing research activity for a team of 23 people affiliated with the PREPARE Project, now in its 2<sup>nd</sup> year. PREPARE is an integrated research program to study protein interaction networks and apply computational genomics to identify novel, high quality drug targets in microbial pathogens.

Immunity and Infection Research: The Division maintains an active basic research program in molecular microbial pathogenesis and host defense at VGH. Pathogens under study included M. tuberculosis, Leishmania, E. coli, Staphylococci, Streptococci and Chlamydia. In addition to addressing mechanisms of pathogenesis, ongoing research is concerned with both innate and acquired immune responses to infection including vaccine development. The Division’s research program has an important bioinformatics focus with additional state-of-the art expertise in molecular modeling and computer-aided drug design.

HIV/AIDS Research Program: The AIDS Research Program, which involves seven faculty members at the St. Paul’s site, is nationally and internationally recognized for work in all facets of HIV. The main areas of research encompass epidemiology, clinical management and basic sciences. The epidemiology group has been actively developing and maintaining long-term analyses of drug treatment programs in Vancouver, including harm reduction strategies to prevent HIV transmission. The group has been investigating the natural history of injection drug use including: study of HIV and Hepatitis C and other adverse consequences related to injection drug use, the scientific evaluation of North America’s first supervised injection site, examination of illicit opiate addiction, as well as treatment and policy in Canada. Vancouver was selected as a research site for a multi-national HIV vaccine study that has generated clinical trials capacity for studies among marginalized populations. The clinical science research focuses on issues important to the medical management of patients with HIV including multidrug-resistant virus, pharmacokinetics of antiretrovirals, and adherence to antiretroviral therapy regimens, drug toxicities, viral co-infections and primary care initiatives. The major focus of the basic science program is HIV resistance to antiretroviral therapy and mechanisms of toxicity.

Epidemiological Research:

The wide ranging research of ID Faculty at the UBC CDC, as directed by Dr Robert Brunham, includes STD prevention, control and service delivery; control of emerging infectious diseases;

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assessment of the human papillomavirus infection (HPV); reduction of antimicrobial misuse as linked to the emergence of resistant organisms; detection and description of unique outbreaks such as *Cryptococcus gattei* disease; and early interruption of transmission of diseases from infected food products. The CDC Division of Mathematical Modeling is now integrated as a public health agency which enhances the ability to translate science into health policy. Drs. Michael Rekart and Bill Bowie continue their work with CIDA funded projects concerning STD, HIV, TB prevention and care in Vietnam and Guyana, and ecosystem health in Ecuador.

#### Clinical Research

The Oak Tree Program at Children's and Women's Health Centre of BC has a collaborative clinical research program led by Dr David Burdge. The Program focuses on women/gender issues in HIV with clinical studies in HIV infected women, pregnant women and children.

#### **Clinical Services**

The Division maintains two highly active consultation services at SPH and at VGH. The volume of consultations at VGH has doubled since 2000 including increases of 15% each year for the past three years. The consultation services see the usual full range of general ID cases, but additionally, there is an abundance of demand to address infections in reconstructive orthopedics including spine, neurosurgery, bone marrow and solid organ transplant, tuberculosis, infections related to IVDU and infections in other marginalized populations. The AIDS inpatient ward based at SPH continues to be extremely busy.

#### **Administration**

Dr. Robert Brunham became the Provincial Executive Director of the BCCDC. This is in addition to his role as Director of the academic and research focused UBC CDC.

Dr. Mark Tyndall became Head of the Division of Infectious Diseases at St. Paul's Hospital, when Dr Peter Phillips stepped down after 10 years of commendable leadership in the role.

#### **Special Honours and Awards**

Dr Tony Chow was presented with the Donald Whitelaw Award for Outstanding Grand Rounds presentation in 2006.

Drs. Thomas Kerr and Mark Tyndall both received Scholar Awards from the Michael Smith Foundation for Health Research.

Dr. Julio Montaner, who is Head of BC Centre for Excellence in HIV/AIDS, became President-elect of the International AIDS Society.

Dr Steven Reynolds, in his final year of Infectious Diseases subspecialty training, won the ACP-ASIM Governors Award for Best Clinical Research Project (Emergency CA-MRSA) at Residents Research Day.

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## MEDICAL ONCOLOGY



***Dr. Susan E. O'Reilly***  
***Clinical Professor & Head***

### **Faculty Members**

Clinical Professor & Head	O'Reilly, Dr. Susan	BCCA
Assistant Professor	Chi, Dr. Kim	BCCA
Assistant Professor	Chia, Dr. Stephen	BCCA
Assistant Professor	Gill, Dr. Sharlene	VA
Assistant Professor	Savage, Dr. Kerry	VA
Clinical Professor	Connors, Dr. Joseph	BCCA
Clinical Professor	Gelmon, Dr. Karen	BCCA
Clinical Professor	Hoskins, Dr. Paul	BCCA
Clinical Professor	MacLean, Dr. Grant	Victoria
Clinical Professor	Murray, Dr. Robert Nevin	BCCA
Clinical Professor	Shah, Dr. Amil	BCCA
Clinical Professor	Swenerton, Dr. Kenneth	BCCA
Clinical Professor	Weinerman, Dr. Brian	BCCA
Clinical Professor	Wilson, Dr. Kenneth	BCCA
Clinical Associate Professor	Coppin, Dr. Christopher	BCCA/Fraser Valley
Clinical Associate Professor	Klasa, Dr. Richard	BCCA
Clinical Associate Professor	Klimo, Dr. Paul	Lion's Gate Hospital
Clinical Associate Professor	Kollmannsberger, Dr. Christian	BCCA
Clinical Associate Professor	Murphy, Dr. Kevin	BCCA/Fraser Valley
Clinical Associate Professor	Shenkier, Dr. Tamara	BCCA
Clinical Assistant Professor	Allan, Dr. Sharon	BCCA
Clinical Assistant Professor	Anderson, Dr. Helen	Victoria
Clinical Assistant Professor	Bernstein, Dr. Vanessa	BCCA
Clinical Assistant Professor	Bryce, Dr. Cicely	BCCA
Clinical Assistant Professor	Ellard, Dr. Susan	UBC
Clinical Assistant Professor	Gill, Dr. Karamjit	Surrey
Clinical Assistant Professor	Khoo, Dr. Kong	VGH
Clinical Assistant Professor	Knowling, Dr. Margaret (Meg)	BCCA
Clinical Assistant Professor	Laskin, Dr. Janessa	BCCA
Clinical Assistant Professor	Lê, Dr. Lyly	Surrey
Clinical Assistant Professor	Lee, Dr. Ursula	BCCA

Clinical Assistant Professor	Lohrisch, Dr. Caroline	BCCA
Clinical Assistant Professor	MacPherson, Dr. Nicol	VGH
Clinical Assistant Professor	Melosky, Dr. Barbara	VA
Clinical Assistant Professor	Noble, Dr. R.	Royal Columbian
Clinical Assistant Professor	Norris, Dr. Brian	Surrey
Clinical Assistant Professor	Sawhney, Dr. Ravinder	BCCA
Clinical Assistant Professor	Sehn, Dr. Laurie	VGH
Clinical Assistant Professor	Stuart, Dr. David	VA
Clinical Assistant Professor	Taylor, Dr. Marianne	VGH
Clinical Assistant Professor	Yun, Dr. John	Richmond
Clinical Instructor	Bouttell, Dr. Elaine	Kelowna
Clinical Instructor	Fenton, Dr. David	BCCA/S. Interior
Clinical Instructor	Fitzgerald, Dr Catherine	BCCA
Clinical Instructor	Hart, Dr. Jason	BCCA – Victoria
Clinical Instructor	Lee, Dr. Christopher	BCCA
Clinical Instructor	MacNeil, Dr. Mary	VGH
Clinical Instructor	Martin, Dr. Lee Ann	VGH
Clinical Instructor	Martins, Dr. Heidi	BCCA
Clinical Instructor	Pansegrau, Dr. Gary	BCCA/Fraser Valley
Clinical Instructor	Souliere, Dr. Sheila	Victoria
Clinical Instructor	Sutherland, Dr. Judith	BCCA
Clinical Instructor	Yee, Mr. Adrian	BCCA - Victoria
Associate Member	Ling, Dr. Victor	BCCRC
Honorary Professor	Bruchovsky, Dr. Nicholas	BCCA
Clinical Professor (Emeritus)	Goldie, Dr. James	BCCA
Clinical Professor (Emeritus)	Klaassen, Dr. David	BCCA
Clinical Professor (Emeritus)	Plenderleith, Dr. Ian	
Clinical Professor (Emeritus)	Silver, Dr. Hulbert	

## Divisional Overview

The Division of Medical Oncology, UBC, comprises the medical oncology and scientific staff at the Vancouver Center, Fraser Valley Center, Surrey, Vancouver Island Center, Victoria and the Center for the Southern Interior, Kelowna, as well as community oncologists in Burnaby, Nanaimo and the Royal Columbian Hospital, New Westminster.

In addition to the clinical division, there is a laboratory section (Advanced Therapeutics), which is located in the British Columbia Cancer Research Center. It comprises three senior scientists and six clinical investigators who have appointments at the Vancouver Cancer Center, Department of Medical Oncology.

Medical Oncology clinical services are organized as a Provincial Systemic Therapy Program reaching across the Province of British Columbia including the four cancer centers and outreach programs in more than twenty additional community hospitals in smaller urban centers. Undergraduate teaching occurs in the Vancouver, Victoria and Fraser Valley Cancer centers. Postgraduate teaching occurs primarily at the Vancouver Cancer Center with additional elective



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opportunities available at all four cancer centers including Victoria, Fraser Valley and Kelowna. UBC clinical faculty at all centers participate in undergraduate teaching modules.

A fifth new BCCA Cancer Centre opens in Abbotsford in 2008, in conjunction with a new general hospital. This centre will also offer undergraduate and postgraduate teaching and clinical research.

The next five years will pose some exciting challenges and opportunities. More medical oncologists and hematologists specializing in neoplastic diseases will be recruited to address the rising incidence of cancer, related to the aging population and, even more importantly, the increasingly complex treatment programs incorporating new targeted small molecules and immunotherapeutic agents. Expanded opportunities for clinical and translational research are readily available based on the rapid emergence of new knowledge in cancer biology, especially insights derived from molecular oncology, genomic and gene expression studies.

The new \$100,000,000 B.C. Cancer Research Center building opened in early 2005. This state-of-the-art research facility houses a wide range of laboratory research programs including molecular oncology, the Terry Fox Laboratory focusing on hematologic cellular biology and leukemias and core programs in genomic analysis, gene expression profiling, novel imaging and tumor modeling and population based epidemiology and biostatistics. The BC Cancer Agency Genome Sciences Centre has moved into a large laboratory facility nearby but continues to forge collaborative projects with several tumor groups within Medical Oncology including breast cancer, gastrointestinal cancer and lymphoproliferative neoplasms.

## **Teaching**

The Medical Oncology Undergraduate Training Committee, chaired by Dr. Amil Shah, is active in providing and planning teaching modules and clinical bedside teaching in Internal Medicine. An elective in Medical Oncology is available to UBC and visiting medical students.

The Postgraduate Training Committee, chaired by Dr. Tamara Shenkier, offers popular two-month electives in Medical Oncology to internal medicine residents from UBC and other universities. Approximately 10-16 residents per year from these and other specialty disciplines spend elective periods at the Vancouver Cancer Center. Opportunities are available for electives at all of our regional cancer centers and some financial support for travel and accommodation is available for residents choosing one of these options.

The Postgraduate Training Committee also plans and supervises the two-year subspecialty-training program in Medical Oncology. This program is based at the Vancouver Cancer Center with elective opportunities at all other centers and in community oncology practice. The four-month elective period may also be applied to laboratory or clinical research. One or two month electives at centers elsewhere in Canada or in other countries may also be considered. This program, now one of the largest programs in Canada, has expanded to enroll four first year and four second year residents and is fully approved by the Royal College of Physicians and Surgeons of Canada and has consistently received excellent reviews. Additional training positions for overseas residents result in eight or nine trainees participating in this two-year

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program at any one time. Currently, residents participate in academic oncology training with excellent exposure to clinical practice, ambulatory care and clinical trials. Residents are expected to conduct clinical research and have a number of publications and presentations to their credit. At least half of our residents from each year recently have competed successfully for post-residency academic subspecialty fellowships that have launched them on promising academic careers. Opportunities to pursue laboratory research projects are available.

### **Continuing Medical Education**

All medical staff are active in continuing medical education courses organized by the British Columbia Cancer Agency, other provincial, national and international bodies. Several of our faculty members have emerged as international leaders in their field and are actively sought out to provide leadership within the major international societies including the American Society of Clinical Oncology, the American Society of Hematology and the American Association for Cancer Research in addition to their contributions to the National Cancer Institute of Canada and its Clinical Trials Group.

### **Research**

Members of the Division are involved in a wide variety of phase I, II, III and IV clinical trials. These include the development of new anti-cancer drugs, the evaluation of new doses schedules and combinations of drugs in the phase II setting and the participation in multi-institutional phase III studies and post marketing phase IV trials evaluating effective new treatments on specific categories of malignancy.

Our phase I investigational new drug program has grown rapidly as a reflection of the energy and enthusiasm of the scientists and physicians in the Advanced Therapeutics section of Medical Oncology and in response to the increasing availability of new agents for testing in North America. We are currently expanding clinical and translational research in a new unit at the Vancouver Cancer Centre.

Our Advanced Therapeutics section is able to evaluate new biological response modifiers, gene therapy and pharmaceutical agents through all stages from in-vitro testing in the laboratory to evaluation in human volunteers. The Vancouver Cancer Center has the only Clean Room in an academic center in Canada that is equipped and licensed for the packaging and formulation of pharmaceutical agents in small quantities for clinical testing.

At the pre-clinical level, studies are being carried out in evaluating anti-angiogenesis agents, gene modifiers, enzyme inhibitors, experimental drug modulators, pre-clinical drug toxicities and molecularly targeted agents such as the new tyrosine kinase inhibitors, immunotherapeutic agents targeted against breast cancer, colorectal cancer, lung cancer and lymphomas.

Currently, our oncologists partner with scientists, pathologists and epidemiologists in winning research grants for collaborative population-based and translational research. The BCCA manages its own grants and these are not listed in this report.

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## **Clinical Services**

The four B.C. Cancer Centers now provide medical oncology consultations for over 9,000 new patients annually with almost 65,000 ambulatory care visits to these centers.

## **Administration**

The Provincial Systemic Therapy Program, headed by Dr. Susan O'Reilly, manages the \$114 million oncology drug budget, which supports the care of approximately 30,000 patients annually, both within BCCA centers and in community hospitals and plans and delivers clinical services in BCCA Centers. Opportunities for health services research projects are available and linkages with the Provincial Tumour Registry and Vital Statistics are readily available. We are uniquely positioned to further develop province-wide population-based research in health outcomes for cancer patients and regularly take advantage of this special opportunity.

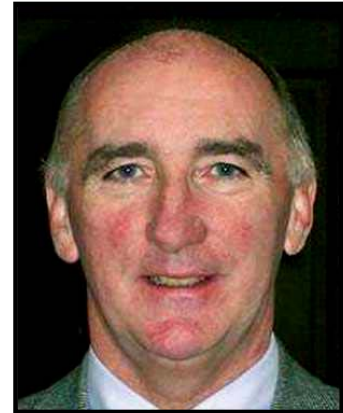
## **Future Directions**

The major academic goal of the Division is to continue to build an outstanding translational and clinical research unit that combines the excellent basic science research at the British Columbia Research Center, the input from the Genome Science Centre, the resources of our academic medical oncologists and the participation of our large patient population.

British Columbia has consistently shown the best cancer survival statistics in Canada and we are in a unique position to carry out province-wide treatment programs in both clinical and translational research. We are continuously expanding our research agenda in these areas and in those of health outcomes and economic analyses.

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## NEPHROLOGY



***Dr. Paul Keown***  
***Professor & Head***

### Faculty Members

Professor & Head	Keown, Dr. Paul	VA
Professor	Quamme, Dr. Gary	VA
Professor	Wong, Dr. Norman	VA
Assistant Professor	Gill, Dr. John	SPH
Clinical Professor	Chan-Yan, Dr. Clifford	SPH
Clinical Professor	Levin, Dr. Adeera	SPH
Clinical Professor	Werb, Dr. Ronald	SPH
Clinical Associate Professor	Chan, Dr. Victor	VA
Clinical Associate Professor	Landsberg, Dr. David	SPH
Clinical Associate Professor	Shapiro, Dr. Jean	VA
Clinical Associate Professor	Taylor, Dr. Paul	SPH
Clinical Associate Professor	Yeung, Dr. Choi Kit	VA
Clinical Assistant Professor	Cass, Dr. Aaron	RCH
Clinical Assistant Professor	Chiu, Dr. Anthony	SPH
Clinical Assistant Professor	Copland, Dr. Michael	VA
Clinical Assistant Professor	Da Roza, Dr. Gerald	RCH
Clinical Assistant Professor	De Luca, Dr. Linda	SPH
Clinical Assistant Professor	Duncan, Dr. John	VA
Clinical Assistant Professor	Jastrzebski, Dr. Jacek	VA
Clinical Assistant Professor	Karim, Dr. Mohamud	RCH
Clinical Assistant Professor	Kiaii, Dr. Mercedeh	SPH
Clinical Assistant Professor	Neufeld, Dr. Peter	VA
Clinical Assistant Professor	Singh, Dr. Rajinder	VGH
Clinical Assistant Professor	Zalunardo, Dr. Nadia	VA
Clinical Instructor	Jamal, Dr. Abeed	SPH
Clinical Instructor	Jung, Dr. Beverly	SPH
Associate Member	Hargrove, Dr. Gaylene	Victoria
Professor (Emeritus)	Cameron, Dr. Eugene	VA
Professor (Emeritus)	Price, Dr. John	VA
Professor (Emeritus)	Sutton, Dr. Roger	VA
Clinical Professor (Emeritus)	Rae, Dr. Angus	SPH

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## Divisional Overview

The Division of Nephrology includes 30 members based at four principal sites: St. Paul's Hospital, Vancouver General Hospital, the UBC Hospital and the Royal Columbian Hospital, who provide provincial leadership in research, education, and clinical care within the field of renal medicine. The Division has a strong clinical base and provides integrated and decentralized nephrology care throughout Vancouver Coastal Health, including Richmond, North Vancouver and coastal areas, with a strong working collaboration with Fraser Health. The Division has an important role in the UBC undergraduate medical curriculum, has a mature nephrology postgraduate training program, and participates actively in the Experimental Medicine and Clinical Investigator programs of the Department of Medicine. Research activities encompass both laboratory and clinical sciences, and combine genetic and molecular research, pharmacology and therapeutics, epidemiology and clinical trials, and population health and outcomes/economic investigations in renal disease and transplantation. Members of the Division assume leadership roles in the advancement of nephrology at provincial, national and international levels through their positions in the BC Provincial Renal Agency, BC Transplant Society, the VCH Regional Renal Program, the Kidney Foundation of Canada, the Canadian and International Societies of Nephrology, the international Transplantation Society and US National Kidney Foundation.

## Teaching

The UBC Division of Nephrology is a key component of the tertiary education program for medicine and related health sciences for the Greater Vancouver region, and has established undergraduate, graduate, post-graduate and continuing medical education sections. The Vancouver General Hospital, St. Paul's Hospital/ Providence Healthcare and BC Children's Hospital have formalized education programs for UBC medical students, interns, residents, sub-specialty residents in nephrology, rotating trainees in general medicine, anaesthesia and other relevant disciplines, and for clinical and research fellows. These educational programs attract trainees from across Canada, and from Australia, Europe, Asia and the Middle East for post-graduate training. The Richmond General Hospital and Lion's Gate Hospital as yet provide no formal educational programs, but will increasingly provide a platform for community nephrology training as the Division extends to these locations. Continuing education funds are available for all renal programs allocated from UBC, through the BCPRA, and from other contributions through the Division of Nephrology. The primary sites for undergraduate and graduate training are at VGH, SPH/Providence Healthcare and the BC Children's Hospital. Education in pharmacy and allied health disciplines occurs in the same sites under the auspices of UBC and related professional bodies. Divisional program directors include: Dr. Suneet Singh (Undergraduate Programs), Dr. John Duncan (Postgraduate Programs), Dr. Adeera Levin (Continuing Medical Education), and Dr. David Landsberg (Fellowship Programs).

**Undergraduate education:** The Division of Nephrology has contributed significantly to implementing the medical school's distributed curriculum in 2006 and is actively involved in all

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areas of education throughout the undergraduate program. Dr. Suneet Singh is the Director of Undergraduate Education for the Division of Nephrology, supported by Drs. Copland, Neufeld, Levin, Chan-Yan, Jamal and other members of the Division. Nephrology subspecialty residents are actively involved in the clinical case sessions. Dr. Singh and Dr. Levin coordinate medical student rotations through Nephrology at the VGH and SPH sites respectively. Dr. Jamal and the administration staff at both sites serve as the student contact for electives and selectives. These rotations receive excellent evaluations and many students return as residents.

**Postgraduate education:** Dr. John Duncan is Director of the Postgraduate Education Program, which is widely recognized for the excellence of its clinical training. This highly-structured program encompasses the broad range of basic and clinical renal sciences through formal educational sessions and weekly resident and fellow's rounds. The Program had 8 trainees enrolled in the first and second years of core nephrology training and has an outstanding record of successful Royal College examination examinations. Elective opportunities are provided for subspecialty residents to pursue training in particular aspects of renal medicine, including histopathology, glomerular diseases, community nephrology, dialysis or transplantation, and other components according to their needs and interests. Residents and fellows are encouraged to be active in clinical research throughout their core years, with submissions to and presentations at meetings of the Canadian and American Societies of Nephrology, the American Society of Transplantation, and the Canadian Transplant Society.

**Graduate education:** The Division has an active fellowship education program under the direction of Dr. David Landsberg, which offers advanced and specialist training in clinical or laboratory sciences in many areas of renal medicine including chronic kidney disease, dialysis, transplantation, immunology and genetics/genomics. This training may be combined with formal graduate course work leading to Masters or Doctoral degrees in Experimental Medicine, Health Care and Epidemiology or related disciplines through the Faculty of Graduate Studies. In 2006, the Division hosted 1 clinical scholar and 6 international fellows - from Australia, the UK (including Great Britain, Scotland and Ireland), Thailand, the Ukraine and India, as well as one Canadian.

**Continuing Medical Education:** Members of the Division participate actively in Continuing Medical Education activities at the local, provincial, national and international levels, and in so doing bring an important measure of prestige to the Department and University. UBC Division of Nephrology rounds are held over 20 times per year, alternating between Vancouver General and St. Paul's Hospital sites, with distinguished speakers invited from throughout North America and Europe. Distinguished Visiting Professors also visit the Division on a frequent basis to present individual seminars or conferences and interact with the members, trainees and staff during their visit. Drs. Levin, Keown and Gill maintain active speaking schedules in national and international meetings, presenting both reviews of key topics and original research, and other members of the Division are gradually acquiring national and international recognition in additional aspects of nephrology.

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## Research

The Division has a strong and internationally-recognized translational research program in both renal disease and transplantation. Members of the Division currently hold over \$2.1 million in grant support including grants from Genome Canada, the CIHR, the MSFHR and other peer-review agencies, and generated more than 25 scientific articles in 2006. The UBC Division of Nephrology research program is working to: (a) optimize the ongoing academic activities of current members by fostering effective collaboration, (b) ensure effective mentoring for new recruits to maximize their opportunities for academic success and (c) provide formal graduate and post-graduate scientific training for residents and fellows in Medicine, Nephrology and other disciplines, and for students from the Experimental Medicine and Clinical Investigator programs.

In June 2006, many of the Division's clinical trials came under its direct administrative auspices at both hospital sites. At Vancouver General Hospital (VGH), a Research Unit was created to allow for better control of operations, to enjoy greater economies of scale and to more aptly streamline clinical trial recruitment processes. Allocation of new research space occurred at both SPH/PHC and at Vancouver General. At Vancouver General Hospital, academic office space was allocated for research and administration, located in the newly-built Gordon and Leslie Diamond Health Care Centre. Mr. Daniel Rogers was hired into this new Research Unit as Research Coordinator in May 2006, and Ms. Guiyun Li joined the Division in November 2006 as Biostatistician. The St. Paul's Hospital site continues to benefit from a well-staffed Research Unit, which includes several Research Coordinators and a Biostatistician, Ms. Caren Rose. In 2006, the SPH site welcomed a new Research Manager, Ms. Katy Vela, and an additional Clinical Research Coordinator, Ms. Brigitte Courteau.

The Renal Sciences Program integrates members from the VGH and SPH Providence Healthcare sites to ensure full participation and collaboration, and to ensure appropriate academic space and resources for the proposed research at both principal hospital sites. The program is funded from all relevant sources including normal peer review agencies, private research contributions, corporate partnerships and the creation of a strong industrial-academic interface. The principal components of the program are outlined below

*Laboratory Sciences:* Dr. Quamme's research is focused on differential expression analyses that identify novel genes involved with magnesium transport and metabolism in human kidney. Using expression systems his group has experimentally characterized these transcripts offering novel clinical approaches to diagnoses of diseases. Dr. Quamme continues this line of investigation through identification of key molecular targets, regulation of gene expression, and cell signaling events. Dr. Wong's research activity continues to explore the role of vasoactive peptide in regulating the expression of vasopressin V2 receptor expression in the inner medullary collecting duct of the kidney, and of other vasoactive peptides including endothelin and AQP4 on the kidney, heart and brain. Dr. Keown's research has targeted the mechanisms, modulation and consequences of the immune response in organ transplantation and autoimmune disease, combining studies in molecular genetics, cell biology, pharmacokinetics and dynamics. Dr. Keown continues to co-lead a Genome Canada-funded (\$9.1 million) search for predictive biomarkers of acute and chronic allograft rejection in heart, kidney and liver transplant recipients. This program is now being extended to explore biomarkers and disease mechanisms in glomerular injury and autoimmune diseases. Dr. Gill, a Michael Smith Scholar and Vice

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President of the Canadian Organ Replacement Register, has pioneered the investigation of alloimmunity following transplantation with the monitoring of anti-donor HLA antibodies using novel solid-phase fluorescent methods for antibody detection. Continuing research will build upon these studies using newly established DNA/RNA banking facilities, signal analysis and high-throughput genomics and proteomic methods for molecular targeting, to investigate disease risk and therapeutic response genes, immuno pharmacodynamics /pharmacogenomics and measures of operational tolerance.

*Clinical Sciences:* Dr. Levin's research encompasses the broad range of epidemiology, outcomes, and health policy in chronic kidney disease. Particular interests include the impact of anemia on renal co-morbidity, analysis of cardiovascular disease risk in patients with impaired renal function, strategies for and benefits of co-coordinated care for chronic kidney disease, the role of vitamin D in bone health and clinical outcome, measures of renal function, and societal measures of renal disease burden. Dr. Levin holds a MSHRF planning award for additional research into complex disorders. Dr. Gill has established an important platform of clinical research in the epidemiology of renal transplantation which has examined the impact of increased donor age and recipient waiting times on outcomes of renal transplantation, the potential survival advantage of pre-emptive transplantation, the progression of kidney disease in native and grafted organs, and the incidence and consequences of cardiovascular disease during the waiting period. Dr. Gill is the recipient of a major CIHR award to further this research base. Dr. Keown's research, supported by the CIHR, employs computer models to explore health outcomes and service delivery in transplantation. Drs. Kiaii and Jastrzebski have focused on dialysis research related to vascular access and the clinical and economic impact of anemia management in dialysis recipients, while Dr. Duncan has examined gender relationships within the context of renal failure care, and the incidence, severity and functional impact of renal artery stenosis in patients with cardiovascular disease. Dr. Shapiro is engaged in studies of neurocognition in chronic renal failure and transplantation, and Dr. Landsberg has pioneered investigation of living altruistic organ donation and pursued clinical trials of therapeutic immunosuppression. The Division has a strong commitment to clinical and therapeutic trials, with many continuing single and multicentre Phase I - Phase IV studies. Further integration of the clinical research program will enable the introduction of advanced study methods and trial designs, and will permit all members of the division to become actively involved in the evaluation of new and innovative treatments.

## **Clinical Services**

The renal services provided by the Division of Nephrology operate within a broad provincial context with established clinical guidelines, provincial contracts, information systems, central administration and co-ordination for education and other projects. This affords the Division an opportunity to be both a key contributor to and a beneficiary of provincial policies, projects and experience. British Columbia is widely recognized to be at the forefront of renal care delivery, with active programs for the early detection of renal disease in the population, multidisciplinary coordination of care, delivery of dialysis therapy in the community or at home, and novel approaches to renal transplant donation. The BC Provincial Renal Agency (BCPRA) coordinates the development and integration of renal services, funding, establishment of standards and guidelines, and works in collaboration with each of the health authorities to ensure equal access to care for all patients living with kidney disease. The BC Transplant Society coordinates the funding and oversight of renal and other solid organ transplant services and the retrieval of cadaveric organs and tissues.



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Within this framework, renal care delivery is based on established principles of integrated chronic disease management through a combination of institutional, community and home-based programs. Three tertiary care teaching hospitals, the Vancouver General Hospital (VGH), St. Paul's Hospital (SPH Providence Healthcare) and BC Children's Hospital (BCCH), collaborate to provide ambulatory chronic renal disease care, in-patient management, plasma exchange (SPH), hospital dialysis and renal transplantation, and home hemo- and peritoneal dialysis for adult and pediatric patients with renal disease throughout the Vancouver Coastal Health and sections of the Fraser Valley region. Community hemo-dialysis is conducted as an integrated program in nine units, three of which are hospital-based and nine are community units, and renal consultation is provided in two large community hospitals, at Lion's Gate Hospital and Richmond General Hospital. Almost 3,000 patients with chronic renal disease currently receive care within VCH, of whom over 1,000 have progressive CKD, almost 800 are on dialysis, and a further 800 have a functioning renal transplant. Recent figures estimate that many more subjects within this region may have chronic renal dysfunction without knowledge of the fact so that further innovation, coordination and integration of services will be essential to meet the impending challenge over the next decade and to improve maintain the standards of care already established by the Division.

In 2006, the Division welcomed two new nephrologists at the Vancouver General Hospital site – Dr. Nadia Zalunardo and Dr. Peter Neufeld - to complement the services in both university-affiliated hospitals and to expand the activities of the Division to the Richmond and North Shore regions.

### **Service to the Community**

Members of the Division of Nephrology play a key role in many University, academic community and volunteer organizations in Canada and around the world. Dr. Levin serves as Director of the BC Provincial Renal Agency, and Chair of the Curriculum Committee of the KRESCENT program, a collaboration between the Kidney Foundation, the Canadian Society of Nephrology and CIHR, which attempts to enhance clinical research science training and career development. Dr. Gill is Vice-Chair of the American Society of Transplantation Guidelines Committee, Chair of the CST Communications Committee, and sits on the Steering Group for CCDT IM/IT Development and the Steering Committee for the CCDT Organ Allocation Forum. He is also involved in peer-review activities with the NIH, Kidney Foundation of Canada, Physician's Services Incorporated, and National Kidney Foundation. Dr. Keown is a member of Council and Chair of the Organizing Committee for the XXIII International Congress of the Transplantation Society, to be held in Vancouver in August 2010. He is involved in numerous university, granting body and scientific journal committees. Dr. Copland brings significant contributions to the Kidney Foundation of Canada as: Chair of the National Medical Advisory Committee, Director-At-Large of the National Board of Directors, Member of the National Research Council, and Member of the National Public Policy and National Patient Services Committees. Dr. Landsberg is Head of the Division of Nephrology for Providence Health Care/St. Paul's Hospital, serves as Member of both the St. Paul's Hospital Medical Advisory Committee and BC Transplant Society Medical Advisory Committee, and oversees the Renal Transplant Program at St. Paul's Hospital. Dr. Shapiro is Medical Manager of the Solid Organ Transplantation Program at Vancouver General Hospital. Dr. Jastrzebski serves as Member of the Canadian Society of Nephrology Ad Hoc Committee for

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Prevention of Infection in the Hemo-dialysis Unit. Dr. Chan-Yan is Chair of the St. Paul's Hospital Department of Medicine Finance Committee, and sits on the University Clinical Faculty Appointment and Promotion Committee.

### **Administration**

In August 2006, the nephrologists, academic, administrative, research and allied health staff and research fellows located in various offices across Vancouver General Hospital campus were amalgamated onto the 5<sup>th</sup> floor of the new, state-of-the-art Gordon and Leslie Diamond Health Care Centre, adjacent to the Jimmy Pattison Pavilion. The Diamond Health Care Centre integrates outpatient care with research and teaching, and promotes an interdisciplinary approach to clinical education. The Division's 4,000 m<sup>2</sup> space consolidates divisional offices, administration and activities, and an integrated out-patient private and hospital clinic which provides renal care, patient education and research opportunities.

Dr. Paul Keown, Professor of Medicine, continued in 2006 as Head of the Division of Nephrology and Director of the VCH Regional Renal Program. The Division has continued to build an effective administrative and financial infrastructure to support growth and development, with Mr. Shawn Jorgensen serving through 2006 as Executive Administrator. Ms. Pam Sewell and Ms. Heather Chitty, located at the St. Paul's and VGH Hospital sites respectively, continued their effective coordination of all educational aspects for the Division, including undergraduate, postgraduate and fellowship activities. Additional administrative personnel will be added throughout the coming year to fulfill the goals and objectives of the Division in the fields of clinical service, teaching and research.

### **Future Directions**

The Division will continue to build on its strengths to ensure the highest quality of academic and clinical activity for the University, the health system, and the community. The Division will work to develop a centre of excellence in renal sciences, with the support of both the VGH & UBC Hospital Foundation and St. Paul's Hospital Foundation, which will integrate existing activities in the fields of laboratory and clinical sciences and expand into novel areas of cutting-edge research and, if supported by the CIHR, to link with the 15 Canadian university-based Divisions of Nephrology in a national Network in Translational Research.

The Division will continue to take a major role in the teaching of Renal Sciences within the University, continue its leadership position in nephrology postgraduate education, and introduce innovative initiatives in the delivery of integrated regional care for patients with renal disease.

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## NEUROLOGY



***Dr. Howard Feldman***  
***Professor & Head***

### **Faculty Members**

Professor & Head	Feldman, Dr. Howard	VA
Professor	Barton, Dr. Jason	VA
Professor	Cashman, Dr. Neil	VA
Professor	Doudet, Dr. Doris	VA
Professor	Oger, Dr. Joel	VA
Professor	Pelech, Dr. Steven	VA
Professor	Stoessl, Dr. A	VA
Professor	Tsui, Dr. Joseph	VA
Professor	Wang, Dr. Yu Tian	UBC
Associate Professor	Curt, Dr. Armin	VA
Associate Professor	Kastrukoff, Dr. Lorne	VA
Associate Professor	McKeown, Dr. Martin	VA
Assistant Professor	Hsiung, Dr. Ging-Yuek	VA
Assistant Professor	Traboulosee, Dr. Anthony	UBC
Assistant Professor	Tremlett, Dr. Helen	VA
Clinical Associate Professor	Beckman, Dr. Jeff	VA
Clinical Associate Professor	Hooge, Dr. John	SPH
Clinical Associate Professor	Javidan, Dr. Manouchehr	VA
Clinical Associate Professor	Jones, Dr. Michael	VA
Clinical Associate Professor	Keyes, Dr. Robert	SPH
Clinical Associate Professor	Krieger, Dr. Charles	VA
Clinical Associate Professor	Robinson, Dr. Gordon	VA
Clinical Assistant Professor	Briemberg, Dr. Hannah	VA
Clinical Assistant Professor	Clarke, Dr. Stephen	SPH
Clinical Assistant Professor	Costantino, Dr. Anthony	VA
Clinical Assistant Professor	Devonshire, Dr. Virginia	VA
Clinical Assistant Professor	Foti, Dr. Dean	VA
Clinical Assistant Professor	Gibson, Dr. Gillian	VA
Clinical Assistant Professor	Johnston, Dr. Dean	SPH
Clinical Assistant Professor	Katz, Dr. David	VA
Clinical Assistant Professor	Martzke, Dr. Jeffrey	VGH

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Clinical Assistant Professor	Mezei, Dr. Michelle	VA
Clinical Assistant Professor	Prout, Dr. Alister	SPH
Clinical Assistant Professor	Spacey, Dr. Sian	UBC
Clinical Assistant Professor	Teal, Dr. Philip	VA
Clinical Assistant Professor	Thiessen, Dr. Brian	VA
Clinical Assistant Professor	Woolfenden, Dr. Andrew	VA
Clinical Instructor	Bozek, Dr. Christopher	VA
Clinical Instructor	Chapman, Dr. Kristine	VA
Clinical Instructor	Hallam, Dr. Bradley	VA
Clinical Instructor	Murphy, Dr. Colleen	UBC
Clinical Instructor	Smyth, Dr. Penelope	VA
Clinical Instructor	Tai, Dr. Charles	Vancouver
Clinical Instructor	Townsend, Dr. Tiffany	VA
Clinical Instructor	Varelas, Dr. Michael	VA
Associate Member	Anderson, Dr. Duncan	VA
Associate Member	Forwell, Dr. Susan	VA
Associate Member	Graeb, Dr. Douglas	VA
Associate Member	Hurwitz, Dr. Trevor	VA
Associate Member	Leavitt, Dr. Blair	Vancouver
Associate Member	Li, Dr. David	VA
Associate Member	Moore, Dr. Wayne	VA
Associate Member	Raymond, Dr. Lynn	VA
Associate Member	Sadovnick, Dr. Adele	VA
Associate Member	Stowe, Dr. Robert	UBC
Associate Member	Wilkinson, Dr. Rosemary	VA
Adjunct Professor	Bub, Dr. Daniel	Victoria
Adjunct Professor	Ostermann, Dr. Joachim	VA
Adjunct Professor	Ruth, Dr. Thomas	UBC
Professor (Emeritus)	Calne, Dr. Donald	VA
Professor (Emeritus)	Eisen, Dr. Andrew	VA
Professor (Emeritus)	Kim, Dr. Seung	VA
Professor (Emeritus)	Pate, Dr. Brian	
Professor (Emeritus)	Sweeney, Dr. Vincent	
Clinical Professor (Emeritus)	Anzarut, Dr. Andre	VA
Clinical Professor (Emeritus)	Bratty, Dr. Paul	VA
Clinical Professor (Emeritus)	Hashimoto, Dr. Stanley	VA

### **Divisional Overview**

The Division of Neurology is the largest division within the Department of Medicine. It has its major teaching, research and clinical activities at Vancouver General Hospital, UBC Hospital and St. Paul's Hospital. There are 47 Neurology faculty members whose primary appointment is in the Division, with another 11 appointed as associate members, 2 as adjunct professors and 10 as emeritae. The Division also has been expanding its breadth of membership to include a broader range of neuroscience disciplines. There is a strong emerging core of basic bench neuroscientists, clinical neuropsychologists and cognitive neuroscientists.

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The Division is nationally and internationally recognized for its clinical and research programs in neurodegenerative, demyelinating, neuromuscular and cerebrovascular diseases. It has been consistently very productive in obtaining peer reviewed grant funding from agencies in Canada and internationally. Divisional members make important contributions to both basic neuroscience and clinical neurological literature. This past year divisional members published more than 112 papers in peer-reviewed journals.

Clinically the Division provides province-wide tertiary and quaternary care for a variety of neurological disorders. The division has clinical outreach to many communities around the province. Faculty are actively involved in teaching and supervising all levels of students and trainees from undergraduate to post doctoral fellows.

Among the highlights for the Division in the past year has been the successful application and launch of PrionNet a National Centers of Excellence (NCE) program in prion diseases. Dr. Neil Cashman is the Scientific Director of this Network which has received \$ 35 million funding for an initial 7 year program. A number of co-investigators and collaborators within UBC are contributing to this program which is headquartered at the UBC campus but which will involve activities across the country. In the area of stroke Dr. Philip Teal Director of the VGH Stroke Program was appointed as the first Sauder Family and BC Heart and Stroke Professorship in Stroke Research. Dr. Tiffany Townsend was recruited to the Division from the Cleveland Clinic to work within the Epilepsy program. She will have an active role in both the ambulatory setting as well as on the Seizure Monitoring Unit at VGH. Dr. Michael Jones resigned his leadership position in the Epilepsy program after providing admirable leadership for 15 years.

The Division continued to contribute actively to the success and collaborations within Brain Research Center at UBC Hospital. A number of members were on a successful CFI application that was funded at year end in the amount of \$17 million. This will enable the development of a translational research center in neuroscience that will support new initiatives and infrastructure to be built while planning for a new building on the campus dedicated to Neuroscience, Mental Health and Addiction clinical and research activity has been progressing well in the direction of future funding.

**With deep regrets, the Division experienced the losses of Drs. Ken Berry and David Jones this past year. Dr. Berry in his role as a Divisional neurologist and neuropathologist contributed immeasurably to the clinical, teaching and academic lives of many generations of Neurology residents and staff at VGH and SPH. Dr. Jones provided skillful leadership to the Division in its early days.**

## **Teaching**

**Undergraduate:** Division members are involved as PBL facilitators, lecturers and clinical skills tutors in the Brain and Behaviour block during 2nd year. The clinical skills sessions have been augmented by the recruitment of volunteer patients from neurology ambulatory care clinics. This was facilitated by hiring two summer students who attended the clinics searching out appropriate candidates for teaching purposes.

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The Neurosciences clinical skills sessions are supported by extensive video learning materials demonstrating the normal neurological examination including mental status testing as well as a wide array of neurological abnormalities. Each second year medical student is provided with a DVD to be used in conjunction with the tutorials that are given by neurosurgeons and neurologists from VGH, UBC and SPH.

The material has been developed and is continually updated by Dr. Gordon Robinson who has considerable experience in using video for teaching. We are indebted to him as well as Mr. Gordon Gill who has generously donated his time and expertise in television production.

A third year medical students receive a two-hour seminar and a bedside teaching session during their internal medicine CTU rotation. It has been proposed by the Department of Medicine that the Neurology CTU will become a regular rotation at VGH beginning in early 2007. This has been enthusiastically accepted by the Division as a way of increasing exposure to neurology as a discipline.

In addition a 4 week elective/selective clerkship is offered based on an inpatient and outpatient experience that allows students to take advantage of all of the resources within the Division. As well as UBC students the clerkship attracts students from other medical schools in Canada and other countries. Students who have participated in this rotation uniformly report that Division members are committed and enthusiastic teachers. They also comment on the valuable contribution made by the residents in neurology.

Other division members led by Dr. Tony Traboulee are an integral part of Phase VI, providing curricula designed to encourage critical evidence-based management of clinical problems.

**Postgraduate:** The Post Graduate Residency Training in Neurology is fully accredited with the Royal College of Physicians and Surgeons. It currently has 18 residents at various levels of training from PGY1 to PGY5. In the first two years of the program, the residents rotate through various subspecialties in Internal Medicine, ICU, Emergency, as well as doing their first Neurology rotations. The PGY3-5 years are core Neurology training years. Residents do their inpatient training at Vancouver General Hospital and St. Paul's Hospital. Many outpatient subspecialty clinics are done at UBC Hospital. During their training the residents in Neurology are actively involved in various research projects. In 2006 there were 3 resident poster presentations at various international meetings and 2 papers published in peer-reviewed journals. Dr. Samuel Yip, the chief resident in Neurology was awarded a Resident Scholarship Award for the American Academy of Neurology Annual Meeting in 2006 and Dr. Ana-Luiza Sayao, PGY3 won the Ludmila and Henry Zeldowicz Award for the academic year 2006-7.

Divisional web site has been developed with postgraduate component including schedules, scientific papers and future projects. The web site was developed by Dr. Naveen Deshpande (R3) with input from our divisional staff.

There are 4 CaRMS positions for academic year 2006-2007. The Royal College Review will take place on February 12, 2007.

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**Graduate, Doctoral, Postdoctoral Students and Fellows:** The Division of Neurology appointed the following individuals to graduate studies in 2006:

**Alzheimer's Disease and Related Disorders:** Dr. Najeeb Qadi (Clinical Research Fellow), Dr. Joyce Yeo (Clinical Research Fellow), Dr. Claudia Jacova (CIHR and Michael Smith Health Research Foundation Post-Doctoral Fellow) (supervisor H. Feldman).

**Parkinson's Disease and Movement Disorders (Pacific Parkinson's Research Center):** Dr. Nandhagopal Ramachandiran, Dr. Roul Sibarani (clinical fellow). Numerous trainees received awards to support their training in 2006. These include Eric Vandervoort and Geoff Topping - NSERC; (supervisor V. Sossi), Kassandra Palmer-CIHR; Ellissa Strome-MSFHR; Eileen Ng-CIHR; Joseph Flores-CIHR; (supervisor D. Doudet), Samantha Palmer-CIHR; (supervisor M. McKeown) and Elliott Bogusz -CIHR; Sarah Lidstone-MSFHR; (supervisor J. Stoessl).

**Multiple Sclerosis and MRI:** Dr. Jimmy Lee and Dr. Stephen Thompson (Post-Doctoral Research Fellows ) (supervisor A Traboulsee)

**Neuro-ophthalmology:** from July 2005 to June 2006- Dr. Rashmin Khari and Dr. Briar Sexton (Clinical Fellows); Dr. Linda Lanyon and Dr. Giuseppe Iaria (Post-Doctoral Fellows). Graduate and summer students awarded scholarships and grant awards in 2006 (supervisor J Barton): Chris Fox-CIHR Canada Graduate Scholarships-Doctoral Award Dalrymple K.-NSERC Post Graduate Scholarship-Doctorate Award and the MSFHR Junior Graduate Studentship Award Van Zoest W.-MSFHR Research Trainee Award. Chris Waite was awarded the AAN-Student Interest Group in Neurology summer fellowship grant and the Thomas A Dohm summer research grant

### **Vancouver General Hospital Neurology Service (Clinical Teaching Unit)**

The in-patient service at VGH consists of a 14-bed unit located on T5-B of the Pattison Pavilion. This unit is the only dedicated hospital neurology clinical teaching unit (CTU) in the province and has within its mandate the provision of tertiary care for complex neurological disorders. The inpatient program features a specialized epilepsy monitoring unit (2 beds) and Acute Stroke Unit (2 beds). Life, Limb and Threatened Organ policies approved by the Vancouver Acute Medical Advisory Committee are in place for accepting acute stroke patients, as well as neuromuscular disorders requiring plasmapheresis.

A large percentage of all stroke patients presenting to the emergency room or referred to VGH are now admitted to the Neurology service for acute management during the first 5-7 days of their post stroke care. From there the stroke pathway includes transfer to the UBC Subacute Stroke Unit or other appropriate rehabilitation facilities or home. This has resulted in an increase in the number of stroke patients cared for on neurology with the elimination in patients requiring a prolonged stay on the unit. During 2006 there was an increased volume of stroke referrals in the emergency department and an increased number of stroke inpatient admissions.

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The VGH and UBCH neurologists provide important consultation services within Vancouver Acute. Neurological diagnostic services at VGH include electroencephalography (EEG), intraoperative monitoring (IOM) and electromyography (EMG) are based at VGH.

Ambulatory services provided include subspecialty clinics for movement disorders, multiple sclerosis, headache, ALS, Alzheimer's disease and other dementias, stroke, neuromuscular disease, and neuro-oncology.

In August 2006 much of the ambulatory care activity conducted at a VGH was relocated to the Diamond Ambulatory Care Centre. This has resulted in the consolidation of clinics for headache, stroke and epilepsy. Support services as well as divisional offices have also moved to the new centre.

These clinics integrate with a strong research environment for each of these programs, which in turn form the core of the academic mission of the Division. The clinics also provide important post-graduate educational activities for trainees within the Division.

### **St. Paul's Hospital Division of Neurology:**

The St. Paul's Hospital Division of Neurology is an important part of the clinical and teaching program of the UBC Division of Neurology. Dr. Robert Keyes is the division head of SPH. This division provides tertiary referral care for the Providence Health Care network as well as to the province more widely. The SPH division participates in an important and extensive outreach program to communities in northern BC and the Yukon territory. It is additionally involved in providing inpatient consultation services to the Mount St. Joseph's Hospital site and Women's Hospital. The division has opened an outpatient neurology clinic at the Mount St. Joseph's Hospital Site to meet the needs of the patient population it serves. At SPH there is a Rapid Access Neurology Clinic where patients requiring urgent but not emergent care are seen and provide clinical service especially to the patient population arising from the downtown core.

The members of the Division of Neurology at SPH includes a wide cross section of subspecialty interests including clinical neurophysiology, neuromuscular disease, multiple sclerosis, neurological diseases in pregnancy, cerebrovascular disease and neurological diseases in HIV and AIDS. A close link between the Division of Neurology at SPH and the Department of Pediatrics and the Department of Obstetrics continues by virtue of the subspecialty interests of Dr. Keyes.

### **Alzheimer's Disease and Related Disorders**

**Clinical Activities:** The Clinic for Alzheimer Disease and Related Disorders is the main tertiary care referral center in B.C. for dementia assessment and management. New referrals can include a range of multidisciplinary assessments including Genetics, Social Work, Neuropsychology, Geriatric Psychiatry and Neurological/Medical which make seminal contributions to the multifaceted clinical care needed for dementia patients and their families. It is also recognized as one of the most accomplished clinical dementia research centers in Canada.



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In 2006 the Clinic undertook evaluations of more than 1000 patients with a range of neurodegenerative and other geriatric cognitive disorders. Its referred population has included an ever increasing younger cohort of subjects under age 55 in addition with concerns about their cognitive functioning and mild cognitive impairment. A new initiative over the past year was opening of a clinical research program on frontotemporal dementia with contributions from neurology, cognitive psychology, neuropsychology, genetics and psychiatry. Important new collaborations included the development of PET protocols to study MCI, and FTD.

**Teaching and Education:** The Clinic has been very active in providing teaching to trainees of multiple disciplines at many levels. A formal one-day preceptorship training program for family physicians and specialists is in place. Clinic members participated extensively in CME activities, and on expert national international working groups and advisory committees. The Clinic is very active in public education and its clinicians have also been called on to have a high profile in national and international public policy in dementia care. Within the Clinic Dr. Foti has made an extensive contribution to the Neurology residency training program through his teaching activities and clinical mentoring.

**Research:** In 2006, the research activities of the Clinic included a mix of peer reviewed funded research projects from the Canadian Institutes of Health Research (CIHR), the National Institutes of Health (NIH), and clinical trials both investigator initiated as well as industry sponsored. Ongoing research areas include the development of volumetric analytic techniques for MRI in mild cognitive impairment, and the long-term characterization of clinical outcomes in mild cognitive impairment and dementia syndromes through the ACCORD cohort study.

The development of a data management core for investigators at the Brain Research Center has been a major initiative for the research group in 2005. The data management group has been coordinating the data management and studies across a range of neurologic and psychiatric illnesses including manic depressive illness, multiple sclerosis as well as dementia. The research unit appointed 3 fellows who were each active in 2006; Dr. Claudia Jacova (post-doctoral fellow funded through a Neurobiology Training Grant of CIHR and MSHRF), Dr Joyce Yeo (clinical research fellow from the University of Manchester) and Dr. Najeeb Qadi (clinical fellow Saudi Arabia).

**Research Accomplishments:** The research unit contributed several major discoveries in 2006 through its FTD research program. An investigator team lead by Dr. Howard Feldman and Dr. Ian Mackenzie reported in Nature of their findings that mutations of the progranulin gene on chromosome 17 were the cause of a form of FTD with ubiquitinated inclusions that was subsequently estimated to account for 10% of all FTDs and 25% of familial cases. This discovery from UBC researchers culminated a 5 year intensive research program in collaboration with Dr. Mike Hutton (Mayo Clinic Jacksonville). The UBC families accrued through the FTD research initiative formed the backbone of the materials that supported the discovery. A second major discovery followed later in the year with a contribution to a publication in Science where the ubiquitinated inclusions were further determined to be made of the constituent protein TDP-43. Dr. Blair Leavitt received the distinction of being the only funded application in a special peer reviewed FTD grant competition with his proposal to develop animal models of progranulin knock out mice to try and ascertain the function of this protein and its role in disease.

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Dr. Dessa Sadovnick's program of genetic research continued to attract grant funding for genomic studies with MIRAGE and continued to provide comprehensive genetic counseling to all patients referred to the Clinic. Dr. Beattie has continued her work on Quality of Life studies in the Clinic and has been active in developing the BC Network of Aging Research.

Clinical trials have continued to focus in the past year on studies of mild cognitive impairment as a precursor state to AD, with participation in the large NIH neuroimaging initiative known as the ADNI study. A core group of coordinators and research assistants remain critical to the success of the clinical trials program.

### **Stroke and Cerebrovascular Program**

The VGH serves as the tertiary referral centre for stroke and cerebrovascular diseases in B.C. To support this clinical role the VGH Stroke Program maintains a dedicated on-call system with the commitment of six neurologists. A "Stroke Hot Line" pager system is available 24/7 to triage patients from around the lower mainland and southern British Columbia. The VGH Stroke Team consists of stroke neurologists, diagnostic and interventional neuroradiologists, neurointerventional/neurovascular neurosurgeons, and vascular surgeons. The program provides state-of-the-art care to cerebrovascular patients. Neuroradiology provides superb diagnostic and interventional services. In cooperation with the BC Bedline the program has successfully developed an acute stroke referral system for the provision of thrombolytic and interventional stroke care. Efforts are now underway to develop a British Columbia Stroke Strategy in collaboration with the Heart and Stroke Foundation, and Vancouver Coastal Health. Dr. Philip Teal was awarded The Sauder Family and Heart and Stroke Foundation of BC and Yukon Professorship in Clinical Stroke Research with date of appointment of September 1, 2006.

The Stroke Prevention Clinic continues to provide same day clinical and diagnostic services to patients seen in its twice weekly clinics. These clinics provide a critical resource for patients at risk of stroke and to emergency departments and physicians. Prompt and expert care reduces the need for hospitalization through the rapid evaluation of patients.

The VGH Stroke Program undertook its well subscribed Annual Western Canada Stroke Conference again. This program has been highly successful in its mission to provide stroke education to neurologists from B.C. and western Canada. Weekly stroke rounds are held to provide education to residents and medical students. Residents and students spend time in the Stroke Prevention Clinic evaluating and making decisions on urgent cases. The Stroke neurologists continue to give Grand Rounds, medical rounds and talks at CME events to educate physicians around the province. Public forums have been held by the Heart and Stroke Foundation with the participation of stroke neurologists and others. On an international level, members of the Stroke Program delivered posters and platform presentations at the American Stroke Association meeting, the Canadian Congress of Neurological Sciences, the American Academy of Neurology, and the European Stroke Conference.

### **Multiple Sclerosis**

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The MS Clinic had 3,450 patient visits and 216 new patients in 2006. The clinic continues to have an active international profile and is used as a resource for research, training, and education.

The clinic has 7 neurologists (Drs. V. Devonshire, S. Hashimoto, J. Hooge, L. Kastrukoff, J. Oger, P. Smyth and A. Traboulsee) and 3 neuro-ophthalmologists (Drs D. Anderson, J. Lindley and K. Wade). Dr V. Devonshire is the clinical Director of the M S Clinic and Dr A. Traboulsee heads the Clinical Trials along with Dr. L. Kastrukoff and Dr. V Devonshire as co-directors.

The Clinic maintains important interdepartmental collaborations to optimize care to affected patients. In particular the close collaborations include Dr (A) D Sadovnick (genetics counseling), Dr. A. Jiwa/ J. Tham (psychiatric care), Dr. S. Elliot (sexual medicine care) and Dr Fenster (neuro-urology). The clinic coordinates important chemotherapeutic intervention for aggressive MS. The clinic also provides specialized care for neuromyelitis optica, an aggressive form of optic nerve and spinal cord demyelination. The MS clinic also has important collaborations with the Cell Separator Unit at VGH site with Dr. Traboulsee serving on the Neuroplex committee.

The clinic provides outreach to 3 satellite clinics in Victoria (1000 patients registered), Kelowna (700 patients), and Prince George (300 patients), as well as providing outreach through clinic activities in Comox. A new clinic collaboration is currently in the planning stages for Kamloops.

In collaboration with Pharmacare and with educational funding from the pharmaceutical industry it has been possible to continue the valuable “MS Special Therapy” program to help educate patients in the choice and management of adverse effects of Disease Modifying Therapies (DMT). There are over 1900 treated patients in this program.

Dr. Devonshire, along with Dr. Paul O’Connor from the University of Toronto, have developed revised national guidelines for the treatment of MS with currently available therapies. This is an important initiative that is supported by the Network of MS Clinics across Canada.

### **Clinical trials:**

The MS clinical trials group had 17 ongoing trials in 2006 with over 700 subject visits. Therapeutic trials in MS have encompassed both disease modifying and symptomatic therapies. All stages and types of MS have been represented. The largest trial is aimed at secondary progressive MS (BioMS). The group continues to have a strong profile in clinical trial development, safety monitoring and MRI/immunology substudies:

The MS/MRI Research Group has provided central analysis for numerous multicenter randomized clinical trials and are recognized internationally for their work in this area. Dr. Oger has had add on studies for Aventis Phase II and BioMS studies

### **Research:**

#### **Epidemiology/Natural History studies:**

Drs H. Tremlett and V. Devonshire have published several seminal studies on the natural history of Multiple Sclerosis based on the unique UBC Costar database. Their research has shown that

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the long term prognosis in MS is more favorable than previously described but that there are no early prognostic indicators. These publications have generated much interest in the national media and have been highlighted in *Neurology*. Dr Tremlett is supported by a grant from the Multiple Society of Canada, a grant from the Michael Smith Foundation and a grant from the Christopher Foundation.

### **Neuro-immunology Laboratories:**

Dr. Oger along with M. E Gibbs and T. Aziz are continuing their development of interferon antibody assays. They are expanding their lab to allow nationwide antibody testing utilizing the Luciferase assay and comparing their results to that of the other assays. The UBC lab is now part of the NABINMS European Group (Neutralizing Antibodies in MS) to evaluate the best assay for monitoring patients.

### **Virology:**

Dr. L Kastrukoff has been working on animal modeling of Herpes simplex virus type 1 (HSV 1) induced central nervous system demyelination. He is currently studying how resistant strains are able to prevent viral access to the brain during the acute stage of infection and thus eliminating the risk of developing demyelination at a later stage of their lives. His studies are beginning to tie together the roles of genetic predisposition, environmental factors (virus), and the immune system in the development of autoimmune CNS demyelination.

### **Genetics of MS:**

Dr. Sadovnick, a Michael Smith Distinguished Scholar, has received a 3 million dollar grant from the MS Foundation of Canada to pursue further studies on the genetic susceptibility to MS. Additionally she is co-investigator on a grant to study pediatric MS. She has initiated a North American pregnancy registry under the auspices of the MS Consortium.

### **MRI :**

Alex MacKay (Physics, and Director of the High Field Imaging Center) continues to receive grant support from the MS Society of Canada to pursue specialized imaging of the myelin sheath (myelin water imaging). This important technique has been upgraded to work on the high field 3T MRI at UBC with improved image data quality compared to the previous studies. The MS MRI group hosted the International Society of Magnetic Resonance Imaging in Medicine (ISMRM) study group in white matter workshop in February 2006. Several important MRI histopathological correlation studies have been conducted with Dr. Wayne Moore of Neuropathology, supported by the MS Society of Canada. The MRI group has important interdisciplinary collaborations with computer scientists and electrical engineering. The group has developed new techniques for measure neurodegeneration using chronic black hole volumes, a valuable outcome in MS.

### **Neurogenetics**

The initiatives in Neurogenetics have brought together a group of researchers including Dr. Sian Spacey, Dr. Michelle Mezei, Dr. Blair Leavitt, Dr. Robin Hsiung, Dr. Dessa Sadovnick, Dr. Lynn Raymond and a group of genetic counselors.

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At the UBCH the Neurogenetics clinic is a referral center for British Columbia providing over 400 outpatient visits in 2006. The patients seen have a wide range of inherited peripheral and central CNS disorders the most common include the ataxias, channelopathies, hereditary spastic paraparesis, the phakomatoses, myotonic dystrophy, CMT, ALS, and mitochondrial disease. Many of these patients are participants in genetic research run through the UBC Neurogenetics Unit and have donated DNA to the clinic DNA bank. As well there are Neurogenetic arms of the Alzheimer and MS Clinics which provide genetic counseling to patients and families with these disorders.

Research Highlights: Dr. Sian Spacey has been awarded an operating grant from the National Ataxia Foundation to investigate the role of the P/Q type calcium channel in the pathogenesis of hereditary ataxia. To date this work has identified mutation and isoform specific interactions which alter P/Q type calcium channel function. This mutation-isoform specific interaction may account for the localization of the symptoms to the cerebellum. In addition to the molecular research conducted through the UBC Neurogenetics clinic Dr. Sian Spacey and Dr. Blair Leavitt have combined their clinical expertise and with the aid of a grant from the BC Ataxia Society have recently published on the role of antigliadin antibodies in ataxia.

### **Neuromuscular Diseases Program**

Dr. Neil Cashman has taken over the leadership of the Vancouver Coastal ALS Centre. Dr. Charles Krieger completed a sabbatical in Israel with further study of novel imaging techniques in degenerative disease models and stem cells in regenerative medicine. Dr. Hannah Briemberg assumed the position of clinical trials development for ALS.

The Vancouver Hospital Neuromuscular Unit moved to the Diamond Health Care Centre in August 2006. Dr Gillian Gibson and Dr. Kristine Chapman are investigators in continued trials in diabetic and traumatic neuropathies. Dr. Briemberg is the principal investigator for a multicentre trial evaluating Etanercept in Dermatomyositis. Dr. Mezei and Dr. Oger are co-investigators in the NIH trial of Thymectomy in myasthenia gravis. Dr. Mezei continues to work in the Adult Metabolic diseases program in the interdisciplinary assessment of patients suspected to have mitochondrial and metabolic myopathies.

### **Neuro-Oncology Program**

The Neuro-Oncology program is a multidisciplinary program involving members of the Divisions of Neurology, Radiation Oncology, Neurosurgery and Medical Oncology. Its goal is to provide comprehensive care for patients with CNS malignancies and establish both clinical and translational research programs in Neuro-Oncology.

In the realm of patient care, the program has continued to supply patients with advanced surgical and radiotherapeutic management of brain tumors including a well-established linear accelerator based stereotactic radiation program. Molecular diagnostic technology has advanced our understanding of oligodendrogliomas and improved our management and chemotherapeutic strategies for these tumors.

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Over the 2006 year, grant supported research into molecular genetic changes in oligodendroglioma and other gliomas is ongoing with grant support from the Brain Tumour Foundation of Canada. We also completed a phase II trial of lapatinib in relapsed glioblastoma multiforme.

Ongoing clinical research trials include a phase III trial comparing radiotherapy to temozolomide chemotherapy in low grade gliomas (NCIC CE5). Upcoming clinical trials include a neurosurgical trial exploring the use of Transmid fusion protein in relapsed glioblastoma multiforme, a phase II trial of dose-intensive temozolomide in relapsed malignant gliomas and a phase I/II clinical trial of RAD001C, a mTOR inhibitor, in glioblastoma multiforme.

## **Neuro-Ophthalmology**

**Clinical Activities:** The UBC Neuro-ophthalmology Division provides clinical teaching and research services at Providence Health Care (St. Paul's Hospital site) and VHHSC (Eye Care Centre) and UBC Hospital. Consulting services are also provided at GF Strong Rehab and BC Children's Hospital. The clinical service continued to provide 10 clinics per week at the combined St Paul's and VGH sites, with Dr. Duncan Anderson being the mainstay of the program. During 2006, there were 2347 patients were seen at PHC site, 650 at the UBC site, 110 at the Burnaby site, 20 at the Comox site, 72 at the Victoria site, 2358 at the VGH-ECC site, and 600 at Dr. Kevin Wade's office, for a total of 6157 patient visits, a 3.8% increase.

**Education and Training:** In clinical education, there were two clinical fellows who completed their training in 2006. Dr. Rashmin Khair assumed an academic position in Sri Lanka, and Dr. Briar Sexton began private practice in Vancouver. The program hosted 6 external trainees and were selected to provide neuro-ophthalmology training for the Saskatchewan ophthalmology program. The program also acted as host to the Pacific Northwest Neuro-ophthalmology Symposium, 6 international speakers, organized 5 grand rounds in total for ophthalmology, neurology, and otolaryngology. The Canadian Neuro-ophthalmology website continues to develop, has attracted regular readers, responses and comments from Sweden, Denmark, Scotland, and the Middle East, and is beginning to receive submissions from other centers. The neuro-ophthalmology division continues to operate a case-based educational website for Canadian neuro-ophthalmology, which started in Aug 05: [www.neuroophthalmology.ca](http://www.neuroophthalmology.ca)

**Research:** The program welcomed two new post-doctoral fellows, Drs. Linda Lanyon and Giuseppe Iaria, who bring respective expertise in computational modeling and fMRI. There were three new summer medical students hosted. George Malcolm left to begin a doctoral program at the University of Edinburgh with John Henderson. Kirsten Dalrymple received a Master's degree in Psychology for her thesis on attentional capture in Balint's syndrome. Alissa Wright won the 2006 Saul Korey award in experimental neurology from the American Academy of Neurology for her work on viewpoint variation in the face inversion effect. Lab members gave 17 research presentations and 12 invited research lectures, and wrote 27 publications. A CIHR operating grant was received for \$367,935, and lab members won 8 new independent salary awards. The 19 ongoing grants in 2006 received by the laboratory totaled \$3,569,430, with laboratory per annum income in 2006 of \$1,084,562 (including \$274,950 in salary awards and \$336,467 in project awards). All of these were competitive awards received from the public sector.

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## **Pacific Parkinson's Research Centre**

### **Clinical**

The Movement Disorders Clinic provided approximately 3,500 outpatient visits in 2006. The majority of these are for patients with Parkinson's disease or focal dystonia. The program continues to be heavily supported by nurse coordinators, who provide education and counseling to patients, families and other health care professionals. A Centre of Excellence award from the National Parkinson Foundation (Miami, Inc.) with additional support from the Parkinson Society Canada supported a physiotherapist and social worker in 2006.

### **Teaching**

The Movement Disorders Clinic provides ambulatory teaching to medical students and to residents in neurology, geriatrics, psychiatry and family medicine. Two clinical fellows completed their training during 2006. One of these (Dr. Andre Troiano) was awarded the Junior Clinical Research award at the Movement Disorders Society 10<sup>th</sup> International Congress on Parkinson's and Movement Disorders in Kyoto, Japan.

Faculty members of the Pacific Parkinson's Research Centre participate in the Brain & Behaviour course and provide training to multiple trainees at the MSc. and PhD levels in the Graduate Neuroscience program. Dr. McKeown continues to run the Motor Systems module of the Systems Neuroscience (Neuroscience 501) core course in the Graduate Neuroscience program. Faculty members within the Centre serve as mentors in the CIHR-funded Neuroscience Training Initiative and serve on numerous supervisory, comprehensive and examination committees.

### **Research**

During the past year, Centre investigators were awarded a CIHR Team grant in Parkinson's Disease, valued at \$4.45M over 5 years. The team was also awarded a Research Unit award from the Michael Smith Foundation for Health Research (\$800K over 4 years), a CIHR Research Resource grant (\$500K, PI T. Ruth) and Dr. McKeown was awarded a Collaborative Health Research Program grant (\$344K over 3 years) together with investigators in Electrical and Computer Engineering. Dr. Sossi received a Peter Wall Senior Early Scholar award.

Centre investigators had 19 PubMed listings during 2006, including papers in *Annals of Neurology*, *Brain*, *Lancet Neurology*, *Magnetic Resonance in Medicine*, *Nature Medicine* and *Neurology*.

### **Epilepsy**

#### **Clinical, Seizure Investigation Unit**

This was another clinical year for which the Seizure Investigation Unit was running full investigating patients with difficult diagnostic problems and investigating those with intractable

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epilepsy to see if surgery might be a solution. Approximately 20 patients were operated on out of about 58 patients that were assessed.

The EEG department has performed more than 2500 procedures and has been involved in ICU long term monitoring, ambulatory EEG monitoring, and intra-operative monitoring other than regular EEGs.

### **Educational Activities**

Drs. Jones and Javidan have done CME around the province and across the country. Dr. Javidan was invited as tutor in the European Summer Epilepsy Course where he worked with a group of international young Neurologists, Neurosurgeons and Pediatric Neurologists to develop a project related to epilepsy surgery. Dr. Javidan has also been the Vice President of the Canadian Society of the Clinical Neurophysiology and will become the president of this society in June 2007. He was an invited lecturer to EEG/epilepsy in the annual Resident's epilepsy course and in the Canadian Neurological Society Federation (CNSF).

### **Neuropsychology**

Dr. David Katz has been very active in both his clinical and research activities having secured grant funding for his research program on facial recognition memory.

### **Basic Neuroscience Research**

Dr. Yu Tian Wang's laboratory continued to attract large recognition for their outstanding contribution to basic neuroscience research both within the Brain Research Center, nationally and internationally.

### **Discoveries:**

In 2006 there were a number of important new discoveries from Dr. Wang's lab that lead to a series of highly influential publications. The discovery areas included the elucidation that subpopulations of NMDA receptors have differential roles in mediating neuronal cell survival and death. These results suggested that selective enhancement of NR2A-containing NMDA receptor activation with glycine may constitute a promising therapy for stroke. Currently, the lab is performing additional investigations to see if activation of NR2A-containing receptors can provide long-term protection against stroke. Other work in stroke has focused on the systemic application of a membrane permeant peptide that disrupts the interaction between the NR2B receptor subunit and its scaffolding protein PSD-95 3 hours after the stroke onset inhibited NMDA-mediated cell death signaling, thereby protecting neurons from ischemic injury, without affecting the receptor-mediated normal synaptic transmission (Aarts et al., Science, 2002). In 2006 the lab found that this peptide administered after stroke reduces ischemic brain damage even when stroke is compounded by hyperthermia and raised blood glucose. Moreover, it induces permanent histological and neurobehavioral neuroprotection examined two months after stroke onset. A phase 1 trial is being prepared to test the safety of the peptide for potential clinical use in treating stroke patients



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Beyond the research on stroke the Wang lab also continued their investigations on learning and memory and how they are affected by stress. They noted that memory retrieval in humans is especially vulnerable to acute psychological stress or cortisol treatment effects due in part to alterations in the medial temporal lobe. They have investigated how stress can affect hippocampal CA1 long-term potentiation (LTP) and LTD. They have shown how TAT GluR2<sub>3Y</sub>, a specific LTD inhibitor developed in their lab can prevent the stress-induced impairment. To facilitate clinical development of the GluR2<sub>3Y</sub> peptide, in collaboration with Allon Therapeutics Inc. they have recently incorporated a pharmaceutical company (Stratford Pharmaceuticals Corp) to develop the GluR2<sub>3Y</sub> peptide as the lead compound. They have received peer-reviewed funds for a Phase I study and for patent applications, toxicology and other preclinical studies required for an IND application.

### **Teaching:**

Dr. Wang has organized and participated in teaching graduate courses for both the Neuroscience and Experimental Medicine Programs and for undergraduate medical student education.

### **Appointments and Promotions**

**Dr. Philip Teal** was promoted to the rank of Clinical Associate Professor from Clinical Assistant Professor with effect from July 1, 2006.

**Dr. David Katz** was appointed to the rank of Clinical Assistant Professor with effect from September 1, 2006.

**Dr. Tiffany Townsend** was appointed to the rank of Clinical Instructor with effect from November 15, 2006.

**Dr. Anthony Traboulee** was promoted to the rank of Assistant Professor from Clinical Assistant Professor with effect from January 1, 2006.

### **Special Honours and Awards**

**The Brain Research Center** was the successful recipient of a Canadian Foundation of Innovation Award for \$17 million to develop a translational research facility at UBCH. A number of divisional members played a seminal role as co-applicants to the successful application

**Dr. Jason Barton** awarded a visiting professorships at the national Hospital for Neurology and Neurosurgery, Queen Square, London, England in 2006.

**Dr. Neil Cashman's** company Amorfix Life Sciences was the recipient of a Technology Pioneer Award at the World Economic Forum in Davos, Switzerland.

**Dr. Howard Feldman** was one of 10 invited plenary speakers to the 10<sup>th</sup> International Conference of Alzheimer's Disease and Associated Disorders and was also an invited plenary speaker to the 25<sup>th</sup> Annual meeting of the Alzheimer Society of Canada.

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**Dr. Howard Feldman and Ian Mackenzie** discovered the gene causing frontotemporal dementia with ubiquitinated inclusions with high profile publications in Nature and Science

**Dr. David Katz** achieved his Board certification in Clinical Neuropsychology by the American Board of Professional Psychology/American Board of Clinical Neuropsychology. He is the neuropsychologist to be board certified at VCH and only one of 26 in Canada. Dr. Katz awarded a team grant from UBC/VCHR as Principal Investigator with Dr. Jason Barton and Dr. Barrie Woodhurst as Co-investigators.

**Dr. Gordon Robinson** was awarded the Clinical Skills Award in 2006.

**Dr. Vesna Sossi** received a Peter Wall Senior Early Scholar award in 2006.

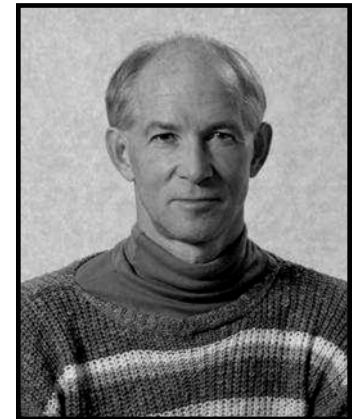
**Dr. Helen Tremlett** received a 'Du Pré Grant' by the Scientific Programmes Committee of the Multiple Sclerosis International Federation (International Medical & Scientific Board) for \$10,000 for a four-month placement at the Menzies Research Institute, University of Tasmania, Australia. She received a travel grant for young investigators from the ECTRIMS Scientific Committee to attend the 22nd Congress of the European Committee for Treatment and Research in Multiple Sclerosis, Madrid, Spain 2006.

**Dr. Tiffany Townsend** passed the Canadian Society of Clinical Neurophysiology EEG Exam in June 2006 and became member of Canadian Society of Clinical Neurophysiologists.

**Dr. Y.T. Wang** was awarded the Fellow of Royal Society of Canada and the Howard Hughes Medical Institute International Scholar in 2006

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## PHYSICAL MEDICINE & REHABILITATION



***Dr. Theo van Rijn***  
***Clinical Associate Professor & Head***

### Faculty Members

Clinical Associate Professor & Head	van Rijn, Dr. Theo	VA
Clinical Associate Professor	Anton, Dr. Hubert	VA
Clinical Associate Professor	Hahn, Dr. George	VA
Clinical Associate Professor	Krassioukov, Dr. Andrei	VA
Clinical Associate Professor	Schamberger, Dr. Wolfgang	Burnaby
Clinical Associate Professor	Travlos, Dr. Andrew	VA
Clinical Assistant Professor	Baruni, Dr. Rida	VA
Clinical Assistant Professor	Dhawan, Dr. Pankaj	VA
Clinical Assistant Professor	Hirsch, Dr. Gabriel	VA
Clinical Assistant Professor	Hughes, Dr. Barbara	VA
Clinical Assistant Professor	Koo, Dr. David	VGH
Clinical Assistant Professor	MacKean, Dr. Lynne	Victoria
Clinical Assistant Professor	Mortifee, Dr. Peter	VA
Clinical Assistant Professor	Townson, Dr. Andrea	VA
Clinical Assistant Professor	Underwood, Dr. Heather	VA
Clinical Assistant Professor	Vondette, Dr. Michael	VA
Clinical Assistant Professor	Weeks, Dr. Claire	VA
Clinical Instructor	Adrian, Dr Mark	VGH
Clinical Instructor	Crossman, Dr. Mark	Vancouver
Clinical Instructor	Dawson, Dr. Andrew	VA
Clinical Instructor	Lau, Dr. Herman	SPH
Clinical Instructor	O'Connor, Dr. Russell	VA
Clinical Instructor	Reebye, Dr. Nittin	New Westminster
Clinical Instructor	Weiss, Dr. Elliott	SPH
Clinical Instructor	Willms, Dr. Rhonda	VA
Clinical Instructor	Yao, Dr. Jennifer	VA
Honorary Professor	Kaplan, Dr. Paul	California
Associate Member	Eng, Dr. Janice	Vancouver
Associate Member	Guzman, Dr. Jamie	VA
Associate Member	Miller, Dr. William	VA
Associate Member	Yassi, Dr. Annalee	Vancouver

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Adjunct Professor	Gross, Dr. E. Lyle	
Professor (Emeritus)	Murray, Dr. Duncan	VA
Clinical Professor (Emeritus)	Robinson, Dr. Cecil	
Clinical Associate Professor (Emeritus)	Pinkerton, Dr. Alexander	

## **Divisional Overview**

The UBC Division of Physical Medicine & Rehabilitation currently has twenty-five active faculty members who are involved with patient care, teaching and research. Our members consult and provide rehabilitation services to persons ranging from the very young to the very old. We manage inpatient and outpatient programs for persons who have suffered spinal cord injury, acquired brain injury, neuromuscular abnormalities and cardio/pulmonary dysfunction. Inpatient services are provided at several sites, including Vancouver Acute/GF Strong Rehab Center, St. Paul's Hospital, Holy Family Hospital, Eagle Ridge Hospital, Sunny Hill Health Center, as well as consultation services to the Vancouver teaching hospitals, BC Children's Hospital, Royal Columbian Hospital and Burnaby General Hospital. Our staff is actively involved in teaching of residents and undergraduate students, as well as undergraduate students in related disciplines. Research activity deals with disease specific issues related to our patient population, as well as disability issues for the population at large. Dr. Jennifer Yao continued to serve as Program Director. Dr. David Koo continued to serve as Undergraduate Coordinator. Dr. Russell O'Connor continued as our Continuing Medical Education Coordinator.

## **Teaching**

We continue to provide a strong presence with MSK skills preceptorship during the 2<sup>nd</sup> year MSK skills series, in conjunction with the Divisions of Orthopedic Surgery and Rheumatology at VGH site. Seven Division members participated in the teaching for 2006/2007 year. We are looking at reviving a highly popular MSK Skills tutorial which was piloted in 2005 to help prepare second year students for their OSCE. This was operated on a volunteer basis by Division of PM&R members and if there is support a planned enrollment cap of 32 students for 2007 is expected on a first come, first serve basis.

This is the first year GF Strong has started participating with 2<sup>nd</sup> year bedside clinical skills teaching, with the capacity of taking 2 students per block, for the 4 potential blocks. We are currently working out the logistics of patient recruitment and identifying them for potential use to preceptors.

UBC elective/selective requests have come from 5 UBC students for the 2006/2007 year, including 2 third year requests.

Undergraduate involvement of PM&R in the 3<sup>rd</sup> year Internal Medicine half-day lecture series has been modified to reflect the new 1 hour format of these lectures and to work within the new teleconferencing structure of the satellite sites. The objectives for this lecture have been updated to include the WHO-sanctioned definitions of impairment, activity and participation, as per the International Classification of Function.

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An Undergraduate Committee now meets quarterly to discuss Undergraduate teaching issues and future service provision.

There were nine active residents in the program at the end of 2006. All residents from PGY2 onwards have a formal half day of research experience throughout their academic years. Resident teaching is done at the bedside and in ambulatory clinics. Formalized seminars are undertaken during weekly Academic Half Days as well as selected times throughout the week. Residents continue to participate in a scheduled monthly Journal Club supervised by members of the Division, in order to develop skills in the critical assessment of journal articles.

Our Division provides needs-based weekly CPD meetings attended by Division and non-Division members who have an interest in topics presented. The CPD Committee meets at least bi-annually to review upcoming CPD activities and to formulate ways to enrich ongoing education of our membership. The CPD committee continues to encourage members to develop innovative teaching methods, as well as utilizing panel discussions and experts from other specialties for broader educational experience.

## **Research**

Division members have actively participated in regular research education fora focused on the relevance of research to the professional development needs of the Division. Current areas of research development include use of therapeutic injections for the management of spasticity and pain; novel approaches to functional electrical stimulation in stroke; evidence based practice and interventions for spinal cord injury; and fatigue in neurological and neuromuscular disorders. The Division is currently actively recruiting a Research Director to participate in and promote research within the Division. The Division Research Advisory Committee has with the support of Dr. van Rijn initiated a strategic planning process for research.

Caroline Abramson and Catherine Tadey ably supported our Division as Research Coordinators during the year.

Dr. Hugh Anton served as the Research Coordinator and Chair of the UBC/PM&R Divisional Research Committee and organized monthly Committee meetings for the Division. As PI he received \$37,500 from the Michael Smith Foundation for Health Research and a matching \$12,500 from the Vancouver Coastal Research Institute for a Team Planning Grant on “Fatigue and Function in Neurological and Neuromuscular Disorders”

Dr. Andrea Townson was co-investigator of 2 research projects that have recently been published:

- [Ditunno PL, Patrick M, Stineman M, Morganti B, Townson AF, Ditunno JF](#). Cross-cultural differences in preference for recovery of mobility among spinal cord injury rehabilitation professionals. *Spinal Cord*. 2006 Sep;44(9):567-75. Epub 2005 Nov 29. PMID: 16317422 [PubMed - indexed for MEDLINE]

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- SCIRE Spinal Cord Injury Rehabilitation Evidence. Editors: Eng J, Teasell R, Miller W, Wolfe D, Townson A, Aubut J, Abramson C, Hsieh J, Connolly S. [www.icord.org/scire](http://www.icord.org/scire)

Dr. Barbara Hughes is the principal investigator of a project regarding bladder management following spinal cord injury as well as being co-investigator in another project dealing with genetic markers in recovery from spinal cord injury.

Dr. Pankaj Dhawan was co-investigator of a study looking at early rehabilitation intervention following mild traumatic brain injury.

Dr Russ O'Connor participated as a principal or co-investigator in several studies:

- Treatment of Thoracic Outlet Syndrome with Botulinum Toxin Injection: A Double-Blind, Randomized Controlled Trial Russell J O'Connor, Heather C Finlayson and Andrew Travlos Division of Physical Medicine and Rehabilitation, University of BC, GF Strong Rehab Centre, Vancouver
- Phenol motor point blocks: evaluation of effectiveness – a prospective study. Dr. Rajiv Reebye, Dr. Russell O'Connor, Dr. Andrew Travlos, Dr. Andrei Krassioukov. Division of Physical Medicine and Rehabilitation, University of BC, GF Strong Rehab Centre, Vancouver (in progress)
- Effect of intramuscular lidocaine injection on spasticity and range of motion: A pilot study. Dr. Jennifer Yao, Dr. Russell O'Connor, Dr. Andrew Travlos, Melanie Lewis PT, Catherine Tadey RN. Division of Physical Medicine and Rehabilitation, University of BC, GF Strong Rehab Centre, Vancouver (in progress)

Dr. George Hahn was involved in a clinical research project at BCCH, in collaboration with ICU PT, OT and IACU physicians regarding prophylactic casting for spastic children. He has been assisting in the submission of a grant regarding sleep studies and development of sleep questionnaires for children and parents. He is also a collaborator in a paper dealing with Cerebral Fat Embolus Syndrome.

## **Clinical Services**

Many members of our Division continue to provide consultation services to Vancouver Acute, St. Paul's Hospital, as well as other hospitals in the Fraser Health Authority. Dr. Elliot Weiss is the leader for rehabilitation of Providence Health Care. Dr. Travlos and team members continue to provide clinical services and direction to the rehabilitation programs for persons suffering from ALS. Drs. Rhonda Willms and Heather Underwood participated in services for persons requiring orthotics and/or prosthetics. Dr. George Hahn and Dr Jacqueline Purtzki provided consultation services for the BC Children's Hospital, Vancouver Acute, and Sunnyhill Health Center. Drs James Filby and Lynne MacKean are new Divisional members who will provide UBC Undergraduate teaching assistance in Victoria.

## **Administration**

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Dr. Andrew Travlos served as a Chair of Specialty Committee in Physical Medicine & Rehabilitation of the Royal College of Physicians and Surgeons of Canada.

Dr. Hugh Anton served as examiner for the Specialty of PM&R at the Royal College.

Dr. Gabriel Hirsch served as Chair of the Section of PM&R for the BC Medical Association.

Dr. Rida Baruni served as the Medical Director of Rehabilitation and Ambulatory Care Services, Vancouver Acute – Vancouver Coastal Health.

Drs. Andrea Townson, Andrew Travlos, and Rida Baruni served as medical managers assisting in program related issues at G.F. Strong Rehabilitation Center.

### **Special Honours and Awards**

Drs. Russ O'Connor and Andrea Townson were scientific co-chairs for the annual 2006 CAPMR meeting (held in Vancouver).

Dr Andrea Townson was an invited speaker at the State of the Science Conference: National Rehab Hospital Rehabilitation Research and Training Center (RRTC) on Spinal Cord Injury, Bethesda Maryland, November 2006.

Topics:

1. Evidence based medicine and clinical implications in SCI
2. Peer mentoring in British Columbia

Dr Andrea Townson was awarded the best poster prize at the 2006 ASIA/ISCOS (American Spinal Injury Association and International Spinal Cord Society) meeting in Boston for: "Intramuscular stimulation (IMS) for the treatment of pain following spinal cord injury"

Dr Russ O'Connor presented:

- Post Polio and Exercise at the Post Polio Conference Vancouver BC - 2006
- Treatment of Focal Spasticity with Phenol Motor Point Block at the Canadian Association of Physical Medicine and Rehabilitation – June 2006
- Physiatry and the Athlete at the Canadian Association of Physical Medicine and Rehabilitation- June 2006

Dr. Russ O'Connor received the Dr. Duncan Murray Teaching Award.

Dr Russ O'Connor was appointed a Medical Manager for the 2010 Paralympics, Vancouver Olympic Committee

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**Future Directions**

The Division is in the process of assisting in the hiring of an internationally renowned clinician scientist to assume directorship of Divisional research development and growth

The Division has begun to co-develop a Canada-wide post-graduate education/teaching initiative to promote academic excellence in our specialty.

The Division continues to develop long-term initiatives regarding rehabilitation education and research in overseas countries.

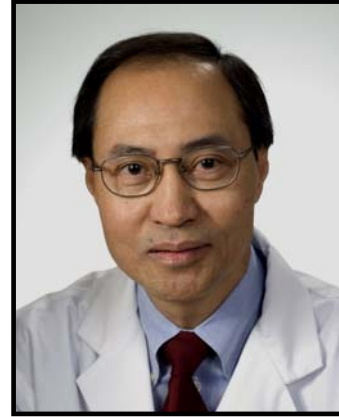


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## RESPIRATORY MEDICINE



***Dr. J. Mark FitzGerald***  
***Professor & Head***  
***(July 1, 2006 – present)***



***Dr. S. F. Paul Man***  
***Professor & Acting Head***  
***(January 1, 2006 – June 30, 2006)***

### Faculty Members

Professor & Head	FitzGerald, Dr. J. Mark	VA
Professor	Bai, Dr. Tony	SPH
Professor	Duronio, Dr. Vincent	VA
Professor	Fleetham, Dr John	VA
Professor	Lam, Dr. Stephen	VA
Professor	Levy, Dr. Robert	SPH
Professor	Man, Dr. S. F.	SPH
Professor	Ostrow, Dr. David	VA
Professor	Pare, Dr. Peter	SPH
Professor	Road, Dr. Jeremy	VA
Professor	Ryan, Dr. Francis (Frank)	VA
Professor	Van Eeden, Dr. Stephanus	SPH
Associate Professor	Sandford, Dr. Andrew	SPH
Associate Professor	Sin, Dr. Donald	SPH
Associate Professor	Ward, Dr. Helen	VA
Associate Professor	Wilcox, Dr. Pearce	SPH
Assistant Professor	Ayas, Dr. Najib	VA
Assistant Professor	Cook, Dr. Victoria	VA
Assistant Professor	Tebbutt, Dr. Scott	SPH
Clinical Professor	Khalil, Dr. Nasreen	BCCDC
Clinical Professor	Lawson, Dr. Lindsay	SPH

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Clinical Associate Professor	Elwood, Dr. Richard	BCCDC
Clinical Associate Professor	Nakielna, Dr. Barbara Edina	SPH
Clinical Assistant Professor	Cohen, Dr. Richard	North Vancouver
Clinical Assistant Professor	Fera, Dr. Tharwat	VA
Clinical Assistant Professor	McWilliams, Dr. Annette	BCCRC
Clinical Assistant Professor	Turner, Dr. Mark	VA
Clinical Assistant Professor	Wilson, Dr. Jennifer	VA
Honorary Professor	Lertzman, Dr. Morley	VA
Honorary Professor	Tan-Hogg, Dr. Wan	SPH
Associate Member	Brauer, Dr. Michael	VA
Associate Member	Gordon, Dr. Ann	New Westminster
Associate Member	Lowe, Dr. Alan	
Associate Member	Muller, Dr. Nestor	
Associate Member	Roberts, Dr. Clive	SPH
Associate Member	Sanders, Dr. Bruce	Victoria
Professor (Emeritus)	Abboud, Dr. Raja	VA
Professor (Emeritus)	Yeung, Dr. Moira	VA
Clinical Professor (Emeritus)	Allen, Dr. Edward	
Clinical Professor (Emeritus)	Champion, Dr. Paul	VA
Visiting Scientist	Morimoto, Dr. Kiyoshi	SPH
Visiting Scientist	Petchkovski, Dr. Dmitri	SPH
Visiting Scientist	Tamagawa, Dr. Eiji	SPH

## Divisional Overview

The UBC Respiratory Division consists of 31 faculty members who are located at Vancouver Acute (Vancouver General Hospital, UBC Hospital), Providence Health Care (St. Paul's Hospital, Mt. St. Joseph Hospital), Vancouver Cancer Centre, BC Centre for Disease Control and BC Transplant Society. There are active respiratory medicine in-patient and ambulatory care programs at Vancouver General Hospital and St. Paul's Hospital. The two-year subspecialty respiratory medicine training program accepts one provincially funded trainee per year. The UBC Respiratory Division will expand the number of trainees to two to three trainees per year starting in 2007. Respiratory Medicine is considered a centre of research excellence at both Providence Health Care and Vancouver Acute. Respiratory Research is a major component in the iCapture Centre (Cardio-respiratory research) at St. Paul's Hospital. Respiratory Research is the primary component of the Pulmonary and Critical Care Research Program at Vancouver Coastal Health Research Institute. During the tenure of Dr. Fleetham, the UBC Respiratory Division developed a strategic plan for clinical care, research and teaching of Respiratory Medicine within the Vancouver Coastal Health Authority, which incorporates a proposal for an academic funding contract for all divisional members. Dr. FitzGerald is continuing this initiative as part of a broader Department of Medicine Alternate Funding Plan.

## Teaching

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**Undergraduate:** The UBC Respiratory Division continues to have a major responsibility for the five-week pulmonary block in the undergraduate curriculum. Dr. Richard Cohen continues as chair of the pulmonary block. Dr. D. Ostrow, Dr. N. Khalil, Dr. S. Lam and Dr. P. Wilcox also participate as week chairs. Division members participate in undergraduate teaching either as tutors or clinical skills instructors.

**Postgraduate:** The UBC Respiratory Medicine Training Program, directed by Dr. Jennifer Wilson, continues to attract a large number of highly qualified applicants from across Canada. The program will have a total of 7 trainees for the 2007/2008 academic year. The program has full approval from the Royal College. This two year clinical program is based at both Vancouver General Hospital and St. Paul's Hospital. There are elective opportunities at community based centres throughout BC and the program offers an optional third year of research training. Our current trainees are Dr. M. Al Ajmi (Kuwait) Dr. M. Molavi (trained in Iran and US, a Canadian Citizen), Dr. N. Al Lawati (Oman), Dr. A. Al Talag (Saudi Arabia), Dr. A. Al Jabbar (Saudi Arabia). Dr Maun Fetish (Saudi Arabia)

Dr. Jennifer Wilson assumed the role January 1, 2006 as Director of the UBC Respiratory Medicine Training Program.

**Experimental Medicine:** The UBC Respiratory Division continues to make significant contributions to the Departmental Experimental Medicine program with MSc and PhD students being trained in both the Jack Bell Research Laboratory at Vancouver General Hospital and the iCapture Centre at St. Paul's Hospital. Dr. Vince Duronio, a member of the Division, is currently the Director of the Experimental Medicine Program.

**Continuing Medical Education:** The annual UBC Respiratory Research retreat in June of each year is a highly successful event attracting the majority of the UBC Respiratory Faculty as well as a large number of community-based respirologists. The goal is to share state-of-the-art research being conducted within the UBC respiratory academic community with colleagues. This event is currently organized by Dr. Pearce Wilcox.

The annual Case Challenge and CME attracts the majority of BC academic and community respirologists in January each year and this is facilitated on an annual basis by Dr. Kevin Elwood. It is held in collaboration with the BC Society of Allergists and funded by an unrestricted grant from GSK. This is a venue in which respirologists throughout BC have been eager and happy participants.

The UBC Annual Respiratory Symposium has been held for seven years in Whistler. In an attempt to make it more accessible to allied health professionals, the conference has now been moved to Vancouver. In 2006 there was an excellent turn out with its switch to Vancouver. It provides a state-of-the-art review of respiratory medicine. Dr. Mark FitzGerald completed his term as Program Chair in 2006 and Dr. Pearce Wilcox has taken over as Chair of the UBC Respiratory Division CHE activities.

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## **Research**

Respiratory Medicine is considered a centre of research excellence at both Providence Health Care and Vancouver Acute. The iCapture Centre was created with CFI funds to examine how abnormal genes change the structure and function of cells, tissues and organs to cause lung disease. Recently, the Division has added substantial strengths to epidemiology and translational research at the Centre. The major respiratory medicine research interests at the VCHRI Pulmonary and Critical Care Research Program are respiratory sleep and neuromuscular disease, environmental and occupational lung disease, lung cancer, tuberculosis and a broad program of clinical research in asthma, COPD, interstitial lung disease and pulmonary hypertension. An emerging program of research in respiratory health outcomes in these different disease categories is also being developed in collaboration with the Centre for Clinical Epidemiology and Evaluation. The prevention and early diagnosis of lung cancer is the primary research focus at the Vancouver Cancer Centre and research into tuberculosis and mycobacterial disease is the major interest at the BC Centre for Disease Control. Research in lung transplantation takes place at both Vancouver Acute and the BC Transplant Society. Finally, there is a strengthened research relationship with critical care medicine, and members are now holders of a joint Michael Smith Foundation grant on patient safety in Critical Care Units.

## **Clinical Services**

Active respiratory medicine in-patient and ambulatory care programs continue at both Vancouver General Hospital and St. Paul's Hospital. Both sites are developing specialty clinics (eg. COPD, asthma, etc.), with major emphasis on overlapping clinical care best practices with clinical and translational research. As well, research databases are being developed to anchor clinical research at both sites. At Vancouver Acute the Respiratory Division moved its outpatient clinics as well as Clinical research Space into State of the Art Ambulatory Care space at The Diamond Health Care Centre.

## **Administration**

The Division is in a state of transition for leadership. Dr. Paul Man served as Acting Head of the Division from July 1, 2005 until June 30th 2006. Dr. Mark FitzGerald assumed the role as Head of the UBC Respiratory Division in July 2006 while continuing as Head of the Vancouver Acute Respiratory Division. Dr. Robert Levy is Head of the Providence Health Care Respiratory Division. Dr. Jennifer Wilson assumed the role as Director of UBC Respiratory Medicine Training Program effective January 2006. She continues the excellent work of Dr. Pearce Wilcox who held the position for twelve years. Bernice Robillard continues to work to support the administrative activities of the UBC Respiratory Division with major responsibilities for the postgraduate program. Lianne Kinnaird has ably helped the Division in its transition.

## **Future Directions**

The Division will continue to develop its clinical program with a strong emphasis on further increasing ambulatory capacity. The Division has, and will continue to take an active and leadership role in the development of increased research capacity through Michael Smith

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Foundation for Health Research as well as national initiatives in funding infrastructure for research. Dr. FitzGerald, in his capacity as Founding Chair of the CTS-led Canadian Respiratory Clinical Research Consortium as well as a co-PI, along with Dr. Paul Man and others for a Michael Smith Foundation for Health Research Technology Platform in Clinical Research will ensure strong representation from pulmonary medicine in these important Provincial and national initiatives. The Division will build upon the conceptual model of a virtual Lung Health Program aimed at building upon the already strong national and international reputation that UBC and its affiliated teaching hospitals have for clinical care, education and research already has.

### **Promotions**

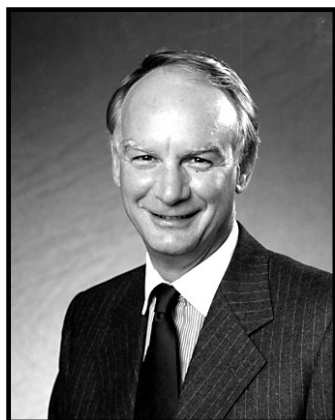
The following members received promotions in 2006:

Dr. Francis (Frank) Ryan was promoted to Full Professor.

Dr. Barbara Edina Nakielna, was promoted to Clinical Professor

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## RHEUMATOLOGY



***Dr. John Esdaile  
Professor & Head***

***(January 1 – September 30, 2006)***



***Dr. Barry Koehler  
Clinical Professor Emeritus &  
Acting Head***

***(October 1, 2006 – present)***

### Faculty Members

Clinical Prof. (Emeritus) & Acting Head	Koehler, Dr. Barry	Richmond General
Professor	Chalmers, Dr. Andrew	VA
Professor	Esdaile, Dr. John	VA
Associate Professor	Choi, Dr. Hyon	VA
Assistant Professor	Cibere, Dr. Jolanda	VA
Assistant Professor	Lacaille, Dr. Diane	VGH
Clinical Professor	Blocka, Dr. Kenneth	VGH
Clinical Associate Professor	Huang, Dr. Simon	SPH
Clinical Associate Professor	Klinkhoff, Dr. Alice	VA
Clinical Associate Professor	Offer, Dr. Robert	Penticton
Clinical Associate Professor	Patterson, Dr. Alice	VA
Clinical Associate Professor	Reid, Dr. Graham	VA
Clinical Associate Professor	Shojania, Dr. Kamran	VA
Clinical Associate Professor	Wade, Dr. John	VA
Clinical Assistant Professor	Badii, Dr. Maziar	VA
Clinical Assistant Professor	Ensworth, Dr. Stephanie	VA
Clinical Assistant Professor	Kelsall, Dr. John	SPH
Clinical Assistant Professor	Shuckett, Dr. Rhonda	SPH
Clinical Assistant Professor	Watterson, Dr. John	VA
Clinical Instructor	Fenton, Dr. Stanley	RCH
Clinical Instructor	Gillies, Dr. Jean	SPH

Clinical Instructor	Wilk, Dr. Lucie	VA
Clinical Instructor	McLeod, Dr. Kevin	North Vancouver
Honorary Professor	Stein, Dr. Howard †	SPH
Associate Member	Kopec, Dr. Jacek	VA
Professor (Emeritus)	Ford, Dr. Denys	
Clinical Professor (Emeritus)	Robinson, Dr. Harold	
Clinical Professor (Emeritus)	Tsang, Dr. Ian	VA

† deceased September 21, 2006

## Divisional Overview

The UBC Division of Rheumatology currently consists of 20 active faculty members, two associate members, and 5 emeritus members. Rheumatology consultation services are offered at Vancouver Hospital & Health Sciences Centre, St. Paul's Hospital, BC Women's Hospital & Health Centre, and G.F. Strong Rehabilitation Centre. Ambulatory care services are available at the Mary Pack Arthritis Centre, St. Paul's Hospital, BC Women's Hospital & Health Centre, and in private practices throughout Vancouver. The Arthritis Society (BC & Yukon Division) provides excellent patient education and resources available through the Learning Centre based at the Mary Pack Arthritis Centre.

Many divisional faculty are members of the Arthritis Research Centre of Canada, a multidisciplinary clinical research and clinical trials facility affiliated with both the University of British Columbia and the Vancouver Coastal Health Research Institute. The Arthritis Research Centre focuses on "Practical Research for Everyday Living" for people with arthritis.

The two-year Postgraduate Training Program in Rheumatology continues to be the second-largest clinical rheumatology training centre in Canada. The program accepts one Ministry-funded trainee every year and a matching trainee funded by The Arthritis Society of Canada if successful in a peer-review competition. Also, one or two internationally-funded trainees are considered. Active in-patient, ambulatory care and research training is done at Vancouver Hospital & Health Sciences Centre, St. Paul's Hospital, G.F. Strong Rehabilitation Centre, BC Women's Hospital & Health Centre, the Arthritis Research Centre, and in private practices throughout the Lower Mainland and elsewhere in the province.

New members of the Division in the past year include Dr. Lucie Wilk and Dr. James Dunne.

The Division of Rheumatology experienced a major loss this year in the passing of Dr. Howard Stein. Dr. Stein was a highly respected and valued member of the University, St. Paul's Hospital, and the community. He founded the St. Paul's Hospital Division of Rheumatology and served as its Head for many years before having to step down due to an illness. He passed away on September 21, 2006 at the age of 60 from myelofibrosis. In the 17 years following his diagnosis, he remained very active in teaching, in political advocacy, and in campaigning for world peace. He was instrumental in bringing together representatives from Jordan and Israel for a peace summit in Vancouver. At his funeral, condolences sent by the Jordanian ambassador were read, and his death was marked by a moment of silence in the House of Commons. The consummate

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clinician, “Howie”, as he was affectionately known, was loved by his colleagues, those he trained, and, most of all, by his patients. He will be deeply missed here and throughout the Canadian rheumatology community.

## **Teaching**

Dr. Simon Huang continues to direct the highly successful undergraduate rheumatology program. Dr. Rhonda Shuckett does a superlative job of leading the Rheumatology Problem-Based Learning for the second-year medical and dental class.

Dr. Barry Koehler has taken over as Program Director for the Postgraduate Training Program, and the hospital programs are led by Drs. Kenneth Blocka, John Wade, and John Watterson at St. Paul’s Hospital, Vancouver Hospital & Health Sciences Centre and G.F. Strong Rehabilitation Centre, respectively.

The postgraduate program is currently comprised of two first-year residents, two second-year residents, and three doctoral candidates. The clinical trainees continue to be involved in outreach clinics in Trail, Cranbrook, Fort St. John, Penticton and other rural communities throughout B.C. UBC provides support for travel and accommodation for these outreach clinics. The residents also participate in mandatory rotations at Vancouver Acute, St. Paul’s Hospital, G.F. Strong, BC Children’s Hospital, and in numerous drug/disease monitoring clinics and community rheumatology practices throughout their training.

For the sixth year, the “Basic Skills Course for Rheumatology Fellows” was given in the first week of September to provide detailed instruction on the clinical examination of the musculoskeletal exam, as well as the essentials of emergency arthritis care. The course, organized by Dr. Kam Shojania, involved the majority of the divisional faculty. Approximately 20 rheumatology trainees from other programs across Canada attended the course.

Continuing Medical Education for Rheumatology is led by Dr. Kam Shojania. In October, “Rheum Update 2006” was held for family practitioners. The conference was well-received and there are plans to expand the program further next year.

In May 2006, Dr. Simon Carette from the University of Toronto visited to perform mock oral examinations for the clinical fellows. Dr. Jean Gillies acted as the Co-Examiner. Dr. Carette also presented Noon Rounds to the Division.

Dr. Howard Stein’s passing in 2006 has left a vacuum in the training program. The importance of his contributions to teaching (especially in the Academic Half-Day) cannot be overstated. His expertise, extensive clinical experience, and caring mentorship will be deeply missed by our trainees. Other members of faculty have quickly stepped forward to try to fill this void as best they can for which we are grateful. We would like to thank Dr. Jean Gillies in particular for her considerable efforts in this regard.

The clinical fellows have also benefited from weekly guest speakers from many other divisions at their Academic Half-Day. As well, both the Division and the Postgraduate Training Program



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have enjoyed Noon Rounds presentations from a number of local and visiting professors including Dr. Joe Connors (BC Cancer Agency), Dr. Eric Brown (UBC), Dr. Hani Al Moallim (Umm Alqura University, Mecca, Saudi Arabia), Dr. Dan Furst (UCLA), Dr. Proton Rahman (Memorial University, Newfoundland), Dr. Kaleb Michaud (Stanford University), and Dr. Greg Silverman (UC, San Diego).

## **Research**

Members of the Division continue to be active in the Arthritis Research Centre. The Arthritis Research Centre includes faculty from the Division of Rheumatology, the Department of Orthopedics, the Department of Health Care & Epidemiology, the Department of Pharmaceutical Sciences and the School of Rehabilitation Sciences, as well as from the Centre for Health Evaluation and Outcome Studies at St. Paul's Hospital, and the Centre for Clinical Epidemiology and Evaluation at Vancouver Acute.

The Harold Robinson/Arthritis Society Chair in Rehabilitation Sciences was filled in 2006 by Dr. Linda Li. Dr. Li completed her doctorate in knowledge translation at the University of Ottawa, under the supervision of Dr. Jeremy Grimshaw. She is also trained as a physiotherapist. She brings a new and important research focus to the Arthritis Research Centre.

Current research is funded by the Canadian Arthritis Network (a Networks of Centres of Excellence), The Arthritis Society of Canada, the Hecht Foundation, the Lupus Research Institute (US), and the Canadian Institutes of Health Research. Faculty members hold scholarships from The Molson Foundation, the J. W. McConnell Foundation Family Trust, the UBC Department of Medicine Academic Enhancement Fund, the Michael Smith Foundation for Health Research, the Arthritis Society of Canada, and the Canadian Institutes of Health Research.

Drs. Kenneth Blocka, Andrew Chalmers, Jan Dutz, John Kelsall, Alice Klinkhoff, Nima Shojania and Kam Shojania are leading clinical trials at the Arthritis Research Centre. The group's research focuses primarily on the study of new biological agents.

Dr. Ian Tsang has been pursuing a new research direction over the last few years. He has been working closely with the Guangzhou Traditional Chinese Medicine University in Guangzhou, China, to develop innovative ways to establish clinical evidence for Traditional Chinese Medicine. He has participated in several conferences related to evidence-based medicine in China as a speaker and panel member. He has also published on the subject. His most recent project involves a collaboration between the Faculty of Health Sciences, Simon Fraser University and the Guangzhou Traditional Chinese Medicine University to develop a facility in Vancouver to conduct clinical studies to assess the impact of Traditional Chinese Medicine management on patients with rheumatic conditions.

## **Clinical Services**

The Mary Pack Arthritis Centre (operated by Vancouver Coastal Health; Director, Dr. Alice Klinkhoff) runs extensive drug and disease monitoring clinics, including the Immunosuppressive

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Clinic (Director, Dr. John Kelsall), the Cyclosporine Clinic (Director, Dr. Andrew Chalmers), the Out-Patient Day Program (Director, Dr. Alice Klinkhoff), the Gold Clinic (Director, Dr. Alice Klinkhoff), the Young Adults with Rheumatic Diseases Clinic (Co-Directors: Dr. David Cabral, Dr. Angela How), the Lupus Clinic (Director, Dr. Stephanie Ensworth), and two Combined Clinics in Orthopaedics and Oral Pathology (Director, Dr. Bruce Blasberg). The Mary Pack program coordinates the travel of divisional faculty to provide consultation and treatment services in 28 remote locations across the province, including amongst others Trail, Cranbrook, Fort St. John, Prince George, the Queen Charlotte Islands, and Alert Bay. It also provides a variety of educational workshops for patients, as well as physiotherapy, occupational therapy, and access to social workers and vocational counselors.

Ambulatory care clinics offered at St. Paul's Hospital include those for scleroderma (Director, Dr. James Dunne), low back pain (Director, Dr. Jean Gillies) and a rapid-access program (Director, Dr. John Kelsall). Dr. Stephanie Ensworth, in addition to directing the Lupus Clinic at the Mary Pack Arthritis Centre, directs the Reproductive Rheumatology Clinic (one of only two such clinics in Canada) and the Rheumatic Diseases in Pregnancy Program at BC Women's Hospital & Health Centre. The latter three clinics have been suspended through 2006 due to faculty medical leave.

The G.F. Strong Rehabilitation Centre's Arthritis Unit (Director, John Watterson) offers post-operative and rehabilitative services to rheumatology patients along with specialized physiotherapy, occupational therapy and vocational counseling. In-patient services are offered at Vancouver Acute, St. Paul's Hospital, and BC Women's Hospital & Health Centre.

### **Administration**

Dr. John Esdaile completed his second term as Head of the UBC Division of Rheumatology, the Vancouver Hospital Division of Rheumatology, and the UBC Postgraduate Training Program in Adult Rheumatology in October 2006. He is currently on a six-month sabbatical at the Centre of National Research on Disability & Rehabilitation Medicine (CONROD), University of Queensland.

Dr. Barry Koehler, Clinical Professor Emeritus, has taken over as Acting Head through June 2007. A Search Committee has been struck to select a new Division Head. Several candidates are currently being considered.

Dr. John Wade has assumed the Acting Headship of the Vancouver Hospital Division of Rheumatology. Dr. Ken Blocka continues as the Head of the St. Paul's Hospital Division of Rheumatology and also oversees the hospital training program there. Dr. John Watterson oversees the hospital training program at G.F. Strong Hospital. Dr. Alice Klinkhoff is Director of the Mary Pack Arthritis Centre. Dr. John Esdaile continues as the Scientific Director of the Arthritis Research Centre.

### **Future Directions**

In 2007, the Division will continue to pursue excellence in research, teaching and clinical care. The Division hopes to secure a new Division Head by the summer of 2007. A rapid-access clinic

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for early rheumatoid arthritis patients is under consideration. Plans to set up a dermatology clinic in May 2007 under the direction of Dr. Jan Dutz are also proceeding. The Arthritis Research Centre is looking forward to breaking ground for the new Centre for Hip Health in 2007.

### **Distinctions and Awards**

Dr. James Dunne was appointed Associate Member. Dr. Dunne has been a long-time member of the St. Paul's Hospital Division of Rheumatology. This appointment recognizes his important role, both in teaching and clinical care, within the Division.

Dr. John Esdaile was named the Kirkland Foundation Scholar in 2006. This prestigious three-year award provides funding to foster young lupus investigators and their projects. Dr. Esdaile was also appointed the Scientific Director and CEO of the Canadian Arthritis Network, one of the federally-funded Networks of Centres of Excellence. He had previously served as their Associate Research Director (Clinical).

Dr. Barry Koehler was named Clinical Professor Emeritus. Dr. Koehler has provided unwavering support to the Division and Postgraduate Training Program throughout his career. His teaching clinic in Richmond is considered one of the best available learning experiences by the trainees.

Dr. Diane Lacaille was awarded a five-year Investigator Scholarship from the Arthritis Society of Canada. This award recognizes Dr. Lacaille's important contributions to rheumatology research in the areas of rheumatoid arthritis and work disability.

Dr. Graham Reid was promoted to Clinical Professor. This promotion recognizes Dr. Reid's deep commitment to teaching and to the Division. He is a respected teacher and mentor. Dr. Reid also received the Clinical Excellence Award from the Vancouver Coastal Health Authority.

Dr. Lucie Wilk was appointed Clinical Instructor. Dr. Wilk, a former trainee in the UBC program, will be on staff at St. Paul's Hospital and will also provide care in the Mary Pack Arthritis Program's Lupus Clinic.



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## MEDICINE

### Members at Large

#### Faculty Members

Clinical Assistant Professor  
Clinical Assistant Professor  
Clinical Assistant Professor  
Clinical Assistant Professor  
Clinical Assistant Professor  
Clinical Associate Professor  
Clinical Associate Professor

Blackwell, Dr. Margaret  
Chan, Dr. Albert  
Cuff, Dr. Darcy  
Rupka, Dr. Dennis  
Saly, Dr. Viera  
Simkus, Dr. Gerald  
Sparks, Dr. Patricia

New Westminster  
New Westminster  
SPH  
New Westminster  
Victoria  
New Westminster  
Sooke

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## **EDUCATIONAL PROGRAMS**



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## CLINICAL INVESTIGATOR PROGRAM



***Dr. Adeera Levin***  
***Clinical Professor & Co-Director***



***Dr. Anita Palepu***  
***Associate Professor & Co-Director***

The Clinical Investigator Program (CIP) program is an integral component of the Department of Medicine. Its main goals are to integrate promising medical students, residents and fellows into an academic environment that sustains and nurtures academic interests. Drs. Palepu and Levin, in their role as co-directors of this program, have been advocating for young investigator participation and interest in research activities. The CIP program is a resource, which permits divisions within the DOM to leverage funding opportunities in order to support the academic endeavors of those divisions.

The Faculty Clinical Investigator Program is a 2-year program, which has the potential to fund at least 4 individuals each year. Current CIP young investigators enrolled in the DOM CIP program from 2005 include:), Dr. John Swiston (2<sup>st</sup> year) Respiriology, Dr Mark Hull (2<sup>st</sup> year) Infectious Diseases, Dr. Greg Haljan (2<sup>st</sup> year) Critical Care Medicine, and Dr Jag Gill (1st year) Nephrology.

Accomplishments of those individuals are listed in the appendix below.

Given the importance of the CIP program to the growth and sustainability of research programs, the co-directors have been more formally integrated into key activities of the DOM. This has included presentations to the DOM business meetings at both PHC and VGH sites, and ongoing interaction with Division Heads at the UBC DOM Division Heads meeting held monthly. They have also presented to the residents early in their academic year to increase awareness of opportunities to pursue a research career through the CIP.

The CIP directors also provide advice and support to CIP trainees as they negotiate their first faculty position and provide referee letters for external funding.



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One new initiative that is supported by the DOM and the core Internal Medicine training program is the opportunity for up to two core Internal Medicine residents to pursue research training during their residency. This initiative is also supported by the Faculty of Medicine CIP and both co-directors participate in the Faculty CIP committee.

## APPENDIX

### **Dr. John Robert Swiston (2<sup>nd</sup> year)**

Division: Respiriology

Supervisors: Dr Mark FitzGerald and Dr John Granton

### ***Publications***

**John Robert Swiston**, Warren Davidson, Sue Attridge, Grace Li, Michael Brauer, and Stephan van Eeden. Acute pulmonary and systemic inflammatory response induced by exposure to forest fire air pollution.

*Re-submission in progress to the American Journal of Respiratory and Critical Care Medicine*

Sindhu R Johnson, **John Robert Swiston**, and John T Granton. Prognostic studies in systemic sclerosis associated pulmonary arterial hypertension: a qualitative systemic review.

*Submitted to the American Journal of Respiratory and Critical Care Medicine*

John Granton and **John Swiston**. Initial Evaluation and Management of Severe Community-Acquired Pneumonia. *Critical Care Rounds* 2005; 6 (4).

### ***Abstracts***

**John Robert Swiston**, Sindhu Johnson, and John T Granton. Prognostic studies of survival in systemic sclerosis associated pulmonary arterial hypertension: a qualitative systematic review. European Respiratory Society Annual Congress 2007 (Stockholm, Sweden).

*Submitted for presentation*

**John Robert Swiston** and John T Granton. Exhaled nitric oxide in pulmonary arterial hypertension: clinical correlation and response to therapy. European Respiratory Society Annual Congress 2007 (Stockholm, Sweden).

*Submitted for presentation*

Cheri L McGowan, **John Swiston**, John T Granton, Susanna Mak, Beverley L Morris, Cathy F Notarius, Peter E Picton, John S Floras. Discordance between direct (microneurographic) and indirect (heart rate variability) estimates of sympathetic activity in patients with pulmonary artery hypertension. FASEB Experimental Biology Annual Meeting 2007 (Washington, DC, USA).

*Accepted for presentation*

**John Robert Swiston**, W Davidson, S Attridge, G Li, M Brauer, and SF van Eeden. Acute pulmonary and systemic effects of forest fire smoke inhalation. American Thoracic Society

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International Conference 2006 (San Diego, California, USA). Proc Am Thorac Soc 2006;3:A804.

### ***Research in Progress***

A study of right ventricular function and sympathetic nervous system activity in pulmonary arterial hypertension before and after therapy with bosentan. John Robert Swiston, Cheri L McGowan, Susanna Mak, Beverley L Morris, Cathy F Notarius, Peter E Picton, John Floras, Narinder Paul, and John Granton.

University of Toronto, Toronto, Ontario, Canada

Exhaled nitric oxide in pulmonary arterial hypertension: clinical correlation and response to therapy. John Robert Swiston and John T Granton.

University of Toronto, Toronto, Ontario Canada

**Prognostic studies of mortality in idiopathic pulmonary arterial hypertension: a systematic review. John Robert Swiston, Sindhu Johnson, and John T Granton.**

University of Toronto, Toronto, Ontario Canada

Anticoagulation and cancer survival: a systematic review and meta-analysis. John Robert Swiston, Anunta Virapongse, and Leonard Yuen.

Harvard University, Boston, Massachusetts, USA

Long-term mortality after hospitalization for community-acquired pneumonia.

John Robert Swiston, Margaret McGregor, Mahyar Etminan, and Mark FitzGerald.

University of British Columbia, Vancouver, British Columbia

### ***Degree Programs enrolled***

Master of Public Health, Quantitative Methods

Harvard School of Public Health

Harvard University, Boston, MA, USA

### ***Funding***

#### **Mentored Clinician Scientist Award 2007**

In It for Life Fund (VGH & UBC Hospital Foundation)

Awarded (commencing July 2007)

#### **Academic Enhancement Fund 2007**

Department of Medicine, University of British Columbia

Application Submitted

#### **Young Investigator Award Program 2007**

Actelion Pharmaceuticals

Application Submitted

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**Dr Mark Hull (2<sup>nd</sup> year)**

Division: Infectious Diseases

Supervisor: Dr J.S.G. Montaner

***Publications***

1. **Hull, M.W**, and Chow, A.W., Endogenous Microflora and Innate Immunity of the Head and Neck. *Infectious Disease Clinics of North America*, 2006 (*In Press*).
2. **Hull M.W**, and Champagne, S., Check Sample Exercise: Community-Associated Methicillin-Resistant *Staphylococcus aureus* (MRSA) Epidemiology, clinical presentation and laboratory details. *American Society for Clinical Pathology*, 50 (2) 17-29, March 2007 (*In Press*).

***Abstracts***

1. **Hull M**, Harris, M et al. Effect of switching from high dose lopinavir/ritonavir soft gel capsules (SGC) to tablet formulation on plasma levels of lopinavir. 4<sup>th</sup> International AIDS Society Conference, 2007 (Sydney, Australia). *Submitted for presentation*.
2. **Hull M**, Champagne S, et al. High Prevalence of PVL positive Community-associated MRSA isolates from clinical specimens at Providence Health Care. Accepted for presentation at the 3<sup>rd</sup> Annual Conference Association of Medical Microbiology and Infectious Diseases (AMMI) Canada, Halifax, March 16<sup>th</sup> 2006.
3. **Hull M**, Joy R, et al. Modelling CD4 cell count decline during Treatment Interruption (TI) stratified by pre-treatment CD4 cell count nadir. Presented at the 16<sup>th</sup> International AIDS Conference, Toronto, 2006 Abstract TPE0147.
4. **Hull M**, Johnston D et al. Evidence of neurologic deterioration due to compartmentalized HIV-1 with discordant viral load response and resistance evolution in cerebrospinal fluid in a treatment-experienced patient with undetectable plasma viral load: a case report. 16<sup>th</sup> International AIDS Conference, Toronto, 2006 Abstract TPE0071.
5. **Hull M**, Shimokura G, et al. High Rates of Community Associate MRSA in an Urban Poor Population, Vancouver, 45<sup>th</sup> Interscience Conference on Antimicrobials and Chemotherapy, San Francisco CA, 2006 Abstract L1203.

***Research in Progress***

1. HIV-related:
  - a. Adrenal Suppression secondary to Fluticasone-Ritonavir interactions in HIV-infected clinic Patients. **M. Hull**, E. Phillips, J. Singer, JSG Montaner (Manuscript preparation underway)
  - b. Population-based assessment of lipid abnormalities associated with anti-retroviral therapy. **M Hull**, L. Normen, B. Yip, M. Harris, JSG Montaner
  - c. Substitution of TMC114 for dual-boosted PI's in Treatment Experienced Patients. **M. Hull**, M. Harris, JSG Montaner

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2. MRSA-related:

- a. Assessment of Community-Associated MRSA in Vancouver's inner city Downtown East-side. **M. Hull**, G. Shimokura, S. Champagne, S. Goh, M. Tyndall and M. Romney (Manuscript underway)
- b. Assessment of Community-Associated MRSA among clinical isolates at Providence Health Care, Vancouver. **M. Hull**, S. Champagne, S. Goh, M. Romney

***Degree Programs Enrolled***

Masters of Health Science.  
Department of Healthcare and Epidemiology  
University of British Columbia

***Funding***

Canadian HIV Clinical Trials Network Post-Doctoral Fellowship 2007 (Renewal Submitted)

**Dr. Greg Haljan (2<sup>nd</sup> year)**

Critical Care  
Supervisor: Dr. Keith Walley

***Research In Progress***

Genetic determinants of cognitive dysfunction following cardiopulmonary bypass. **Greg Haljan**, Jim Russell, John Murkin, and Keith Walley.

Confocal two-photon laser microscopy of cerebral microvasculature flow patterns: the response to the systemic inflammatory response syndrome. **Greg Haljan**, Kevin Hodgson, Jim Russell and Keith Walley.

Cerebral Oxygenation and Neurocognitive Dysfunction in Cardiac Surgical Patients. **Greg Haljan** and Jian Ye

***Publications***

**Haljan G.** Erythropoietin in Critically Ill Patients. *Current Respiratory Medicine Reviews* (submitted)

**Haljan G**, Maitland A, Buchan A, Aurora R, King M, Haigh J, Culleton B, Faris P, Zygun D. The Erythropoietin NeuroProtective Effect: Assessment in CABG Surgery (TENPEAKS): A Randomized, Double-Blind, Placebo Controlled Proof-of-Concept

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Clinical Trial. *NEJM* (submitted).

**Haljan G**, Chan J, Sutherland AM, Russell JA, Murkin JM, Walley KR Serum VEGF levels increase after Coronary Artery Bypass Surgery and are associated with neurological outcome. (Poster) American Thoracic Society International Conference, 2007 (accepted)

**Haljan G**, A Maitland, A Buchan, R Aurora, M King, J Haigh, B Culleton, P Faris, D Zygun. The Erythropoietin NeuroProtective Effect: Assessment in CABG Surgery (TENPEAKS): A Randomized, Double-Blind, Placebo Controlled Proof-of-Concept Clinical Trial. 26th International Symposium on Intensive Care and Emergency Medicine, Brussels, March 2006. (accepted)

**Haljan G**, A.M. Sutherland, K. Lau, J.M. Murkin, and K.R. Walley. Neurologic outcome after coronary artery bypass surgery is associated with post-operative serum levels of Interleukin 1-Receptor Antagonist. American Thoracic Society International Conference, May 2006. (accepted)

**Haljan G**, A.M. Sutherland, J.M. Murkin, and K.R. Walley. Serum Erythropoietin levels increase after coronary artery bypass surgery and are associated with neurological outcome at discharge from hospital. 62<sup>nd</sup> Annual Meeting of the Canadian Anesthesiologists' Society, June 2006. (submitted)

### *Awards*

Best Oral Presentation  
University of British Columbia CIP Program 6<sup>th</sup> Annual Research Day.

### **Dr. Jagbir Gill (1<sup>st</sup> year)**

Division of Nephrology

Supervisors: Dr. John Gill, Dr. Michael Cecka, Dr. Gabriel Danovitch

### *Abstracts*

**Gill J**, Bunnapradist S, Gill J, Danovitch GM, Wilkinson A, Cecka MJ. Older Living Donors: A Better Alternative for Older Patients. American Transplant Congress, San Francisco, CA, USA, May 5-9, 2007. Abstract

**Gill J**, Cho YW, Danovitch GM, Wilkinson A, Lipshutz G, Pham PT, Bunnapradist S. Outcomes of Dual Adult Kidney Transplants: An Analysis of the UNOS/OPTN Database. American Transplant Congress, San Francisco, CA, USA, May 5-9, 2007.

Bunnapradist S, **Gill J**, Pham PT, Danovitch GM, Wilkinson A, Chavalitdhamrong D, Cho YW. Impact of Pulsatile Perfusion of Transplants from Deceased Donors After Cardiac Death: A OPTN/UNOS Analysis. American Transplant Congress, San Francisco, CA, USA, May 5-9, 2007.

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Chavalitdhamrong D, **Gill J**, Huang E, Ciciarelli J, Gritsch A, Veale J, Singer J, Cho YW, Bunnapradist S. Patient and Graft Outcomes from Deceased Kidney Donors Aged 70 years and Older: An Analysis of the OPTN/UNOS Database. American Transplant Congress, San Francisco, CA, USA, May 5-9, 2007.

Bunnapradist S, **Gill J**, Stadtler M, Simmons V, Mehra M, Hawthorne R, Mendez R, Shah T, Cho YW. Factors Associated with Discard of Recovered Kidneys. American Transplant Congress, San Francisco, CA, USA, May 5-9, 2007.

Young B, **Gill J**, Living Donor Kidney versus Simultaneous Pancreas-Kidney Transplantation in Type I Diabetics. World Congress of Nephrology. Rio de Janeiro, Brazil. April 21-25, 2007.

Bunnapradist S, **Gill J**, Shah T, Stadtler M, Mone T, Mendez R, Locke J, Ciciarelli J, Cho YW. Factors Impacting Kidney Discard: Can Machine Perfusion Decrease the Likelihood of Discard? World Congress of Nephrology. Rio de Janeiro, Brazil. April 21-25, 2007.

### ***Publications***

Gill, J, **Gill J**, Rose C, Zalunardo N, Landsberg D. The Older Living Kidney Donor: Part of the Solution to the Organ Shortage. 2006;82: 1662-1666.

### ***Submitted***

Danovitch GM, **Gill J**, Bunnapradist S. Immunosuppression of the Elderly Kidney Transplant Recipient.

**Gill J**, Malyuk R, Djurdjev O, Levin A. Use of GFR Equations to Adjust Drug Doses in An Elderly Multiethnic Group: A Cautionary Tale.

### ***Degree Programs Enrolled***

Masters in Public Health  
Harvard School of Public Health  
Completion August 2008

### ***Funding 2007-08***

KRESCENT (Kidney Research Scientist Core Education and National Training Program)  
Fellowship Grant: awarded  
Kidney Foundation Biomedical Research Fellowship Grant: awarded and declined

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## **CONTINUING MEDICAL EDUCATION PROGRAM**



***Dr. G.B. John Mancini***  
***Professor & Director***

***Hazel Wilcox & Kathy Standeven***  
***Program Organizers***

### **New Initiatives/Developments**

In our fiscal year 2006, the department successfully planned and delivered three Continuing Medical Education events:

The 8<sup>th</sup> Annual Respiratory Update Conference was held March 3-4, 2006 at the Hotel Vancouver. This was the first year the department worked along side the Division of Respiratory Medicine and Dr. Mark Fitzgerald. The two day event was well-attended and received by a mix of 125 physicians, therapists and other health professionals.

On April 8, 2006, the department, in conjunction with the UBC Division of Cardiology and Dr. Simon Rabkin, held the 2<sup>nd</sup> Annual “Hot Topics in Cardiology” program at the Coast Plaza Hotel. This one day event was attended by approximately seventy physicians predominantly from Western Canada.

Our “9<sup>th</sup> Annual Medicine in the 21<sup>st</sup> Century” Conference was held June 8 – 10, 2006 at the Sutton Place Hotel in Vancouver. A distinguished roster, comprised of twenty seven UBC Faculty members, delivered a series of didactic presentations and small case based workshop sessions to over 100 physicians and allied health professionals from across Canada and the United States. Once again this event was well-attended and the quality, as in past years, was rated highly. Plans are currently underway for the 2007 event to be held at the Sheraton Wall Centre Hotel June 14 – 16, 2007.

In September 2006, Kathy Standeven joined the department as Manager of Continuing Medical Education to allow Hazel Wilcox to concentrate her efforts on the rapidly expanding Residency program. Kathy began working with the UBC Division of Respiratory Medicine and Dr. Pearce Wilcox to offer the next “Respiratory Update” conference scheduled for March 30 –31, 2007 at the Hyatt Regency Hotel in Vancouver.

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The department continues to offer the CME conferences with the goal of generating funding for the Department of Medicine Academic Enhancement Fund. Over the past two years we were able to donate just over \$55,000 to the fund. This fund helps support junior faculty who need protected time and other resources to develop their academic credentials in teaching and research.

We would like to thank our many Faculty Members who have contributed their time by participating in our CME events. Without their continued support we would be unable to continue to offer high quality, well-attended CME events.



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## GRADUATE STUDIES PROGRAM IN EXPERIMENTAL MEDICINE



***Dr. Vincent Duronio***  
***Professor & Director***

### **Divisional Overview**

Experimental Medicine is the UBC graduate studies program, within the Department of Medicine, which was developed to train individuals seeking a career in biomedical research. Students are enrolled in both MSc and PhD degree programs. Subspecialties within the Experimental Medicine Program include Cancer Biology, Cardiology, Dermatology, Gastroenterology, Haematology/Oncology, Immunology, Infectious Diseases, Molecular Biology, Nephrology, Neurology, Pediatrics, Physiotherapy and Respiratory Medicine. A substantial number of students in the program are under the supervision of faculty members outside of the department. In 2006, 32 new students were admitted to the program. At the end of 2006, there were 132 students registered in the program, 49 for MSc degrees and 83 for PhD degrees.

During 2006, a total of twenty-two students graduated, fourteen at the May 2006 Convocation and eight at the November 2006 Convocation. Student names and thesis titles are listed below (research supervisor in parenthesis):

### **PhD Graduates**

1. Zabrina Brumme, *An Investigation of Human and Viral Genetic Factors Influencing HIV Disease Progression and Response to Treatment in the Era of Highly Active Antiretroviral Therapy (HAART)*, (Dr. Richard Harrigan)
2. Eric Campos, *Genetic and Proteomic Analysis of the p33ING1b Tumour Suppressor in Melanoma*, (Dr. Gang Li)
3. Hyun Beom Choi, *Roles of Microglial Purinergic Receptors in Inflammatory Conditions of the Brain*, (Dr. Seung Kim and Dr. James McLarnon)
4. Ronald Lindstrom, *A Community-based Participatory Approach to Planning Child and Youth Health Services in North West British Columbia: Finding Common Ground*, (Dr. Robert Armstrong)

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5. Yitao Liu, *Opposing roles of NMDA receptor subtypes in neuronal fate and novel treatments for ischemic brain injury*, (Dr. Yu Tian Wang)
  6. David Mulholland, *Deciphering the Role of Beta-catenin in Prostate Cancer*, (Dr. Colleen Nelson)
  7. Shirin Kalyan, *Innate Regulation of TSST-1 Induced Immune Response by Peripheral Blood Gamma/Delta T Cells*, (Dr. Anthony Chow)
  8. Michelle Wong, *Hypoxia and Rapamycin induced changes to the cell cycle of Multicellular Spheroids and Human Tumour Xenografts leading to potential therapeutic advantage*, (Dr. Ralph Durandl)
  9. Xiaozhu Zhang, *Genetic Determinants of Neutrophil Mediator Mobilization and Release and Susceptibility to COPD*, (Dr. Andrew Sandford)

### **MSc Graduates**

1. Farah Ali, *Asymmetrical Length Adaptation in Airway Smooth Muscle: Possible Mechanisms*, (Dr. Peter Paré)
2. Jennifer Davis, *Hipwatch: Osteoporosis Treatment and Investigation After a Hip Fracture: A 6-month Randomized Controlled Trial*, (Dr. Karim Khan and Dr. Pierre Guy)
3. Loutfig Demirjian, *Acute Effect of Cigarette Smoke on TNF-alpha and Proteases Released by Macrophages*, (Dr. Raja Abboud and Dr. Vincent Duronio)
4. Patrice Godin, *Role of Hsp60 in the Internalization of S. Aureus inside Human Keratinocytes*, (Dr. Anthony Chow)
5. David Holloway, *Reducing Mitral Valve Regurgitation Through Constriction of the Annulus*, (Dr. Samuel Lichtenstein and Dr. Peter Skarsgard)
6. Laura Kravetsky, *Targeting Childhood Obesity through a School-Based Physical Activity Intervention: Action Schools! BC*, (Dr. Heather McKay)
7. Wei Hung Kuo, *The ING1b Protein Facilitates the Accessibility to UV-damaged Nucleosomal DNA*, (Dr. Gang Li)
8. Grace Lam, *B Cell Modulation by Toxic Shock Syndrome Toxin-1 Induced CD4+ Regulatory T Cells Generated in BALB/c Mice*, (Dr. Anthony Chow)
9. Peter Romanowski, *Analysis of proteins isolated from dissolvable polyacrylamide gels using mass spectrometry*, (Dr. Juergen Kast)
10. David Shaw, *Novel Haplotypes and Polymorphisms of the Interleukin-10 and Interleukin-18 Pathway Genes in Complex Inflammatory Diseases*, (Dr. Keith Walley)
11. Andrea Tegzes, *Phenotypic Characterization of Mouse Mammosphere-Initiating Cells Indicates They Represent a Novel Progenitor Population*, (Dr. Connie Eaves)
12. Sim Ee Ung, *Thiol-Dependent Mycobacterial Responses to Oxidative and Nitrosative Stress*, (Dr. Yossef Av-Gay)

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13. Jing Wang, *Role of the Novel Tumor Suppressor P33ING2 in Cellular Stress Response to Ultraviolet Irridation in Melanoma Cells*, (Dr. Gang Li)

In 2006, 108 Experimental Medicine students surveyed reported a total of \$2,197,350 in funding, an average of \$20,345 per student. Research Supervisors provided \$1,219,550 in Graduate Research Assistantships. Other funding sources included CIHR (\$368,800), the Michael Smith Foundation (\$214,000), and NSERC (\$55,800).

There are 132 faculty members currently registered as Research Supervisors in the program. Faculty members from other departments also participate as course lecturers, thesis committee members, in research seminars and as examiners for internal examinations and theses defenses.

In the academic year 2005, the Experimental Medicine Program offered nine graduate courses. These included: MEDI 501 (Molecular & Cellular Biology), MEDI 502 (Methodology), MEDI 530 (Gastroenterology), MEDI 535 (Journal Club), MEDI 548 (Directed Studies in Experimental Medicine), MEDI 560 (Pulmonary Pathophysiology), MEDI 570 (Cardiology), MEDI 580 (Infectious Diseases) and MEDI 590 (Molecular Medicine).

The overall administration of the program is under the guidance of the Experimental Medicine Committee. The committee is composed of representatives from each subspecialty and one student representative. This committee meets at least once per year to discuss policy and procedures. Current members of the committee are: Dr. Yossef Av-Gay (Infectious Diseases), Dr. Vincent Duronio (Respiratory Medicine and Director), Dr. R. Keith Humphries (Haematology/Oncology), Dr. Gang Li (Dermatology), Dr. Steve Pelech (Molecular Medicine), Dr. Bill Salh (Gastroenterology), Dr. Andrew Sandford (Respiratory Medicine, iCapture Centre), Dr. Yu Tian Wang (Neurology, Brain Research Centre), and Dr. Graydon Meneilly (ex-officio). The Experimental Medicine Program's daily administration is through the director and one secretary.

The Experimental Medicine Program continues to sponsor Student Research Day events, two of which were held in 2006.

The first Student Research Day of 2006 was held on May 18 at the Holiday Inn Vancouver Centre. 10 students gave oral presentations and 26 students participated in poster presentations.

Alison Karst won Best Oral Presentation. Michael Butt won Best Poster Presentation. Honourable Mentions went to Shauna Dauphinee, Benjamin Patchell, April K. Randhawa, Gina Rossi and Michael Ryan. The total amount of prize money won was \$450.

The second Student Research Day of 2006 was held on November 3 at the Holiday Inn Vancouver Centre. 13 students gave oral presentations and 25 students participated in poster presentations.

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Aaron Joe won the “Norman L.M. Wong Award” for top overall presentation. Benjamin Patchell, Poh Choo Tan, Armin Barekataan, Iva Kulic, Florian Kuchenbauer, Philip Ly and Kyle Niessen also won awards for their presentations. The total amount of prize money won was \$900.

Financial support for the Student Research Day events was provided by the Vancouver Coastal Health Research Institute, the Canadian Society of Biochemistry, Molecular and Cellular Biology, Altana Pharma Inc., AstraZeneca Canada Inc., Fujisawa Canada Inc., GlaxoSmithKline Inc., Hoffman La-Roche Ltd., Janssen Ortho Inc., and Merck Frosst Canada and Co.

The Experimental Medicine Program continued to offer travel grants to students who had already used the travel grant provided by the Faculty of Graduate Studies.

The Experimental Medicine Office relocated at the end of 2006 to the UBC Department of Medicine, 10<sup>th</sup> Floor, Room 10203, Gordon and Leslie Diamond Health Care Centre, 2775 Laurel Street, Vancouver General Hospital. The office telephone number is 604-875-4111-ext.63140, the fax number is 604-875-4886 and e-mail address is [exptlmed@interchange.ubc.ca](mailto:exptlmed@interchange.ubc.ca).

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## HIV/AIDS RESEARCH PROGRAM



*Dr. Julio Montaner  
Professor & Director*

### Overview

The AIDS Research Program continues to refine the role of antiretroviral therapy for the treatment of HIV infection. The main areas of research continue to be epidemiology, basic science and clinical science. In the following report we summarize the program's activities and areas of concern for the year 2006.

### Epidemiological Research

The epidemiology group has been very productive and continues to benefit from long-term analyses emerging from VIDUS, SEOSI, ACCESS, ARYS, MAKKA, VanGuard and CEDAR cohorts under the leadership of Drs. Wood, Kerr, Tyndall, Lampinen and Spittal, respectively. The Drug Treatment Program, under the leadership of Dr. Robert Hogg, has emerged as a key contributor to our understanding of the dynamics of the HIV epidemic as well as the effect of treatment. The Epidemiological Research group has published over 40 peer-reviewed scientific articles during 2005 alone, many of them in highly respected international journals. Members of our team have received funding from the Michael Smith Health Research Foundation and the Canadian Institutes of Health Research for senior scholar research (Robert Hogg, Mark Tyndall), new investigator awards (Thomas Kerr, Patricia Spittal), and masters and doctoral training (Suze Burkout, Shayesta Dhalla, Sarah Fielden, Karris Johnston, Elisa Lloyd-Smith, Cari Miller, Melanie Rusch, Beth Rachlis, Kate Shannon, Will Small), and post-doctoral training (Paula Braitstein ART-LINC, Treena Orchard). Dr. Hogg also holds the Michael O'Shaughnessy Chair in Population Health in the Department of Medicine at UBC. Grant funding was obtained from the Michael Smith Health Research Foundation, Canadian Institutes of Health Research, National Institutes of Health in the United States and a number of pharmaceutical companies.

### Basic Science

The research laboratory based at the B.C. Centre for Excellence in HIV/AIDS has established itself not only as a leading force in Canada, but also as a centre with considerable international influence. The laboratory has provided clinical services to the province of B.C. in the areas of

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HIV drug resistance testing and pharmacokinetic measurement. The clinical implications and predictors of HIV drug resistance continue to be investigated, both at the B.C. Centre for Excellence and as part of international collaborations. The research laboratory focuses on developing tools with clinical applications that may be employed in the near future. These include techniques for monitoring the side effects and degree of adherence to medications, as well as tracking variations in the HIV and human genomes which are associated with response to HIV therapy, and virus pathogenicity. In addition to providing HIV drug resistance testing as a clinical service to most of Canada and investigator-driven trials, the research lab has also received peer-reviewed funding for several studies from the Canadian Institutes of Health Research, Michael Smith Health Research Foundation, and the Ontario HIV Treatment Network. Novel testing applications in the laboratory continue to provide testing support for Phase III clinical trials.

## **Clinical Science**

Cutting-edge research continues by members of the clinical science group, focusing on the treatment of patients with multidrug-resistant virus, pharmacokinetics of antiretrovirals, optimizing adherence to antiretroviral therapy regimens, recognition and management of drug toxicities, management of viral co-infections, and primary care initiatives.

New and investigational agents continue to emerge which hold promise in the treatment of patients with multi-drug resistant HIV. In 2005, the clinical group pioneered the use of a novel gas-powered injection system for the subcutaneous administration of enfuvirtide, the first approved HIV fusion inhibitor. This technique has substantially improved the tolerability of this agent and based on the results of our studies (published in the journal AIDS) this device is recommended in major U.S. HIV treatment guidelines. The clinical group has also actively participated in large international trials on a number of investigational drugs for use in treatment-experienced patients, including the protease inhibitors tipranavir and TMC114, the non-nucleoside reverse transcriptase inhibitor TMC125, and the CCR5 receptor antagonist maraviroc. Our group was the first in Canada and one of the first in the world to explore the use of two of these investigational drugs, TMC114 and TMC125, together in combination in the salvage therapy situation.

The clinical team continues to work in concert with the B.C. Centre for Excellence Laboratory to study the complex issues of pharmacokinetic interactions between antiretroviral drugs. Results of studies in this area which have been presented include the impact of atazanavir and ritonavir dosage adjustments on plasma levels of atazanavir; the impact of TMC125 on levels of coadministered saquinavir, lopinavir, and ritonavir; and the effect of dosage adjustments to overcome the negative interaction between tipranavir and lopinavir/ritonavir. The Therapeutic Drug Monitoring program is accumulating a large database, which incorporates information on all HIV+ patients undergoing antiretroviral drug level testing in the province. Linkage of this information with the Drug Treatment Program database will enable us to explore the complex relationships between antiretroviral drug levels and drug efficacy and toxicity, with respect to demographic factors (e.g. gender, age, and ethnicity), comorbid conditions, concomitant medications, and other factors. A major focus of the Centre has been the use and study of pharmacokinetics to optimize and individualize care. Ongoing research is exploring factors

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which impact variability in the pharmacokinetics of these drugs such as gender, age and co-infection with hepatitis C.

The issues surrounding adherence to antiretroviral drug regimens are a topic of active study by the Psychology Team. A number of studies have been completed. One focused on describing how patients who have sustained undetectable viral loads for over a year accounted for their success, while the other study explored barriers to initiating antiretroviral therapy when medically indicated. Current projects include: examining HCV treatment adherence in patients co-infected with HCV and HIV, developing a brief psychological intervention to facilitate adherence, creating an inclusive adherence model, and describing the multi drug rescue therapy experience from the perspectives of both patients and care providers. The common goal of the psychology team's projects is to optimize patients' ability to take their antiretrovirals.

Toxicities of antiretroviral therapy continue to be a major focus of research by the clinical group. Metabolic disorders including mitochondrial toxicity and dyslipidemia are being studied in conjunction with colleagues in the Healthy Heart Program and UBC. For example, a randomized clinical trial looking at the effect of rosiglitazone on lipid levels and other markers of cardiovascular disease risk in antiretroviral-treated patients completed enrollment at the end of 2005; follow-up is ongoing. Also actively enrolling is a large cross-sectional study examining the incidence of osteoporosis and osteopenia among HIV+ patients, one of the aims of which is to delineate whether specific antiretroviral therapies are risk factors for bone disease in this population. Other studies are examining the risk factors for, and appropriate monitoring and management of kidney dysfunction in the HIV+ population. During 2005, a paper was accepted for publication based on work from our clinical group in conjunction with Helene Cote at UBC, demonstrating the relationship between nephrotoxicity and concurrent treatment with tenofovir and didanosine. Based on these findings, the provincial HIV treatment guidelines now recommend against the routine use of these two drugs together if safer alternatives exist. Also, the results of a study examining the safety of antiretroviral treatment interruptions with close monitoring in a selected patient population, as a means of reducing the overall cost and toxicity associated with antiretroviral treatment, was published in the *Journal of Infectious Diseases*. Drug interactions both between antiretroviral agents and concurrent therapy are important causes of patients' morbidity. Ongoing studies are exploring linkages between the Drug Treatment Program and provincial databases to develop better processes for identifying drug interactions. Studies on the clinical impact of key drug interactions such as the interaction between inhaled steroids and ritonavir which can lead to adrenal suppression are ongoing. Pharmacogenetics is an emerging area of research. Cutaneous testing in the form of patch testing has emerged as a useful tool in the diagnosis of abacavir hypersensitivity syndrome which will be applied in a large multicentre trial. HLA typing is being validated and studied prospectively with the plan to implement HLA-B\*5701 as a screening test for the diagnosis of abacavir hypersensitivity.

Co-infection with hepatitis B and C continues to have a major effect on the HIV-infected clinic population. Ongoing research in this area is examining the effect of tenofovir on hepatitis B viral load in individuals with HIV/hepatitis B co-infection, and CIHR-funded research is examining the effect of mitochondrial toxicity in the liver caused by HIV and hepatitis C treatment. CIHR funding has also been obtained to examine the pharmacokinetics of protease

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inhibitors in patients co-infected with hepatitis C. In addition, a study is planned which will examine the issue of suboptimal adherence to anti-hepatitis C treatment in HIV-positive patients.

Ongoing observational studies have defined the clinical, imaging and pathologic features of non-tuberculous mycobacterial immune reconstitution syndrome (NTM-IRS). The longterm outcome of patients with NTM-IRS has also been characterized.

The John Ruedy Immunodeficiency Clinic (IDC) continues to operate as a primary and specialty clinic for HIV-infected patients. The clinic incorporates a interdisciplinary team with expertise in all areas of HIV care particularly primary care physicians, nurses, social workers, pharmacists, nutritionists, counsellors and psychologists. As well, the IDC operates a number of specialty clinics in the fields of primary care, infectious diseases, lipid disorders and endocrinology, anal dysplasia, neurology, dermatology, nephrology, psychiatry, addictions medicine, hepatitis B and C co-infections, antiretroviral management and clinical trial operations.

The HIV positive patient population served by the IDC continues to expand and currently numbers approximately 600. The clinic operates 5 days a week with after hours on-call coverage. The comprehensive clinical team described above is available to all patients. A large database is maintained with information on primary care initiatives, allowing a comprehensive, up-to-date assessment of the patient's health status as well as immunizations, serologies, comorbidities, medications, substance use, and other factors of interest. The clinic as well gives medical support and consultations to the Dr. Peter Residency patients, and the AIDS Ward at St. Paul's Hospital. An Antiretroviral Outreach Program (ARV-ORO) has been established to help inform, support and evaluate activities in Vancouver's Downtown Eastside. The Downtown Community Health Clinic and Vancouver Native Health have antiretroviral support programs that provide supervised medications to over 200 patients.

In partnership with the Vancouver Coastal Health Authority and the UBC Skills Enhancement Program for Family Physicians, the IDC offers a 3-month post-graduate program for family doctors. The aim of the program is to enhance skills in the care and treatment of patients with HIV/AIDS. As well, it provides opportunities to Medical and Family Practice residents for elective rotations, as well as UBC medical students.

### **Current Areas of Active Clinical Research**

- First-line antiretroviral therapy
- Salvage therapy for patients with previous treatment failure and multiple drug-resistant HIV
- Strategies for optimizing the use of investigational and newly available antiretroviral agents
- Complications of antiretroviral therapy, including lipodystrophy, dyslipidemias, cardiovascular disease, mitochondrial toxicity, peripheral neuropathy, hepatotoxicity, nephrotoxicity, osteopenia/osteoporosis, hypersensitivity reactions
- Effect of treatment interruptions on long-term outcomes of HIV disease
- Assessing and optimizing adherence to antiretroviral regimens and hepatitis C therapy
- Pharmacokinetics of antiretroviral drugs, achieving optimal therapeutic drug levels, and drug interactions
- Treatment and complications of hepatitis B and C co-infections



- Prevention and treatment of opportunistic infections
- Observational studies of HIV-related immune reconstitution syndromes

## International Health

We are currently working in close collaboration with several countries to continue developing resources, training, services and research. These countries include Argentina, Mexico, Kenya, Uganda, and China (Yunnan Province). There is active collaboration with Medecins Sans Frontiers and the WHO to develop antiretroviral guidelines for injection drug users in Eastern European countries and South East Asia, as well as their HIV Drug Resistance Network.

## Students/Residents/Postdoctoral Research Fellows:

<u>Student Name</u>	<u>Program Type</u>	<u>Dates</u>	<u>Supervisor(s)</u>
Denotter, Diane	MSc	1995	M. Schechter, R. Hogg, S. Strathdee
Janzen, Randy	MSc	1996-1997	J. Singer, R. Hogg, I. Goldstone
Heacock, Helen	PhD, UBC	1996-1998	C. Hertzman, S. Marion, K. Teschke, R. Hogg
Sallar, Anthony	PhD, UBC	1996-2001	M. Schechter, R. Hogg, S. Sheps, M. Tyndall
Botnick, Michael	PhD (Sociol & Anthropol)	1997-2002	R. Ratner, R. Hogg
Lynd, Larry	PhD, UBC	1997-2002	A. Anis, M Schechter, P. Pare, R. Hogg
Craib, Kevin	PhD	1997-2003	M. Schechter, R. Hogg, J. Raboud
Ogilvie, Gina	MSc	1999-2001	M. Schechter, D. Burdge, R. Hogg
Green, Tom	MSc	2001-2003	R. Hogg, J. Montaner
Piaseczna, Magda	MSc (MSHRF)	2001-2003	M.Schechter, R. Hogg
Steenbeek, Audrey	PhD	2001-2005	M. Tyndall, R. Hogg
Braitstein, Paula	PhD, UBC MSc	2001-2005 1999-2001	R. Hogg, J. Montaner, M. O'Shaughnessy M. Schechter, R. Hogg
Brumme, Zabrina	PhD (MSHRF, CIHR) (Experimental Medicine)	2001-2006	R Harrigan, R. Hogg, J. Montaner
Miller, Cari	PhD, UBC	2001-present	J Frankish, M. Schechter, P. Spittal
Weber, Amy	MD/PhD, UBC	2001-present	M. Tyndall, R. Hogg, J. Montaner
Cox, Michelle	MSc Health Care & Epidemiology	2002	D. Patrick, M. Tyndall, M. Kraiden
Ahmed, R.	Visiting MD (Saskatchewan)	2002 (1 mth)	J. Montaner
Heitzer, Ulrich	Visiting Student (Austria)	2002 (2 mths)	J. Montaner
De la Rosa, Raphael	Visiting MD (Barcelona)	2002 (3 mths)	J. Montaner
Formankova, Sonia	M Economics (Slovakia)	2002 (3 mths)	J. Montaner, R. Hogg
Quercia, Romina	Visiting MD (Argentina)	2002 (3 mths)	J. Montaner
Ronco, S.	Student, UBC	2002 (3 mths)	J. Montaner, M. Harris
McGuire, Anna	BSc, UBC	2002 (4 mths)	J. Montaner, R. Hogg

Edwards, J.	Environmental Health	2002-2004	Dr. Heacock, E Wood, MW Tyndall
Rusch, Melanie	Health Care & Epidemiology, PhD	2002-present	R. Hogg, M. Tyndall, J. Shovellar, D. Patrick
Farrow, J. Chung, Henry Jaber, A., Buzaid A. Esmail, N. Al Gofaili, K. Liu, D. Perlman, Shelley Trip, J. Thomas, D. Harji, F. Sadia, A. Medvedev, G. Lysyshyn, Mark Gupta, K. Al Riyami, L. Shah, J. Mohammed, Abufayah Szakacs, T.	Residency-Infectious Diseases and HIV/AIDS	2003	J. Montaner
Alvarez, Gonzallo	Visiting Doctor	2003	J. Montaner
Forrest, David	Visiting Doctor	2003	J. Montaner
Heath, Katherine	Postdoctoral Fellow PhD, UBC MSc	2003 1997-2002 1995-1996	J. Montaner R. Hogg M. Schechter, R. Hogg, J. Singer, J. Montaner
Mohammed, R.	Visiting Doctor	2003	J. Montaner
Nametallah, A. Wu, J. Lester, Richard Chan, K.	Fellows	2003	J. Montaner
Penner, Jeremy	Health Care & Epidemiology, M.S. Thesis Student	2003	M. Tyndall, P. Granger
Remple, Valencia	Health Care & Epidemiology MD/PhD	2003	D. Patrick, M. Tyndall, A. Jolly
Wong, KH	Visiting Scientist, Hong Kong	2003	
Wood, Evan	Postdoctoral Fellow PhD, UBC	2003 2000-2002	J. Montaner R. Hogg, J. Montaner, M. Schechter
Zala, Carlos	Visiting Doctor	2003	J. Montaner
Corneil, Trevor	Medical Resident	2003 (Aug-Nov)	R Hogg, E. Wood
Kulkarni, S.	Infectious Diseases Resident	2003-2004	V. Montessori
O'Connell, Jacqueline	Medical Student	2003-2004	E. Wood

Lampinen, Tom	Postdoctoral Fellow	2003-2005	R. Hogg
Christie, Timothy	MSc	2003-present	R. Hogg, J. Montaner
Burns, Dr. Michael Hart, Dr. Daphne Ackland, Dr. Susan Forrest, Dr. Dave Shaw, Dr. Nikki Rouleau, Dr. Danielle Morris, Dr. Tracey Vanzulli, Dr. Claudia Bedell, Dr. Richard	Preceptorship (HIV Primary Care and HIV/AIDS Specialty Clinic)	2004	J. Montaner S. Guillemi
Chen, Kristen Malhotra, Samir Cooper, Ryan Al Enezi, Osama Su, Jenny Hull, Mark Castillo, Eliana Pepper, Erin Shu, David Al Abdali Koundour, Elena Hans, Gurpreet Al Shukairy, Abeer Muller, Florian Momenkhan, Ibrahim Wali, Ghassan Luiza, Ana Stone, Julie Monro, Melody Buyliss, Michael Dhaliwal, Harinder Kimel, Gil Halpenny, Roberta	Residency-Infectious Diseases and HIV/AIDS	2004	J. Montaner
Buchcar, Anna	Postdoctoral Research Fellow- Health Professional	2004	J. Montaner
Collins, C.	CIHR Translational Research in Infectious Diseases	2004	E. Wood
Grebaly, Jason	PhD - Pharmacology	2004	B. Conway, M. Tyndall, M. Kraiden
Kretz, Patricia	CIHR Translational Research in Infectious Diseases	2004	R. Hogg, E. Wood
Kuyper, Laura	Medical Student	2004	E. Wood, R. Hogg, J. Montaner
Lester, Richard	Postdoctoral Research Fellow- Health Professional	2004	J. Montaner
Shannon, Kate	Health Care & Epidemiology PhD Dissertation	2004	M. Tyndall, T. Kerr, C. Patton
Taylor, Darlene	Health Care & Epidemiology	2004	M. Tyndall, D. Patrick

	MSc thesis		
Ramirez Moreno, Saby	Postdoctoral Research Fellow-Health Professional	2004-2005	J. Montaner
Dhalla, Shayesta	PhD	2005	R. Hogg, T. Kerr
Kaida, Angela	PhD	2005	R. Hogg, J Spiegel
Lloyd-Smith, Elisa	Health Care & Epidemiology PhD	2005	R. Hogg, E. Wood, T. Kerr, M. Tyndall
Mehrabad, Azar	MSc	2005	P. Spittal, M. Schechter, R. Hogg
Rachlis, Beth	MSc	2005	R. Hogg, T. Kerr
Small, Will	Health Care & Epidemiology PhD Dissertation	2005	M. Tyndall, T. Kerr, J. Shovellar
Tam, Lily	BSc	2005	R. Hogg, R. Harrigan
Ghesquiere, Dr. Wayne Zala, Dr. Carlos Ferro, Dr. Alejandro Villar del Saz, Dr. Sara Farrales, Dr. Lynn Scholtens, Dr. Martina Kordic, Dr. Liliana Hart, Dr. Daphne Riese, Dr. Nicole Townsend, Dr. Maria	Preceptorship (HIV Primary Care and HIV/AIDS Specialty Clinic)	2005	J. Montaner S. Guillemi
Perlman, Michael Bedell, Richard Nematallah, Anouf Buzaid, Amin Murray, Melanie Alshukairi, Abeer Bahabri, Nezar Hull, Mark Renouf, Daniel Prchal, David Samm, Holly Wali, Ghassan Al Roughani, Raed Stefanovic, Aleksandra Mirzanejad, Dr. Leung, Victor Robbins, George Quon, Bradley Warwas, Mark Reynolds, Steven Briscoe, Natalie Kaur, Aman	Residency-Infectious Diseases and HIV/AIDS	2005	J. Montaner

Yau, Steven	Student Researcher	2005 (May-Aug)	R. Hogg, J. Montaner
Fielden, Sarah	Student Researcher	2005-present	R. Hogg
Gill, Vikram	MSc	2005-present	R. Harrigan, M. Tyndall, T. Lampinem
Low, Andrew	MSc	2005-present	R. Harrigan, J. Montaner, B. Cherkasov
Ng, Francisco	Postdoctoral Research Fellow-Health Professional	2005-present	J. Montaner
Rocha, Clara	Postdoctoral Research Fellow-Health Professional	2005-present	J. Montaner
Maas, Benjamin	Research Assistant	2005-2006	T. Kerr, J. Montaner
Werb, Daniel	Research Assistant	2006 (June-Dec)	T. Kerr, J. Montaner
Jahnke, Natalie	Postdoctoral Research Fellow-Health Professional	Sept 2006-present	J. Montaner
Ferro, Dr. Alejandro Gutierrez, Dr. Sonia Riese, Dr. Nicole Townsend, Dr. Maria Wood, Dr. Evan	Preceptorship (HIV Primary Care and HIV/AIDS Specialty Clinic)	2006	J. Montaner
Alwarid, Sura Bath, Misty Bernard, Matthew Croome, Alison Hermann, Laura Leung, Benj Maas, Benjamin Millington, Scott Paulus, Stephen Reynolds, Steve Salmon, Joanne Yau, Steven Yipp, Bryan	Residency-Infectious Diseases and HIV/AIDS	2006	J. Montaner

## Awards & Distinctions

Our faculty members have been highly recognized by their peers locally, nationally and internationally. The following listing highlights the awards and distinctions received by our faculty throughout their careers.

### Hogg, Robert

- Young Investigator Award, Canadian Association for HIV Research, 1992
- National Health Research Scholar (AIDS), NHRDP, 1995-2000
- Investigator Award, CIHR, 2001-2002
- AccolAIDS Award in Science, Research and Technology for the Vanguard Project, BCPWA Society, 2003
- Michael O'Shaughnessy Chair, Department of Medicine, Faculty of Medicine, UBC, 2005

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- Michael Smith Foundation for Health Research, Senior Scholar Award, 2001–2006
  - AIDS: Most highly cited author award 2006 in Epidemiology and Social Science. (Hogg et al. Intermittent use of triple-combination therapy is predictive of mortality at baseline and after 1 year of follow-up. AIDS 2002, Vol 16, pp. 1051-1058.)

Kerr, Thomas

- AccolAIDS Award, Research, 2006
- Michael Smith Foundation for Health Research, New Investigator Award, 2006

Montessori, Val

- The Stefan Gryzbowski Prize, Best Project, Residents' Research Day-UBC, 1995
- The F.P. Patterson Orthopaedic Prize-University of British Columbia, 1989-1990
- The Fay R. Dirks Award for Excellence in Teaching, St. Paul's Hospital, Department of Medicine, UBC, 1998
- Faculty Research Award, Department of Medicine, UBC, 1999-2000
- Teacher of the Year Award, St. Paul's Hospital Family Practice and Royal College Residents, 2001-2002

Montaner, Julio

- Young Investigator Award, American College of Chest Physicians (ACCP), 1989
- The Louis Pasteur Award for Excellence in Clinical Medicine in the Fight Against AIDS, Canadian Flowcytometry Conference, 1995
- Chair in AIDS Research, UBC, 1996-present
- Be a Guest Award for the 1996 International AIDS Conference - Tourism Vancouver, 1996
- The Martin Hoffman Award for Excellence in Research, Department of Medicine, UBC, 1996
- Premio "Amaifa 2001" Al mejor Poster presentado sobre Farmacologia Clinica, Pan American Confernece of Pharmaceutical Medicine, Buenos Aires, November 2001
- Boehringer Ingelheim - Distinguished Researcher Award, February 2002
- AccolAIDS-Science, Research and Technology Award, April 2002
- Solutions Through Research Award, Science Council of British Columbia, October 2002
- National Health Research Scholar Award, Pathogenesis and Treatment of HIV and Related Diseases, NHRDP, Health and Welfare, Ottawa, 1987-1997 (Competitive Award consisting of two year terms for 10 years)
- Distinguished Service Award, Department of Medicine, St. Paul's Hospital, Providence Health Care, 2004
- Betty Fata Award for Conference Leadership, Tourism Vancouver (in recognition for leadership on the 1996 International AIDS Conference held in Vancouver), 2004

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- AccolAIDS-Science/Research/Technology (Organization-BC Centre for Excellence in HIV/AIDS), 2005
  - The Mark Wainberg Lecture (Research Award). 14<sup>th</sup> Annual Canadian Conference on HIV/AIDS Research (CAHR), 2005
  - Donald M. Whitelaw Award for Outstanding Grand Rounds (St. Paul's Hospital). Department of Medicine, University of British Columbia, 2005
  - Grant-in-aid Research Award of \$600,000 from Roche Laboratories. May 2006
  - Sanofi Pasteur Award: Conquering HIV/AIDS-Recognizing Canadians who Make a Difference (Awarded to Julio Montaner, Stephen Lewis, Louise Binder, Frank Plummer, Mark Wainberg, Norbert Gilmore). August 2006
  - President-Elect, International AIDS Society. 2006-2008

- Phillips, Elizabeth
- Research Presentation Award, Division of Infectious Diseases, University of Toronto, 1997
  - Research Presentation Award, Division of Clinical Pharmacology, University of Toronto, 1998
  - Young Investigator's Award, Canadian Infectious Disease Society, 2000
  - Career Support Award, AIDS Bureau, Ontario Ministry of Health, 2000-2001
  - Career Scholarship Award, Ontario HIV Treatment Network, 2001
  - Career Scholarship Award – Ontario HIV Treatment Network, 2001-2004
  - Piafsky Young Investigator Award, Canadian Society for Clinical Pharmacology, 2005

- Phillips, Peter
- Ontario Scholar, Gerald Allen Award, Jarvis Collegiate Institute, Toronto, 1968
  - Evelyn Medical Resident Award, University of British Columbia, Vancouver, 1982
  - Canadian Infectious Diseases Society/ICI Pharma Young Investigators Award, 1987
  - Educational influential" physician, according to survey conducted by Division of CME, Faculty of Medicine, UBC, 1998
  - Master Teacher Award (St. Paul's Hospital), Department of Medicine, UBC, 2001

- Press, Natasha
- Medical Society Honors Award, University of Toronto, 1995
  - Leslie Joan Clow Memorial Award, University of Toronto, 1995
  - Canadian Hematology Society Award, 1997
  - Residents' Research Day Award, University of British Columbia, 1997
  - John Dirks Award, University of British Columbia, 1998
  - Residents' Research Day Award, University of British Columbia, 2000

- Tyndall, Mark
- Dean's Honor List, University of Waterloo, 1979-1982
  - Canadian Infectious Disease Society Fellowship, 1989

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- Medical Research Council of Canada Fellowship, 1989-1993
  - The R. Samuel McLaughlin Foundation Fellowship, 1994-1995
  - Michael Smith Foundation for Health Research, Senior Scholar Award, 2006-2011

Wood, Evan

- MSc Trainee Award, BC Health Research Foundation, 1999-2000
- MSc Trainee Award, CHSRF, 1999-2000
- New Investigator Award, CIHR, 2004
- 2004 Michael Smith Foundation for Health Research Scholar, 2004
- AccolAIDS Award in Science, Research and Technology, BC Persons with AIDS Society, 2004
- Peter Lougheed Award recipient as the #1 ranked New Investigator in the Canadian Institute of Health Research's 2003 New Investigator competition, 2004
- Lydia Sikora Memorial Award for Excellence in Health Research, 2005-2006
- Ron Ghitter Award in Human Rights, 2005-2006



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## POSTGRADUATE EDUCATION PROGRAM



***Dr. James Mark Roberts***  
***Clinical Assistant Professor & Director***

### **New Initiatives/Developments**

2006 continued to be an extremely busy year for the Internal Medicine Residency Training Program. The ongoing medical school expansion sees continued growth in our program with a record 98 residents in the core program. Our program is now the second largest Internal Medicine Training Program in Canada.

In July 2006 we saw a total of 35 PGY1s beginning in the training program. We also began the first of the programs in our Victoria expansion site. Under the leadership of Drs. Richard Leather & Anthony Della Siega a new Cardiology rotation was implemented. In September 2006 the CTU rotations in Victoria and Prince George saw the assignment of senior residents for the first time. We began videoconferencing 50% of our Academic Half Day Sessions to the two major expansion sites. Discussions began with Royal Columbian Hospital with respect to the set-up of 2 CTUs in New Westminster. This discussion will be ongoing over the course of the next several months with implementation of these CTUs beginning in July 2007. Dr. Gerald da Roza is actively involved with the design of this new program component.

In 2005, we had introduced an innovative and state-of-the art quality improvement (QI) curriculum for all core Internal Medicine residents. A 2-phase curriculum was developed and implemented in 2005-06. Phase 1 focused on 2 interactive workshops on QI delivered during academic half-day (AHD). Phase 2 involves PGY-1 residents who forming teams of 4-5, each conducting a QI project on a self-identified topic with help from a faculty sponsor. This spans over 10 months, with 5 concurrent 1-hour tutorials to provide small group feedback. Feasibility was assessed at a year-end QI Day in November when teams presented project findings. The sessions were adjudicated by Drs. Kaveh Shojania, John Shepherd, Graydon Meneilly and Ms. Barbara Terise. Dr. Shojania is currently the Canada Research Chair in Patient Safety & Quality Improvement. Dr. Shojania is also an Assistant Professor of Medicine at the University of Ottawa as well as a Scientist for the Clinical Epidemiology Program with the Ottawa Health Research Institute. Dr. Shepherd is the VP of Health Service Networks for Clinical Quality and Safety for Vancouver Coastal Health. Barbara Terise is the Corporate Director for Quality Improvement and Information Management for Providence Health Care.

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Our QI curriculum is recognized nationally and has been awarded a 2006 RCPSC/AMS CanMEDS Research and Development Grant for the ongoing development and evaluation of the QI curriculum (PI: Dr. Roger Wong). Dr. Roger Wong was also invited to disseminate our QI curriculum internationally at the 2006 RCPSC annual meeting in Ottawa, Canada (September, 2006), and the 28<sup>th</sup> World Congress of Internal Medicine in Taipei, Taiwan (November 2006).

In March 2006 the Annual Resident Whistler Conference was held over a two day period and attended by approximately 60 residents. The theme for the event was “Health Advocacy”.

The 22<sup>nd</sup> Annual Resident Research Day was held on May 24, 2006 at the Sutton Place Hotel . There were a total 32 podium and 27 poster presentations. We were pleased to welcome the podium adjudicators – Drs. Iqbal Bata, Mark Crowther and Brian Weinerman. Our poster adjudicators were Drs. Nadine Caron and Don McKenzie. The event was moderated this year, for the first time, by Dr. Sharlene Gill.

Planning for the Royal College Accreditation Survey, scheduled for February 2007, began in September with completion and submission of the required documentation.

For the first time an Emergency Call System was implemented for the CTUs. This allows the program to assign senior residents, on no call or low call rotations, days they will be assigned for emergency coverage if needed. To-date this has been working well.

The Postgraduate Program launched an innovative new educational program through the Centre of Excellence for Surgical Education and Innovation (CESEI). We are using manikins and computer simulators to teach and educate medical residents in a variety of Royal College mandated procedures.

As the ongoing expansion of the medical school continues we anticipate working with all sites involved to ensure appropriate education models are in place.



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## UNDERGRADUATE EDUCATION PROGRAM



*Dr. H. Grant Stiver*  
*Professor & Director*

The Department of Medicine Undergraduate Medical Education Program Office is located in the Gordon and Leslie Diamond Health Care Centre (GLDHCC). The Department currently consists of 17 divisions overseen by Division Heads, as well as, site-specific Division Heads: Allergy and Immunology, Cardiology, Community General Internal Medicine, Critical Care, Endocrinology, Gastroenterology, Geriatric Medicine, General Internal Medicine, Haematology, Infectious Diseases, Medical Oncology, Nephrology, Neurology, Physical Medicine & Rehabilitation, Respiratory Medicine and Rheumatology. All Divisions are engaged in undergraduate teaching.

The Department of Medicine Undergraduate Medical Education Program is a distributed program with satellite offices in Chilliwack (Chilliwack Integrated Clerkship), Prince George (Northern Medical Program (NMP)), and Victoria (Island Medical Program (IMP)). The IMP and NMP each have 24 medical students in the 3<sup>rd</sup> year Clinical Clerkship.

The Department of Medicine Vancouver Fraser Medical Program (VFMP) encompasses second, third and fourth year medical students.

January through May, second year UBC medical students participate in a four-week bedside teaching course. These sessions are part of the Clinical Skills Course (INDE 420) and continue to be one of the highest rated sessions in the undergraduate curriculum. Students are assigned a patient and perform a complete and focused history and physical examination, reviewed at the bedside by a clinician instructor who also critiques the student's write-up of the case. As of January 2007, there are 178 medical students in the second year class. Students are now deployed between eight different sites throughout the Lower Mainland, including the addition of Burnaby General Hospital, the Fraser Valley Cancer Centre and Royal Columbian Hospital!

September to August, the third year clinical clerkship rotation consists of an eight-week rotation, including Thursday afternoon academic half-days, Chief Medical Resident teaching sessions and a Neurology Bedside Teaching session. The third year clinical clerkship differs considerably from the second year in that the objectives are not only to further the medical knowledge and skill of the student in clinical diagnosis, but also to have the student learn to manage patients' problems and provide daily overall care to the ill patient. As of September 2006, there are 155

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medical students in the third year class. The written examination at the end of each clinical clerk's rotation continues to be the National Board of Medical Examiners (NBME) shelf examination in Medicine. The performance of UBC first-time examinees of the NBME exam in Medicine (all clerkship rotations) during the 2005-06 academic year resulted in a mean subject exam test score of 74.4. The mean for North American medical schools which have an eight-week clerkship was 75.2. The performance of students beginning the clerkship at the end of Third Year generally increased compared with the performance of students beginning in September, reflecting the increased clinical experience acquired throughout the year.

In year four, UBC medical students undertake a series of selective and elective rotations from September to December and also in the month of April. Our program offers a wide range of subspecialty rotations and approximately 70% of fourth year students take at least one of these subspecialty rotations. As of September 2006, there are 131 medical students in the fourth year class.

In 2006, the Department of Medicine Undergraduate Program had many accomplishments and achievements:

- In January 2006, Royal Columbian Hospital participated in teaching the second year bedside teaching sessions.
- In February 2006, the Undergraduate Education Program began to broadcast Undergraduate Education Committee meetings to Prince George, Victoria and Chilliwack.
- The Program welcomed Katya Leonardia as the new Program Assistant for Expansion and New Programs.
- The Academic Half-Day module was revamped to include teaching sessions by the Chief Medical Residents of core topics as part of the learning objectives of the third year clinical clerkship.
- The Undergraduate Education Program also introduced a paper log book for students to track and log core competencies during their third year rotation in Internal Medicine.

### **Medical School Expansion**

In September 2006, the Department of Medicine third year clinical clerkship expanded to include an additional 24 third year medical students in the Vancouver Fraser Medical Program (VFMP).

In 2007, the Undergraduate Program will continue to collaborate with expanded programs in Prince George and in Victoria to support clerkship rotations during the 2006-07 academic year and continue to expand the current Internal Medicine Electives' Program to include additional sites throughout British Columbia.

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## **PUBLICATIONS**



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## ALLERGY & IMMUNOLOGY

### **Kanani, Dr. Amin S**

- Kanani, AS. Chronic Urticaria: Soothing the Itch. *Canadian Journal of Continuing Medical Education*. 2006; 18, 8:67-70

### **Wong, Dr. H. C. George**

- Wong HCG. Potential adverse and allergic reactions from complementary and alternative medicine (CAM) and other dietary supplements (DS). *Allergy Asthma Clin Immunol*, 2006; 2(2): 68-73.

## CARDIOLOGY

### **Aymong, Dr. Eve**

- Farkouh ME, Ramanathan K, Aymong E et al. An early revascularization strategy is associated with a survival benefit for diabetic patients in cardiogenic shock after acute myocardial infarction. *Clin Cardiol*. 2006 May;29(5):204-10

### **Buller, Dr. Christopher E**

- Jeger RV, Shannon M, Harkness MS, Ramanathan K, Buller CE, Pfisterer ME, Sleeper LA, Hochman JS. Emergency Revascularisation in Patients with Cardiogenic Shock on Admission: A Report from the SHOCK Trial and Registry. *European Heart Journal*. January 2006.
- Goodhart DM, Hubacek J, Anderson TJ, Duff H, Barbeau G, Ducas J, Carere RG, Lazzam C, Dzavik V, Buller CE, Traboulsi M. Effect of percutaneous coronary intervention of nonacute total coronary artery occlusions on QT dispersion. *Am Heart J*. 2006;151:529 e1-529 e6.
- Webb JG, Chandavimol M, Thompson C, Ricci DR, Carere R, Munt B, Buller CE, Pasupati S, Lichtenstein S Percutaneous aortic valve implantation via the femoral artery. *Circulation* 2006; 113: 842-850.
- Buller CE, Pate GE, Armstrong PW, O'Neill B J, Webb JG, Gallo R, Welsh RC. Catheter thrombosis during primary percutaneous coronary intervention for acute ST elevation myocardial infarction despite subcutaneous low-molecular-weight heparin, acetylsalicylic acid, clopidogrel and abciximab pretreatment. *Can J Cardiol*. 2006;22:511-5.
- Ratner PA, Tzianetas R, Tu AW, Johnson JL, Mackay M, Buller CE, Rowlands M, Reime B. Myocardial infarction symptom recognition by the lay public: the role of gender and ethnicity. *J Epidemiol Community Health*. 2006;60:606-15.
- Stewart DJ, Hilton JD, Arnold JM, Gregoire J, Rivard A, Archer SL, Charbonneau F, Cohen E, Curtis M, Buller CE, Mendelsohn FO, Dib N, Page P, Ducas J, Plante S, Sullivan J, Macko J, Rasmussen C, Kessler PD, Rasmussen HS. Angiogenic gene therapy in patients with nonrevascularizable ischemic heart disease: a phase 2 randomized, controlled trial of AdVEGF(121) (AdVEGF121) versus maximum medical treatment. *Gene Ther*. 2006.
- Paul W. Armstrong and WEST Steering Committee. A comparison of pharmacologic therapy with/without timely coronary intervention vs. primary percutaneous intervention early after ST-elevation myocardial infarction: the WEST (Which Early ST-elevation myocardial infarction Therapy) study. *European Heart Journal Advance Access published on June 6, 2006*. doi:10.1093/eurheartj/ehl088
- Hochman JS, Sleeper LA, Webb JG, Dzavik V, Buller CE, Aylward P, Col J, White HD. Early revascularization and long-term survival in cardiogenic shock complicating acute myocardial infarction. *JAMA*. 2006;295:2511-5.
- Hochman JS, Lamas GA, Buller CE, Dzavik V, Reynolds HR, Abramsky SJ, Forman S, Ruzyllo W,



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Maggioni AP, White H, Sadowski Z, Carvalho AC, Rankin JM, Renkin JP, Steg PG, Mascette AM, Sopko G, Pfisterer ME, Leor J, Fridrich V, Mark DB, Knatterud GL. Coronary Intervention for Persistent Occlusion after Myocardial Infarction. *N Engl J Med*. 2006. DOI: 10.1056/NEJM0a066139.

- Dzavik V, Buller CE, Lamas GA, et al. Randomized trial of percutaneous coronary intervention for subacute infarct related coronary artery occlusion to achieve long-term patency and improve ventricular function. The Total Occlusion Study of Canada (TOSCA)-2 trial. *Circulation* 2006; DOI: 10.1161/CIRCULATIONAHA.106.669432
- Pate GE, Lee M, Humphries K, Cohen E, Lowe R, Fox RS, Teskey R, Buller CE. Characterizing the spectrum of in-stent restenosis: Implications for contemporary treatment. *Can J Cardiol*. 2006;22:1223-9.

#### **Cairns, Dr. John A**

- Cairns JA. Ranolazine: Augmenting the anti-anginal armamentarium. *J Am Coll Cardiol* 2006; 48(3):576-8.

#### **Carere, Dr. Ronald G**

- Ye J, Cheung A, Lichtenstein SV, Carere RG, Thompson CR, Pasupati S, Webb JG. Transapical aortic valve implantation in humans. *J Thorac Cardiovasc Surg* 2006;131:1194-6.
- Webb JG, Chandavimol M, Thompson CR, Ricci DR, Carere RG, Munt BI, Buller CE, Pasupati S, Lichtenstein S. Percutaneous aortic valve implantation retrograde from the femoral artery. *Circulation* 2006 Feb 14;113(6):842-50.
- Goodhart DM, Hubacek J, Anderson TJ, Duff H, Barbeau G, Ducas J, Carere RG, Lazzam C, Dzavik V, Buller CE, Traboulsi M. Effect of percutaneous coronary intervention of non-acute total coronary artery occlusions on QT dispersion. *Am Heart Journal* 2006 Feb;151(2):529.
- Pate GE, Gao M, Ding L, Carere RG, Tyers FO, Hayden RI. Changing outcomes of coronary revascularization in British Columbia, 1995 - 2001. *Can J Cardiol* Vol 22 No 14 December 2006.
- Ye J, Cheung A, Lichtenstein SV, Carere RG, Thompson CR, Pasupati S, Webb JG. Transapical aortic valve implantation in humans. *J Thorac Cardiovasc Surg* 2006;131:1194-6.
- Webb JG, Chandavimol M, Thompson CR, Ricci DR, Carere RG, Munt BI, Buller CE, Pasupati S, Lichtenstein S. Percutaneous aortic valve implantation retrograde from the femoral artery. *Circulation* 2006 Feb 14;113(6):842-50.
- Goodhart DM, Hubacek J, Anderson TJ, Duff H, Barbeau G, Ducas J, Carere RG, Lazzam C, Dzavik V, Buller CE, Traboulsi M. Effect of percutaneous coronary intervention of non-acute total coronary artery occlusions on QT dispersion. *Am Heart Journal* 2006 Feb;151(2):529.

#### **Chan, Dr. Sammy**

- Chan SY, Mancini GBJ, Burns S, Johnson FF, Brozic AP, Kingsbury K, Barr S, Kuramoto L, Schulzer M, Frohlich J, Ignaszewski A. Dietary Measures and Exercise Training Contribute to Improvement of Endothelial Function and Atherosclerosis Even in Patients Given Intensive Pharmacologic Therapy. *Journal of Cardiopulmonary Rehabilitation* 2006;26:288-293.
- Fung AY, Saw J. Book Chapter 1: Epidemiology and Significance of Carotid Artery Stenosis. Editors: Drs. Jacqueline Saw, J. Emilio Exaire, David S. Lee, Jay S. Yadav. Humana Press, Totowa, N.J., 2006. (Book Chapter)

#### **Gin, Dr. Kenneth, G**

- Abu-Laban RB, McIntyre CM, Christenson JM, van Beek CA, Innes GD, O'Brien RK, Wanger KP, McKnight RD, Gin KG, Zed PJ, Watts J, Puskaric J, MacPhail IA, Berringer RG, Milner RA. Aminophylline in bradyasystolic cardiac arrest: a randomised placebo-controlled trial. *Lancet*. 2006;367:1577-84.

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**Hamburger, Dr. Jaap**

- Webb J, Mann C, Hamburger J, Pate G, McManus B, Krucoff M, Mancini GBJ. Initial Experience with a Novel Coronary Rinsing and Thrombectomy System: "Rinspiration". *The Journal of Invasive Cardiology*, May 2006;18:188-192.

**Heilbron, Dr. Brett G**

- Heilbron, B, Forster, B. CCTA: A Non-invasive Assessment of CAD. *Perspectives in Cardiology* September 2006.
- Bennett M, Heilbron, B. Atypical Angina: Cardiac CT angiography shines for this diagnosis. *Parkhurst Exchange* Nov 2006, Vol. 14, No. 11. 2006

**Humphries, Dr. Karin H**

- Khan NA, Ma I, Thompson CR, Humphries KH, Salem DN, Sarnak MJ, Levin A. Kidney Function And Mortality Among Patients With Left Ventricular Systolic Dysfunction. *J Am Soc Nephrol* 2006; 17:244-253
- Hubacek J, Galbraith PD, Gao M, Humphries KH, Graham MM, Knudtson ML, Ghali WA for the APPROACH Investigators. External validation of a percutaneous coronary intervention mortality prediction model in patients with acute coronary syndromes. *American Heart Journal* 2006 Feb;151(2):308-15.
- Lear SA, Birmingham CL, Chockalingam A, Humphries KH. Study Design of the Multicultural Community Health Assessment Trial (M-CHAT)- A Comparison of Body Fat Distribution In Four Distinct Populations. *Ethnicity and Disease* 2006;16:96-100
- Hemmelgarn B, Southern D , Humphries KH, Culleton BF, Knudtson ML, Ghali WA. Refined characterization of the association between kidney function and mortality in patients undergoing cardiac catheterization. *Eur Heart J*. 2006 May;27(10):1191-7. Epub 2006 Mar 30
- Pate GE, Lee M, Humphries KH, Cohen E, Lowe R, Fox R, Buller CE. Characterizing the Spectrum of In-stent Restenosis: Implications for Contemporary Treatment. *Can J Cardiol* 2006 Dec;22(14):1223-9
- Pilote L, Dasgupta K, Guru V, Humphries KH, McGrath J, Norris N, et al. A Global View of Gender Specific Issues Related to Cardiovascular Disease. *Can Med Assoc J* 2006; 22(14):1223.
- Munt BI, Humphries KH, Gao M, Moss RR, Thompson CR. True versus reported waiting times for valvular aortic stenosis surgery. *Can J Cardiol*. 2006 May 1;22(6):497-502.
- De Coster C, Quan H, Finlayson A, Gao M, Halfon P, Humphries KH, Johansen H, Lix L, Luthi, J-C, Ma J, Romano PS, Roos L, Sundararajan V, Tu JV, Webster G, Ghali WA. Identifying priorities in methodological research using ICD-9-CM and ICD-10 administrative data: Report from an international consortium. *BMC Health Services Research* 2006;6:77

**Ignaszewski, Dr. Andrew**

- Mancini, Chan SY, Mancini GBJ, Burns S, Johnson FF, Brozic AP, Kingsbury K, Barr S, Kuramoto L, Schulzer M, Frohlich J, Ignaszewski A. Dietary Measures and Exercise Training Contribute to Improvement of Endothelial Function and Atherosclerosis Even in Patients Given Intensive Pharmacologic Therapy. *Journal of Cardiopulmonary Rehabilitation* 2006;26:288-293.

**Jue, Dr. John**

- Rabkin SW, Jue J, Tsang MY. Aortic valve sclerosis is associated with an echocardiographically determined thinner aortic wall. *Journal of Heart Valve Disease* 15(2):158-64, 2006 Mar.

**Kerr, Dr. Charles**

- Kerr CR, Connolly SJ, Kowey P, Page RL, Pritchett EL, Ruda MY, Ruzyllo W, Wilkinson WE. A-STAR Investigators. Efficacy of azimilide for the maintenance of sinus rhythm in patients with

---

paroxysmal atrial fibrillation in the presence and absence of structural heart disease. [Journal Article. Multicenter Study. Randomized Controlled Trial. Research Support, Non-U.S. Gov't] *American Journal of Cardiology*. 98(2):215-8, 2006 Jul 15.

- Dorian P, Cvitkovic SS, Kerr CR, Crystal E, Gillis AM, Guerra PG, Mitchell LB, Roy D, Skanes AC, Wyse DG. A novel, simple scale for assessing the symptom severity of atrial fibrillation at the bedside: the CCS-SAF scale. [Journal Article] *Canadian Journal of Cardiology*. 22(5):383-6, 2006 Apr.

### **Mancini, Dr. G B John**

- Mancini GBJ, Editor, *Advances in Vascular Biology*, *Can J Cardiol*, Feb 2006;22 (supplement B).
- Webb J, Mann C, Hamburger J, Pate G, McManus B, Krucoff M, Mancini GBJ. Initial Experience with a Novel Coronary Rinsing and Thrombectomy System: "Rinspiration". *The Journal of Invasive Cardiology*, May 2006;18:188-192.
- Hobbs, F.D.R., Gensini G, Mancini GBJ, Manolis AJ, Bauer B, Böhler, Genest J, Feldman R, Harvey P, Jenssen TG, Metcalfe M, da Silva PM. Can combining different risk interventions into a single formulation contribute to improved cardiovascular disease risk reduction? Rationale and design for an international, open-label program to assess the effectiveness of a single pill (amlodipine/atorvastatin) to attain recommended target levels for blood pressure and lipids (The Jewel Program). *International Journal of Cardiology* 2006;110:242-250.
- Chan SY, Mancini GBJ, Burns S, Johnson FF, Brozic AP, Kingsbury K, Barr S, Kuramoto L, Schulzer M, Frohlich J, Ignaszewski A. Dietary Measures and Exercise Training Contribute to Improvement of Endothelial Function and Atherosclerosis Even in Patients Given Intensive Pharmacologic Therapy. *Journal of Cardiopulmonary Rehabilitation* 2006;26:288-293.  
(Generated a simultaneous editorial: Kuvin, JT. Diet and Exercise: Are They Worth it in the Era of Advanced Pharmacotherapy? *Journal of Cardiopulmonary Rehabilitation* 2006;26:294-296.)
- Hochman JS, Lamas GA, Buller CE, Dzavik V, Reynolds HR, Abramsky SJ, Forman S, Ruzyllo W, Maggioni AP, White H, Sadowski Z, Carvalho AC, Rankin JM, Renkin JP, Steg PG, Mascette AM, Sopko G, Pfisterer ME, Leor J, Fridrich V, Mark DB, and Knatterud GL for the Occluded Artery Trial Investigators. Coronary Intervention for Persistent Occlusion after Myocardial Infarction. *The New England Journal of Medicine*. 2006; 355(23): 1-13.
- Dzavik V, Buller CE, Lamas GA, Rankin JM, Mancini GBJ, Cantor WJ, Carere RJ, Ross JR, Atchison D, Forman S, Thomas B, Buszman P, Vozzi C, Glanz A, Cohen EA, Meciar P, Devlin G, Mascette A, Sopko G, Knatterud GL, Hochman JS, for the TOSCA-2 Investigators. Randomized Trial of Percutaneous Coronary Intervention for Subacute Infarct-Related Coronary Artery Occlusion to Achieve Long-Term Patency and Improve Ventricular Function: The Total Occlusion Study of Canada (TOSCA-2) Trial. *Circulation* 2006; 114: 1-9.
- Invited Editorial: Ayas NT, **Mancini GBJ**, Fleetham J. Does CPAP delay the development of cardiovascular disease in patients with obstructive sleep apnoea hypopnoea? *Thorax*, 2006; 61:4590460.

### **Mayo, Dr. John**

- Webb JG, Harnek J, Munt BI, Kimblad PO, Chandavimol M, Thompson CR, Mayo JR, Solem JO. Percutaneous Transvenous Mitral Annuloplasty: Initial human experience with device implantation in the coronary sinus. *Circulation*. Epub 2006 February 6, 2006.
- McWilliams AM, Mayo JR, Ahn MI, MacDonald SLS, Lam S. Lung Cancer Screening Using Multi-slice Thin Section Computed Tomography and Autofluorescence Bronchoscopy. *Journal of Thoracic Oncology* 2006 January 1;(1):61-68.
- Aldrich JE, Duran E, Dunlop P, Mayo JR. Optimization of dose and image quality for computed radiography and digital radiography. *J Digit Imaging* 2006;19:126-131.

- 
- de Jong PA, Dodd JD, Coxson HO, Storness-Bliss C, Paré PD, Mayo JR, Levy RD. Bronchiolitis obliterans following lung transplantation: early detection using computed tomographic scanning. *Thorax* 2006;61:799-804/
  - O'Sullivan P, Brown M, Mayo JR. Central line pump infusion and large volume mediastinal contrast extravasation in CT. *British Journal of Radiology*, 2006;79:e75-77
  - Hodges ANH, Mayo JR, McKenzie DC. Pulmonary Oedema Following Exercise in Humans. *Sports Med* 2006; 36 (6): 501-512
  - Lara-Guerra H, Kalloger SE, Powell T, Kim DW, Coxson HO, Clifton JC, Finley RJ, Mayo JR. Tomographic Comparison of Ventilation Techniques for CT-Guided Thoracoscopic Staple Excision of Subcentimeter Lung Nodules. *Journal of Investigative Surgery* 2006;19(3):185-191.
  - Aldrich JE, Chang S, Bilawich AM, Mayo JR. Radiation Dose: The Role of Patient Size and the Selection of CT Tube Current. *Canadian Association of Radiology Journal* 2006;57(3):152-158.
  - Aldrich JE, Bilawich AM, Mayo JR. Radiation doses to patients receiving computed tomography examinations in British Columbia. *Can Assoc Radiol J* 2006;57:79-85.
  - Turner MO, Mayo JR, Müller NL, Schulzer M, Fitzgerald JM. The value of thoracic computed tomography scans in clinical diagnosis. A prospective study. *Can Respir J* 2006;13:311-316.

#### **Munt, Dr. Brad**

- Webb JG, Chandavimol M, Thompson C, Ricci DR, Carere R, Munt B, Buller CE, Pasupati S, Lichtenstein S. Percutaneous aortic valve implantation retrograde from the femoral artery. *Circulation* 2006; 113: 842-850.
- Pate GE, Thompson CR, Munt BI, Webb JG. Techniques for percutaneous closure of prosthetic paravalvular leaks. *Cathet Cardiovasc Interv* 2006; 67: 158-166.
- Munt B, Webb J. Percutaneous valve repair and replacement techniques. *Heart*, 2006; 92: 1369-1372.
- Munt BI, Humphries KH, Gao M, Moss RR, Thompson CR. True versus reported waiting times for valvular aortic stenosis surgery. *Can J Cardiol*. 2006 May 1;22(6):497-502.
- Webb JG, Harnek J, Munt BI, Kimblad PO, Chandavimol M, Thompson CR, Mayo JR, Solem JO. Percutaneous transvenous mitral annuloplasty: initial human experience with device implantation in the coronary sinus. *Circulation*. 2006;113:851-5.
- Webb JG, Harnek J, Solem JO, Munt B, Thompson CT, Kimblad PO. Percutaneous transvenous mitral annuloplasty via the coronary sinus. *Circulation* 2006; 113: 851-5.

#### **Nair, Dr. Parvathy**

- Nair P, Siu SC, Sloggett CE, Biclar LE, Sidhu RS, Yu EH. "The Assessment of Technical and Interpretative Proficiency in Echocardiography" *Journal of the American Society of Echocardiography*; July 2006; 19(7): 924-31.

#### **Rabkin, Dr. Simon W**

- Rabkin SW. Effect of amiodarone on phospholipids content and composition in heart, lung, kidney and skeletal muscle: relationship to alteration of thyroid function. *Pharmacology* 2006 Jan 5;76(3):129-135.
- Rabkin SW, Jue J, Tsang MY. Aortic valve sclerosis is associated with an echocardiographically determined thinner aortic wall. *Journal of Heart Valve Disease* 15(2):158-64, 2006 Mar.
- Khan NA, McAlister FA, Rabkin SW, Padwal R, Feldman RD, Campbell NR, Leiter LA, Lewanczuk RZ, Schiffrin EL, Hill MD, Arnold M, Moe G, Campbell TS, Herbert C, Milot A, Stone JA, Burgess E, Hemmelgarn B, Jones C, Larochelle P, Ogilvie RI, Houlden R, Herman RJ, Hamet P, Fodor G, Carruthers G, Culleton B, Dechamplain J, Pylypchuk G, Logan AG, Gledhill N, Petrella R, Tobe S, Touyz RM. Canadian Hypertension Education Program. The 2006 Canadian Hypertension Education

**Ramanathan, Dr. Krishnan**

- Jeger RV, Shannon M, Harkness MS, Ramanathan K, Buller CE, Pfisterer ME, Sleeper LA, Hochman JS. Emergency Revascularisation in Patients with Cardiogenic Shock on Admission: A Report from the SHOCK Trial and Registry. *European Heart Journal*. January 2006.
- Farkouh ME, Ramanathan K, Aymong ED, Webb JG, Harkness SM, Sleeper LA, Hochman JS. An early revascularization strategy is associated with a survival benefit for diabetic patients in cardiogenic shock after acute myocardial infarction. *Clin Cardiol*. 2006;29:204-10.
- Billeh R, Hirsh D, Barker C, Jorgensen B, Jeger R, Ramanathan K, Tseng CH, Hudaihed A, Haas F, Jorde UP. Randomized, double-blind comparison of acute beta1-blockade with 50 mg metoprolol tartrate vs 25 mg carvedilol in normal subjects. *Congest Heart Fail*. 2006;12:254-7.

**Saw, Dr. Jacqueline**

- Fung AY, Saw J. Book Chapter 1: Epidemiology and Significance of Carotid Artery Stenosis. Editors: Drs. Jacqueline Saw, J. Emilio Exaire, David S. Lee, Jay S. Yadav. Humana Press, Totowa, N.J., 2006. (Book Chapter)

**Webb, Dr. John G**

- Buller CE, Pate GE, Armstrong PW, O'Neill BJ, Webb JG, Gallo R, Welsh RC. Catheter Thrombosis during primary percutaneous coronary intervention for acute ST-elevation myocardial infarction despite subcutaneous low-molecular weight heparin, aspirin, clopidogrel and abciximab pre-treatment *Can J Cardiol* 2006; 22(6):511-515.
- Chandavimol M, McClure SJ, Carere R, Thompson CR, Ricci DR, MacKay M, Webb JG. Percutaneous aortic valve implantation: a case report. *Can J Cardiol* 2006; 22: 1159-1161.
- Webb JG, Chandavimol M, Thompson C, Ricci DR, Carere R, Munt B, Buller CE, Pasupati S, Lichtenstein S. Percutaneous aortic valve implantation retrograde from the femoral artery. *Circulation* 2006; 113: 842-850.
- Webb JG, Chandavimol M, Hamburger JN, Page G, Mc Manus B, Krucoff M, Mancini GBJ. Initial experience with a novel coronary rinsing and thrombectomy system. *J Invasive Cardiol* 2006; 18: 188-192.
- Pate GE, Thompson CR, Munt BI, Webb JG. Techniques for percutaneous closure of prosthetic paravalvular leaks. *Cathet Cardiovasc Interv* 2006; 67: 158-166.
- Webb JG, Harnet K, Solem JO, Munt B, Thompson CT, Kimblad PO. Percutaneous transvenous mitral annuloplasty via the coronary sinus. *Circulation* 2006; 113: 851-5.
- Hochman JS, Sleeper LA, Webb JG, et al. Early revascularization and long-term survival in cardiogenic shock complication acute myocardial infarction. *JAMA* 2006; 295:2511-2515
- Ye J, Lichtenstein SV, Cheung A, Carere RG, Thompson CR, Webb JG. Transapical aortic valve implantation in man. *J Thorac Cardiovasc Surg* 2006; 131: 1194-6.
- Garay F, Webb J, Hijazi ZM. Percutaneous replacement of pulmonary valve using the Edwards-Cribier percutaneous heart valve. First report in a human patient. *Cathet Cardiovasc Intervent* 2006; 67: 659-662.
- Alzubaidi A, Macdonald S, Clement J, Webb JG. Percutaneous closure of a para-anastomotic abdominal aortic aneurysm leak. *Cathet Cardiovasc Intervent* 2006; 68: 799-802.
- Webb JG, Pasupati S, Achtem L, Thompson CR. Rapid pacing to facilitate transcatheter prosthetic heart valve implantation. *Cathet Cardiovasc Intervent* 2006; 68: 199-204.
- Lichtenstein SV, Cheung A, Ye J, Thompson CR, Carere R, Pasupati S, Webb JG. Transapical

---

transcatheter aortic valve implantation in man. *Circulation* 2006; 114: 591-6.

- Ye J, Lichtenstein SV, Pasupati S, Carere RG, Thompson CR, Sinhal A, Webb JG. Six month outcome following transapical transcatheter aortic valve implantation in the initial seven patients. *Eur J Cardiothorac Surg* 2006; 31: 16-21.
- Munt B, Webb J. Percutaneous valve repair and replacement techniques. *Heart*, 2006; 92: 1369-1372.
- Farkouh ME, Ramanathan K, Aymong ED, Webb JG, Harkness SM, Sleeper LA, Hochman JS. An early revascularization strategy is associated with a survival benefit for diabetic patients in cardiogenic shock after acute myocardial infarction. *Clin Cardiol*. 2006;29:204-10.

#### **Wong, Dr. Graham**

- Wong GC, Marcotte F, Rudski LG. Impact of chronic lisinopril therapy on left atrial volume versus dimension in chronic organic mitral regurgitation. *Can J Cardiol*. 2006;22:125-9.

#### **Yeung-Lai-Wah, Dr. John**

- Yeung-Lai-Wah JA, Al Ghamdi B. Premature beats. In RE Rakel, ET Bope (eds) *Conn's Current Therapy*. 2006: 378 - 382. (Book Chapter)

### **CRITICAL CARE MEDICINE**

#### **Dodek, Dr. Peter M**

- Heyland DK, Dodek P, Rocker G, Groll D, Gafni A, Pichora D, Shortt S, Tranmer J, Lazar N, Kutsogiannis J, Lam M. for the Canadian Researchers at the End of Life Network (CARENET). What Matters the Most in End-of-Life Care: Perceptions of Seriously Ill Patients and their Family Members. *CMAJ*. 174: 627-633, 2006.
- Belway D, Henderson W, Keenan SP, Levy AR, Dodek PM. The effect of pre-transport stabilization and specialization of transport personnel on outcome of critically ill patients transferred between hospitals: a systematic review of the literature. *Journal of Critical Care*, 21: 8-18, 2006.
- Norena M, Wong H, Thompson WD, Keenan SP, Dodek PM. Adjustment of intensive care outcomes for severity of illness and comorbidity scores. *Journal of Critical Care*. 21: 142-150, 2006.
- Heyland DK, Frank C, Groll D, Pichora D, Dodek P, Rocker G, Gafni A, for the Canadian Researchers at the End of Life Network (CARENET) Understanding cardiopulmonary resuscitation decision making: Perspectives of seriously ill hospitalized patients and family members. *Chest*. 130: 419-428, 2006.
- Canadian Critical Care Trials Group (authors: Heyland D, Cook D, Dodek P, Muscedere J, Day A) A randomized trial of diagnostic techniques for suspected ventilator-associated pneumonia. *N Engl J Med*. 2006; 355: 2619-2630.

#### **Dorscheid, Dr. Delbert R**

- Davidson WJ, Dorscheid DR, Spragg R, Schulzer M, Mak E, Ayas NT. Exogenous pulmonary surfactant for the treatment of adult patients with acute respiratory distress syndrome: results of a meta-analysis. *Crit Care*. 10(2):R41. doi:10.1186/cc4851. 2006.
- Patchell BJ and Dorscheid DR. Repair of the injury to respiratory epithelial cells characteristic of asthma is stimulated by *Allomyrina dichotoma* agglutinin specific serum glycoproteins. *Clin Exp Allergy*. 36(5):585-93. 2006.
- Singhera GK, Chan TS, Cheng JY, Vitalis TZ, Hamann KJ, Dorscheid DR. Apoptosis of viral-infected airway epithelial cells limit viral production and is altered by corticosteroid exposure. *Respir Res*. 7(1):78. 2006.
- Allahverdian S, Patchell BJ and Dorscheid DR. Carbohydrates and epithelial repair - more than just

---

post-translational modification. *Curr Drug Targets*. 7(5):597-606. 2006.

- Allahverdian S, Wojcik KR, Dorscheid DR. Airway Epithelial Wound Repair: Role of Carbohydrate Sialyl Lewis X. *Am J Physiol Lung Cell Mol Physiol*. Jun 2. [Epub ahead of print] 2006.
- Dorscheid DR#, Patchell BJ#, Estrada O, Marroquin BA, Tse R, White SR. Effects of corticosteroid-induced apoptosis on airway epithelial wound closure in vitro. *Am J Physiol Lung Cell Mol Physiol*. Jun 2. [Epub ahead of print] 2006.  
# Authors are equal contributors and co-first authors.
- Davani EY, Boyd JH, Dorscheid DR, Wang Y, Meredith A, Chau E, Singhera GK, Walley KR. Cardiac ICAM-1 mediates leukocyte-dependent decreased ventricular contractility in endotoxemic mice. *Cardiovasc Res*. Jul 14; [Epub ahead of print] 2006.

#### **Keenan, Dr. Sean P**

- Belway D, Henderson W, Keenan SP, Levy A, Dodek PM. The Effect of Pretransport Stabilization and Specialization of Transport Personnel on Outcome of Critically Ill Patients Transferred Between Hospitals: A Systematic Review of the Literature. *J Crit Care* 2006; 21:8-17
- Norena M, Wong H, Thompson WD, Keenan SP, Dodek PM. Severity of Illness and Comorbidity Scores as Predictors of Intensive Care Outcomes. *J Crit Care* 2006; 21:142-150

#### **Russell, Dr. James A**

- Sutherland A, Gordon A, Russell JA. Are vasopressin levels increased or decreased in septic shock? *Crit Care Medicine* 2006; 34 (2): 542-543
- Gordon A, Russell JA. Goal-directed therapy: how long can we wait? *Crit Care* 2006; 9(6): 647-8
- Manocha S, Gordon A, Ebrahim S, Groshaus H, Walley KR, Russell JA. Inhaled beta-2 agonist salbutamol in acute lung injury: an association with improvement in acute lung injury. *Crit Care* 2006; 10: R12-R18
- Sutherland A, Gordon A, Russell JA. Are vasopressin levels increased or decreased in septic shock? *Crit Care Medicine* 2006; 34 (2): 542 -543.
- Gordon A, Russell JA. Goal-directed therapy: how long can we wait? *Crit Care* 2006; 9(6): 647 -8.
- Manocha S, Gordon A, Ebrahim S, Groshuas H, Walley KR, Russell JA. Inhaled beta-2 agonist salbutamol in acute lung injury: an association with improvement in acute lung injury. *Crit Care* 2006; 10: R12 -R18.
- Rice TW, Wheeler AP, Morris PE, Paz HL, Russell JA, Edens, TR, Bernard GR. Safety and efficacy of affinity purified, anti-tumor necrosis factor-alpha, ovine Fab for injection (CryoFab™) in severe sepsis. *Crit Care Medicine* 2006; 34 (9): 2271 -2281.
- Bernard GR, Dhainaut JF, PhD, Russell JA, Shorr A, Macias WL, Nelson DR, Sundin DP. Protein C Concentrations in Severe Sepsis: Early Directional Change in Plasma Levels Predict Outcome. *Crit Care* 2006; [ccforum.com/content/10/3/R92](http://ccforum.com/content/10/3/R92) (open access).
- Wiedemann HP, Wheeler AP, Bernard GR, Thompson BT, Hayden D, de Boisblanc B and NHLBI ARDSnet. Comparison of two fluid management strategies in acute lung injury. *N Engl J Med* 2006; 354 (24): 2564 -2575. (J. Russell was Site PI of UBC site of ARDSnet).
- Wheeler AP, Bernard GR, Thompson BT, et al of NHLBI ARDSnet. Pulmonary-artery versus central venous catheter to guide treatment of acute lung injury. *N Engl J Med* 2006; 354 (21): 2213 -2211. (J. Russell was Site PI of UBC site of ARDSnet)
- Walley KR, Russell JA. Protein C -1641 AA is associated with decreased survival and more organ dysfunction in severe sepsis. *Crit Care Medicine* 2006; 35 (open access ahead of publication Nov 22). Also: *Crit Care Medicin* 2007; 35(1): 12-17
- Russell JA. Management of sepsis. *N Engl J Med* 2006; 355 (16): 699-713.
- Manocha S, Russell JA, Sutherland AM, Wattanatham A, Walley KR. Fibrinogen-beta gene haplotype clade is associated with mortality in sepsis. *J Infection* (2006) doi:10.1016/j.inf.2006.10.001

---

**Walley, Dr. Keith R**

- Manocha S, Gordon AC, Salehifar E, Groshaus H, Walley KR, Russell JA. Inhaled beta-2 agonist salbutamol and acute lung injury: an association with improvement in acute lung injury. *Crit Care* 10(1):R12, 2006.
- Cooper DJ, Pellegrino V, Walley KR. Vasopressin: the preferred vasopressor in sepsis? ... not today, not yet. *Crit Care Resusc* 8(3):239-40, 2006.
- Davani EY, Boyd JH, Dorscheid DR, Wang Y, Meredith A, Chau E, Singhera GK, Walley KR. Cardiac ICAM-1 mediates leukocyte-dependent decreased ventricular contractility in endotoxemic mice. *Cardiovasc Res* 72: 134-142, 2006.
- Manocha S, Gordon AC, Salehifar E, Groshaus H, Walley KR, Russell JA. Inhaled beta-2 agonist salbutamol and acute lung injury: an association with improvement in acute lung injury. *Crit Care* 10(1):R12, 2006.
- Lee KWJ, Hill JS, Walley KR, Frohlich JJ. Relative value of multiple plasma biomarkers for as risk factors for coronary artery disease and death in an angiography cohort. *CMAJ* 174(4):461-466, 2006.
- Walley DC, Tripp BW, Song YC, Walley KR, Tebbutt SJ, MACGT: multi-dimensional automated clustering genotyping tool for analysis of microarray-based mini-sequencing data. *Bioinformatics* 22(9):1147-1149, 2006.
- Cooper DJ, Pellegrino V, Walley KR. Vasopressin: the preferred vasopressor in sepsis? ... not today, not yet. *Crit Care Resusc* 8(3):239-40, 2006.
- Davani EY, Boyd JH, Dorscheid DR, Wang Y, Meredith A, Chau E, Singhera GK, Walley KR. Cardiac ICAM-1 mediates leukocyte-dependent decreased ventricular contractility in endotoxemic mice. *Cardiovasc Res* 72: 134-142, 2006.
- Boyd JH, Mathur S, Wang Y, Bateman R, Walley KR. Toll-like receptor stimulation in cardiomyocytes decreases contractility and initiates an NF-kappaB dependent inflammatory response. *Cardiovasc Res* 72(3):384-93, 2006.
- Manocha S, Russell JA, Sutherland AM, Wattanatham A, Walley KR. Fibrinogen- $\beta$  gene haplotype is associated with mortality in sepsis. *J Infect* 2006 Nov 17,[Epub ahead of print]

**ENDOCRINOLOGY****Fung, Dr. Michelle A**

- Al Ghofaili K, Fung M, Ao Z, Meloche M, Shapiro RJ, Warnock G, Elahi D, Meneilly G, Thompson D. Effect of Exenatide on Beta Cell Function after Islet Transplantation in Type 1 Diabetes. *Diabetes Care*. Accepted May 2006.
- Fung M, Thompson D, Shapiro RJ, Warnock G, Andersen DK, Elahi D, Meneilly G. Effect of Glucagon-like Peptide-1 (7-37) on Beta Cell Function After Islet Transplantation in Type 1 Diabetes. *Diabetes Research and Clinical Practice*.74(2):189-93, 2006 Nov.

**Gill, Dr. Sabrina**

- Pagan Y, Srouji SS, Jimenez Y, Emerson A, Gill S, Hall JE. Inverse relationship between and LH and BMI in PCOS is mediated at a pituitary and not hypothalamic level. *Journal of Clinical Endocrinology & Metabolism* Apr 2006;91(4):1309-16.
- Gill S: Discontinuation of menopause hormonal therapy: What are the symptoms and how should they be managed? Commentary. *Nature Clinical Practice Endocrinology & Metabolism*; April 2006; 2(4):192-93
- Lee J, Gill S, Liu J, Weinstein L: A Case of Sporadic Pseudohypoparathyroidism 1B: Update in Pathophysiology. *Endotrends* (accepted)

**Johnson, Dr. Michelle D**



- 
- Ezzat S, Serri O, Beaugard H, Chik CL, Johnson MD, Marcovitz S, Nyomba BLG, Ramirez JR, Ur E: Canadian Consensus Guidelines for the Diagnosis and Treatment of Acromegaly. *Clinical and Investigative Medicine* 29(1): 29-39, 2006

**Kendler, Dr. David L**

- Kendler DL. Boning up on osteoporosis--current thinking on management. Interview by Emma Buchanan. *S Afr Med J*. 2006 Jul;96(7):604-5.
- Recker RR, Kendler D, Recknor CP, Rooney TW, Lewiecki EM, Utian WH, Cauley JA, Lorraine J, Qu Y, Kulkarni PM, Gaich CL, Wong M, Plouffe L Jr, Stock JL. Comparative effects of raloxifene and alendronate on fracture outcomes in postmenopausal women with low bone mass. *Bone*. 2006 Dec 18; [Epub ahead of print]
- Reid DM, Hosking D, Kendler D, Brandi ML, Wark JD, Weryha G, Marques-Neto JF, Gaines KA, Verbruggen N, Melton ME. Alendronic acid produces greater effects than risedronic acid on bone density and turnover in postmenopausal women with osteoporosis : results of FACTS -international. *Clin Drug Investig*. 2006;26(2):63-74.
- Leib ES, Binkley N, Bilezikian JP, Kendler DL, Lewiecki EM, Petak SM. Position Development Conference of the International Society for Clinical Densitometry. Vancouver, BC, July 15-17, 2005. *J Rheumatol*. 2006 Nov;33(11):2319-21.
- Kendler D. Boning up on osteoporosis--current thinking on management. Interview by Emma Buchanan. *S Afr Med J*. 2006 Jul;96(7):604-5.
- Lewiecki EM, Binkley N, Bilezikian JP, Kendler DL, Leib ES, Petak SM. Official positions of the International Society for Clinical Densitometry. *Osteoporos Int*. 2006;17(11):1700-1. Epub 2006 Aug 18.
- Davison KS, Siminoski K, Adachi JD, Hanley DA, Goltzman D, Hodsmann AB, Josse R, Kaiser S, Olszynski WP, Papaioannou A, Ste-Marie LG, Kendler DL, Tenenhouse A, Brown JP. Bone strength: the whole is greater than the sum of its parts. *Semin Arthritis Rheum*. 2006 Aug;36(1):22-31. Epub 2006 Jul 3. Review.
- Davison KS, Siminoski K, Adachi JD, Hanley DA, Goltzman D, Hodsmann AB, Josse R, Kaiser S, Olszynski WP, Papaioannou A, Ste-Marie LG, Kendler DL, Tenenhouse A, Brown JP. The effects of antifracture therapies on the components of bone strength: assessment of fracture risk today and in the future. *Semin Arthritis Rheum*. 2006 Aug;36(1):10-21. Epub 2006 Jul 3. Review.
- Kendler DL, Kiebzak GM, Ambrose CG, Dinu C, Robertson S, Schmeer P, Van Pelt JL. Effect of calcium tablets on interpretation of lumbar spine DXA scans. *J Clin Densitom*. 2006 Jan-Mar;9(1):97-104. Epub 2006 Mar 29.
- Khan AA, Hanley DA, Bilezikian JP, Binkley N, Brown JP, Hodsmann AB, Josse RG, Kendler DL, Lewiecki EM, Miller PD, Olszynski WP, Petak SM, Syed ZA, Theriault D, Watts NB; Canadian Panel of the International Society for Clinical Densitometry. Standards for performing DXA in individuals with secondary causes of osteoporosis. *J Clin Densitom*. 2006 Jan-Mar;9(1):47-57. Epub 2006 Apr 4.
- Leslie WD, Adler RA, El-Hajj Fuleihan G, Hodsmann AB, Kendler DL, McClung M, Miller PD, Watts NB; International Society for Clinical Densitometry. Application of the 1994 WHO classification to populations other than postmenopausal Caucasian women: the 2005 ISCD Official Positions. *J Clin Densitom*. 2006 Jan-Mar;9(1):22-30. Epub 2006 May 12.
- Binkley N, Bilezikian JP, Kendler DL, Leib ES, Lewiecki EM, Petak SM; International Society for Clinical Densitometry. Official positions of the International Society for Clinical Densitometry and Executive Summary of the 2005 Position Development Conference. *J Clin Densitom*. 2006 Jan-Mar;9(1):4-14. Epub 2006 May 12.
- Kendler DL. Strontium ranelate--data on vertebral and nonvertebral fracture efficacy and safety: mechanism of action. *Curr Osteoporos Rep*. 2006 Mar;4(1):34-9. Review.

---

**Prior, Dr. Jerilynn C**

- Richards JB, Joseph L, Schwartzman K, Kreiger N, Tenenhouse A, Goltzman D, The effect of cyclooxygenase-2 inhibitors on bone mineral density: results from CaMOS Research Group. *Osteoporosis International*. 2006; 17(9):1410-9.
- Sawka AM, Papaioannou A, Josse RG, Murray TM, Ioannidis G, Hanley DA, Prior JC, Thabane L, Papadimitropoulos EA, Gafni A, Pickard L, Anastassiades T, Kirkland S, Adachi JD, and Tenenhouse A, CaMOS Research Group. What is the Number of Older Canadians Needed to Screen by Measurement of Bone Density to Detect and Undiagnosed Case of Osteoporosis? A Population-Based Study From CaMos. *Journal of Clinical Densitometry*. 2006; 9(4):413-418.
- Hopman WM, Berger C, Joseph L, VandenKerkhof E, Anastassiades T, Adachi JD, Ioannidis G, Brown JP, Hanley DA, Papadimitropoulos EA, Tenenhouse A, CaMOS Research Group. The natural progression of health-related quality of life: results of a five-year prospective study of SF-36 scores in a normative population. *Quality Life Research*. 2006 Apr; 15(3) : 527-36
- Prior, JC, Perimenopause lost-reframing the end of menstruation. *Journal of Reproductive and Infant Psychology*. 2006 Nov, 4: 323 - 335
- Prior JC, FSH and bone-important physiology or not? *Trends in Molecular Medicine*. 2007 Jan:13 (1) Epub 2006 Dec1.

**Tildesley, Dr. Hugh D**

- Tildesley HD. Efficacy and Safety of Atorvastatin in the Prevention of Cardiovascular End Points in Subjects with Type 2 Diabetes: The Atorvastatin Study for Prevention of Coronary Heart Disease Endpoints in Non-Insulin Dependent Diabetes Mellitus (ASPEN) 2006
- Johns K, Olynik C, Mase R, Kreisman S, Tildesley HD . Gestational Diabetes Mellitus Outcome in 394 Patients. *Journal of Obstetrics-Gynecology Canada* 2006 Feb. 28: 122-7
- Bhatt DL, Fox KA, Hacke W, Berger PB, Black HR, Boden WE, Cacoub P, Cohen EA, Creager MA, Easton JD, Flather MD, Haffner SM, Hamm CW, Hankey GJ, Johnston SC, Mak KH, Mas JL , Montalescot G, Pearson TA, Steg PG, Steinhubl SR, Weber MA, Brennan DM, Ribaldo LF, Booth J, Topol RJ, for the CHARISMA Investigators. Clopidogrel and Aspirin versus Aspirin Alone for the Prevention of Atherothrombotic Events . *New England Journal of Medicine*. Vol. 354:1706-1717. April 2006 No. 16
- Tildesley HD, Aydin C, Ignaszewski A, Strelzow J, Yu E, Bondy G. Sulfonylurea Therapy is Associated with Increased NT-proBNP levels in the Treatment of Type 2 Diabetes . *International Journal of Cardiology*. 2006 July 14
- Johns K, Robinson C, Wilson I, Bondy G, Tildesley HD. Does the Microalbumin:Creatinine Ratio Lack Clinical Utility in Predicting Microalbuminuria? *BC Medical Journal* . Oct 2006
- Taylor R, Tildesley HD, Aydin C . Division of Endocrinology, St. Paul's Hospital, Vancouver, BC . Cost and Efficacy Comparison between Thiazolidinedione Therapy and Insulin Therapy in Patients with Type 2 Diabetes. *BC Medical Journal* . Oct 2006

**Wilkins, Dr. Graeme E**

- Wiseman S, Baliski C, Irvine R, Anderson D, Wilkins G, Filipenko D, Zhang H, Bugis S. Hemithyroidectomy: The Optimal Surgical Approach For Individuals Undergoing Surgery For A Cytological Diagnosis of Follicular Neoplasm. *Annals of Surgical Oncology* 13 (3): 1-8, 2006.

**GASTROENTEROLOGY****Byrne, Dr. Michael F**

- Byrne MF. Gallstone pancreatitis-Who really needs an ERCP? *Can J Gastroenterol*. 2006;20:15-17.
- Gerke H, Jaffe TA, Mitchell RM, Byrne MF, Stiffler HL, Branch MS, Baillie J, Jowell PS. Endoscopic

---

ultrasound and computer tomography are inaccurate methods of classifying cystic pancreatic lesions. *Dig Liver Dis.* 2006;38:39-44.

- Byrne MF. "Wake me up before you go-go". Drug, 'wham', scope, then snooze. Can't we do better with conscious sedation for endoscopy? *Can J Gastroenterol.* 2006 Dec;20(12):767-9.
- Cox D, Maree AO, Dooley M, Conroy R, Byrne MF, Fitzgerald DJ. Effect of enteric coating on antiplatelet activity of low-dose aspirin in healthy volunteers. *Stroke.* 2006 Aug;37(8):2153-8.
- Byrne MF. Nonanesthesiologist-administered propofol sedation in endoscopic practice. *Gastroenterol Hepatol.* 2006;2(6):416-418.
- Ho JK, Mahmoudi N, Al-Ali J, Yoshida EM, Byrne MF. Duodenal Varices: A Rare Manifestation of Portal Hypertension. *Internet Journal of Gastroenterology* 2006.

#### **Enns, Dr. Robert A**

- Case in of the season: Aneurysmal Dilation of A Small Bowel Semin *Roentgenol.* 2006 Oct;41(4):248-249

#### **Erb, Dr. Siegfried R**

- Ho JK, Harrigan PR, Sherlock CH, Steinbrecher UP, Erb SR, Mo T, Chung SW, Buczkowski AK, Intaraprasong P, Scudamore CH, Yoshida EM. Utilization of a liver allograft from a hepatitis B surface antigen positive donor. *Transplantation.* 2006;81:129-131.
- Jaber Alali, Alnoor Ramji, Jin K. Ho, Charles H. Scudamore, Siegfried R. Erb, Elsie Cheung, Bina Kopit, Clare A. Bannon, Stephen W. Chung, John G. Soos, Andrzej K. Buczkowski, Eileen M. Brooks, Urs P. Steinbrecher, Eric M. Yoshida. Liver Transplant Candidate Unsuitability: A Review of the BC Experience. *Canadian Journal of Gastroenterology.* 2006; 20: 95-99.
- James J. Powell, Wichian Apiratpracha, Nilufar Partovi, Siegfried R. Erb, Charles H. Scudamore, Urs P. Steinbrecher, Andrzej K. Buczkowski, Stephen W. Chung, Eric M. Yoshida. Subcutaneous Administration of Hepatitis B Immune Globulin (HBIG) in Combination with Lamivudine Following Orthotopic Liver Transplantation: Effective Prophylaxis Against Recurrence. *Clinical Transplantation* 2006; 20:524-25.
- Jin K. Ho, Hin Hin Ko, David F. Schaeffer, Siegfried R. Erb, Cherise Wong, Andrzej K. Buczkowski, Stephen W. Chung, Charles H. Scudamore, Urs P. Steinbrecher, Eric M. Yoshida. Sexual Health after Orthotopic Liver Transplantation. *Liver Transplantation* 2006; 12: 1478-84.

#### **Freeman, Dr. Hugh J**

- Freeman HJ, Berean KW. Resolution of extensive paraneoplastic collagenous sprue and colitis after resection of colon cancer. *Can J Gastroenterol* 2006; 20: 357-360.
- Freeman HJ. Hepatobiliary and pancreatic disorders in celiac disease. *World J Gastroenterol* 2006; 12: 1503-1508.
- Freeman HJ. Asymptomatic familial colon cancer with FDG-PET scanning for recurrent disease. *Int J Gastrointestinal Cancer* 2006; 36: 163-170.
- Freeman HJ. Crohn's disease initially diagnosed after age 60 years. *Age and Aging*, 2006.
- Freeman HJ. Application of the Montreal Classification for Crohn's disease to a single clinician database of 1015 patients. *Can J Gastroenterology* 2006.
- Freeman HJ. Granuloma-positive Crohn's disease. *Can J Gastroenterology* 2006.
- Freeman HJ, Berean KW, Nimmo M. Evolution of collagenous colitis into severe and extensive ulcerative colitis. *Can J Gastroenterology* 2006.
- Freeman HJ. Adult celiac disease followed by onset of systemic lupus erythematosus. *J Clin Gastroenterol* 2006.

#### **Lam, Dr. Eric C**

- 
- da Silveira EB, Lam E, Martel M, Bensoussan K, Barkun AN. The importance of process issues as predictors of time to endoscopy in patients with acute GI-bleeding using the RUGBE data. *Gastrointest Endosc.* 2006; 64: 299-309.

#### **Ramji, Dr. Alnoor**

- Alali J, Ramji A, Ho JK, Scudamore CH, Erb SR, Cheung E, Kopit B, Bannon CA, Chung SW, Soos JG, Buczkowski AK, Brooks EM, Steinbrecher UP, Yoshida EM. Liver transplant candidacy unsuitability: A review of the British Columbia experience. *Can J Gastroenterol.* 2006 Feb;20(2):95-9.

#### **Salh, Dr. Baljinder Singh**

- Moussavi M, Assi K, Gomez-Munoz A and Salh B. Curcumin modulates ceramide generation via the de novo pathway in colon cancer cells. *Carcinogenesis* 27(8): 1636-44, 2006. Epub 2006 Feb 25
- Marotta A, Parhar K, Hundal R, Duronio V and Salh B. Differential Targeting of Protein Kinase B in Cell Death Induced by Sulindac And Its Metabolite Sulindac Sulfide. *Int J Oncol* 28(6): 1471-9, 2006
- K. Assi, R. Pillai, A. Gomez-Munoz, D. Owen and B. Salh. The Specific JNK Inhibitor SP600125 Targets TNFa Production and Epithelial Cell Apoptosis in Acute Murine Colitis. *Immunology* 118(1): 112-21, 2006
- K Parhar, J Morse and B. Salh. The Role of CK2 in Epithelial Cell Inflammatory Signaling. *International Journal of Colorectal Disease*, Epub Sep 2006
- K Parhar, S Eivemark, A Gomez-Munoz, A Yee and B Salh. Investigations of Interleukin 1b - Mediated Regulation of NF-kB in Colonic Cells Reveals Divergence Between PKB And PDK - Transduced Events. *Molecular and Cellular Biochemistry*, Epub Nov 2006

#### **Steinbrecher, Dr. Urs P**

- Ho JK, Harrigan PR, Sherlock CH, Steinbrecher UP, Erb SR, Mo T, Chung SW, Buczkowski AK, Intaraprasong P, Scudamore CH, Yoshida EM. Utilization of a liver allograft from a hepatitis B surface antigen positive donor. *Transplantation.* 2006;81:129-131.
- 2006 Alali J, Ramji A, Ho JK, Scudamore CH, Erb SR, Cheung E, Kopit B, Bannon CA, Chung SW, Soos JG, Buczkowski AK, Brooks EM, Steinbrecher UP, Yoshida EM. Liver transplant candidacy unsuitability: a review of the British Columbia experience. 2006. *Can. J. Gastroenterol.* 20:95-99.
- 2006 Powell JJ, Apiratpracha W, Partovi N, Erb, SR, Scudamore CH, Steinbrecher UP, Buczkowski AK, Chung, SW, Yoshida, EM. Subcutaneous administration of hepatitis B immune globulin in combination with lamivudine following orthotopic liver transplantation: effective prophylaxis against recurrence. 2006. *Clin. Transplant.* 20:524-525.

#### **Tai, Dr. Isabella T**

- Taghizadeh F, MJ Tang, IT Tai. Synergism between vitamin D and SPARC-induced apoptosis and inhibition of cell growth results in increased susceptibility of therapy-resistant colon cancer cells to chemotherapy. Accepted *Mol. Cancer Therapeutics*.

#### **Yoshida, Dr. Eric M**

- Leung Y, Ip Chan J, Yoshida EM, Wu HX, Daly PC. A Cross-Sectional Analysis of Acute Hepatitis B Reported to the Vancouver Coastal Health Authority 2000-2003. *Canadian Journal of Gastroenterology* 2006; 20: 471-74.
- Alali J, Ramji A, Ho JK, Scudamore CH, Erb SR, Cheung E, Kopit B, Bannon CA, Dhung SW, Soos JG, Buczkowski AK, Brooks EM, Steinbrecher UP, Yoshida EM. Liver Transplant Candidate Unsuitability: A Review of the BC Experience. *Canadian Journal of Gastroenterology.* 2006; 20: 95-99.

- 
- Ramji A, Yoshida EM, Kwan WCP. Durability of Lamivudine Associated HBe Antigen Seroconversion in Chinese-Canadian Patients with Chronic Hepatitis B Virus Infection. *Internet Journal of Gastroenterology* 2006; 4 (E-journal @ www.ispub.com)
  - Ho JK, Yoshida EM. Extra-hepatic Consequences of Cirrhosis. *Medscape General Medicine* 2006; 8:59 (8 pages) (E Journal; www.medscape.com) (Invited article subjected to peer-review).
  - Bain VG, Kaita K, Yoshida EM, Swain M, Heathcote J, Newmann AU, Fiscella M, Yu R, Osborn B, Cronin PA, Freimuth WW, McHutchinson JG, Subramanian GM. A Phase 2 Study to Evaluate the Antiviral Activity Safety and Pharmacokinetics of Albuferon Recombinant Human Albumin-Inteferon alpha Fusion Protein in Genotype 1 Chronic Hepatitis C Patients. *Journal of Hepatology* 2006; 44: 671-78.
  - Sherman M, Yoshida EM, Deschenes M, Krajden M, Bain V, Peltekian K, Anderson F, Kaita K, Simonyi S, Lee SS. Peginterferon alfa-2a (40KD) (Pegasys) plus ribavirin (Copegus) in chronic hepatitis C patients who failed previous interferon therapy: results of a multicentre open-label access program in Canada. *Gut* 2006; 55: 1631-1638.
  - Cheung J, Wong W, Zandieh I, Leung Y, Lee SS, Ramji A, Yoshida EM. Acute Management and Secondary Prophylaxis of Esophageal Variceal Bleeding: a Western Canadian Study. *Canadian Journal of Gastroenterology* 2006; 20: 531-34.
  - Cantarovich M, Yoshida EM, Marotta PJ, Greig PD, Kneteman NM, Marleau D, Peltekian KK, Barkun J. Poor Prediction of the Glomerular Filtration Rate Using Current Formulae in De Novo Liver Transplant Patients. *Transplantation* 2006; 82: 433-36.
  - Ho JK, Harrigan PR, Sherlock CH, Steinbrecher UP, Erb SR, Mo T, Chung SW, Buczkowski AK, Intaraprasong P, Scudamore CH, Yoshida EM. Utilization of a liver allograft from a hepatitis B surface antigen positive donor. *Transplantation*. 2006;81:129-131.
  - Ko H, Yoshida EM. Acute fatty liver of pregnancy. *Can J Gastroenterol*. 2006;20:25-30.
  - Lee SS, Bain VG, Peltekian K, Krajden M, Yoshida EM, Deschenes M, Heathcote J, Bailey RJ, Simonyi S, Sherman M. Treating chronic hepatitis C with pegylated interferon alfa-2a (40 KD) and ribavirin in clinical practice. *Aliment Pharmacol Ther*. 2006;23:397-408.
  - Wang CS, Ko HH, Yoshida EM, Marra C, Richardson K. The Efficacy of Interferon-Based Combination Anti-Viral Therapy for Hepatitis C Virus After Liver Transplantation: A Meta-Analysis. *American Journal of Transplantation* 2006; 6: 1586-99.
  - Powell JJ, Apiratpracha W, Partovi N, Erb SR, Scudamore CH, Steinbrecher UP, Buczkowski AK, Chung SW, Yoshida EM. Subcutaneous Administration of Hepatitis B Immune Globulin (HBIG) in Combination with Lamivudine Following Orthotopic Liver Transplantation: Effective Prophylaxis Against Recurrence. *Clinical Transplantation* 2006; 20:524-25.
  - Ho JK, Ko HH, Schaeffer DF, Erb SR, Wong C, Buczkowski AK, Chung SW, Scudamore CH, Steinbrecher UP, Yoshida EM. Sexual Health after Orthotopic Liver Transplantation. *Liver Transplantation* 2006; 12: 1478-1484.
  - Tremlett H, Seemuller S, Zhao Y, Yoshida EM, Petkau J, Oger J. Liver Test Abnormalities in Multiple Sclerosis. *Neurology* 2006; 67: 1291-1293.
  - Bain VG, Yoshida EM, Kaita KD, Swain MG, Heathcote EJ, Garcia A, Moore PA, Yu R, McHutchinson JG, Subramanian GM. Pharmacodynamics of Albumin-Interferon alfa Assessed by Induction of Interferon Specific Gene Expression in Peripheral Blood in a Phase 2a Study in INF alfa Naive Patients with Genotype 1 Chronic Hepatitis C Infection. *Hepatology Research* 2006; 35: 256-262.
  - Shah J, Yoshida EM, Connors J, Gill S. Hepatic Dysfunction During and After Lymphoma Chemotherapy in Patients with Hepatitis C. *Journal of Clinical Gastroenterology* 2006; 40: 636-38.
  - Yoshida EM, Reilly M, Arbour LT. Autoimmune Liver Disease in Canadian First Nations Aboriginal Communities of British Columbia's Pacific NorthWest. *World Journal of Gastroenterology* 2006; 12:

---

3625-27 (Invited Article subjected to peer-review).

- Zandieh I, Adenwalla M, Cheong-Lee C, Ma PE, Yoshida EM. Retinal Vein Thrombosis Associated with Combination Peginterferon and Ribavirin Therapy for Chronic Hepatitis C. *World Journal of Gastroenterology* 2006; 12: 4408-10.
- Law JK, Ali JA, Harrigan PR, Sherlock CH, Savage K, Yoshida EM. Fatal Post-Lymphoma Chemotherapy Hepatitis B Reactivation Secondary to the Emergence of a YMDD Mutation Viral Strain with Lamivudine Resistance. *American Journal of Hematology* 2006; 81: 969-972.
- Santos AD, Partovi N, Ford JE, Yoshida EM. A Review of Anemia and Neutropenia in the Treatment of Chronic Hepatitis C with PegInteferon & Ribavirin Combination Therapy and the Use of Hematologic Growth Factors as Adjuvant Therapy. *Annals of Pharmacotherapy* (accepted MS# H169).
- Apiratpracha W, Ho JK, Powell JJ, Yoshida EM. Acute Lower Gastrointestinal Bleeding from a Dieulafoy Lesion in the Rectum Just Proximal to the Ano-Rectal Junction Post-Orthotopic Liver Transplant. *World Journal of Gastroenterology* 2006; 14: 7547-7578.

## GENERAL INTERNAL MEDICINE

### Hatala, Dr Rose

- Hatala R, Keitz SA, Wilson MC, Guyatt G. Beyond journal clubs: moving towards an integrated evidence-based medicine curriculum. *JGIM*. 2006; 21:538-541.

### Khan, Dr. Nadia A

- Khan N, McAlister F. Beta blockers for the treatment of primary hypertension. *Lancet*. 2006 Jan 21;367(9506):208
- N Khan, I Ma\*, C R. Thompson, K Humphries, D Salem, M. Sarnak, A Levin. Kidney function and mortality among patients with left ventricular systolic dysfunction *J Am Soc Nephrol*. 2006;17(1):244-53.
- Khan N, Rahim S, Anand S, Panju A. Does the clinical exam predict significant peripheral arterial disease? *JAMA*. 2006;295(5):536-46.
- SH Chou, BR Hemmelgarn, N Wiebe, BF Culleton, BJ Manns, S Klarenbach, JS Gill, NA Khan, M Tonelli for the Alberta Kidney Disease Network. Differences in use of peritoneal dialysis and survival among East Asian, Indo Asian and White end-stage renal disease patients in Canada. *Am J Kidney Dis*. 2006 Dec;48(6):964-71
- Khan NA, Finlay A. McAlister, Norman RC Campbell, Ross D Feldman, Jeff Mahon, Richard Lewanczuk, Simon W Rabkin, Kelly B. Zarnke, Brenda Hemmelgarn, Marcel Lebel, Mitchell Levine, Carol Herbert, for the Canadian Hypertension Education Program. The 2006 Canadian Recommendations for the Management of Hypertension: Therapy. *Canadian Journal of Cardiology*. 2006 May 15;22(7):583-93.
- Khan NA, Hemmelgarn B, Tonelli M, Thompson C, Levin A. Troponins and Meta analysis. *Circulation* 2006;113(20) (letter to editor).
- Khan NA, McAlister FA. Beta-blockers for the treatment of hypertension: a re-examination of published data. *CMAJ*. 2006 Jun 6;174(12):1737-42. (also will be featured in ACP Journal Club)
- Campbell NR, Khan NA, Grover S. Assessment of absolute cardiovascular risk as a starting point for interventions to reduce cardiovascular risk in hypertensive patients. *J Hypertens*. 2006 Sep;24(9):1683-5

### Magee, Dr. Laura A

- Sherwin JE, Lockitch G, Rosenthal P, Ashwood ER, Geaghan S, Magee L, et al. National Academy of Clinical Biochemistry Laboratory Medicine practice guidelines: maternal-fetal risk assessment and reference values in pregnancy. Washington, DC: AACC Press, 2006 ([www.nacb.org](http://www.nacb.org))

- 
- Magee L, Shrim A, Koren G. Diagnosis and management of nausea and vomiting in pregnancy. *Fet Mat Med Rev* 2006;17:45-67

#### **Ma, Dr. Irene W**

- Khan NA, Ma I, Thompson CR, Humphries K, Salem DN, Sarnak MJ, Levin A. Kidney Function and Mortality among Patients with Left Ventricular Systolic Dysfunction. *J Am Soc Nephrol.* 2006 Jan; 17(1):244-53.
- Ma IW, Valentine HA, Shibata A, Waskerwitz J, Dafoe DC, Alfrey EJ, Tan JC, Millan M, Busque S, Scandling JD. Validation of a screening protocol for identifying low-risk candidates with type 1 diabetes mellitus for kidney with or without pancreas transplantation. *Clin Transplant.* 2006 Mar;20(2):139-46.

#### **Palepu, Dr. Anita**

- Russell LB, Hubley AM, Palepu A, Zumbo BD. Does Weighting Capture What's Important: Revisiting Subjective Importance Weighting with a Quality of life Measure. *Social Indicators Research* 2006; 75: 141-167
- Small D, Palepu A, Tyndall MW. The establishment of North America's first state sanctioned supervised injection facility: A case study in culture change. *International Journal of Drug Policy* 2006; 2: 73-82.
- Paasche-Orlow MK, Cheng DM, Palepu A, Meli S, Farber V, Samet JH. Health literacy and HIV-RNA suppression: A longitudinal perspective. *Journal of General Internal Medicine.* 2006; 21:835-40.
- Palepu A, Tyndall MW, Joy R, Kerr T, Wood E, Press N, Hogg RS, Montaner JSG. Antiretroviral resistance and HIV treatment outcomes among HIV/HCV co-infected injection drug users: The role of methadone maintenance therapy. *Drug and Alcohol Dependence* 2006; 84: 188-94. PMID: 16542797
- Palepu A, Cheng DM, Kim T, Nunes D, Vidaver J, Alperen J, Saitz R, Samet JH. Substance abuse treatment and access to liver specialty care among HIV/HCV co-infected persons with alcohol problems. *Journal of Substance Abuse Treatment* 2006 (4): 411-7
- Nosyk B, Sun H, Li X, Palepu A, Anis AH. Highly active antiretroviral therapy and hospital readmission: Comparison of a matched cohort. *BMC Infectious Diseases* 2006; 6:146.
- Wood E, Kerr T, Hogg RS, Palepu A, Zhang R, Strathdee SA, Montaner JS. Impact of HIV testing on uptake of HIV therapy among antiretroviral naïve HIV-infected injection drug users. *Drug and Alcohol Review* 2006; 25: 451-4.

#### **Rosenbaum, Dr. Debbie A**

- Hemoglobin at time of referral prior to dialysis predicts survival: an association of haemoglobin with long-term outcomes. Levin, A, Djurdjev O, Duncan J, Rosenbaum, D, Werb R. *NDT* 2006 Feb;21(2):370-7.

#### **Wright, Dr. James (Jim) M**

- Gueyffier F, Wright JM. The lower the better. Does simplicity lead to absurdity? *J Hypertension.* 2006;24:432-433.
- Tejani A, Musini V, Perry TLjr, Mintzes B, Wright JM. Benign prostatic hypertrophy. Update on drug therapy. *Can Fam Physician.* 2006;52:1075-1078.

### **GERIATRIC MEDICINE**

#### **Beattie, Dr. B L**

- MacEntee, M, Wyatt, CCL, Beattie, BLB, Paterson, b, Levy-Milne, R, McCandless, L, Kazanjian, A,

---

"Provision of Mouth-Care in Long-term Care Facilities: an Educational Trial", *Community Dentistry and Oral Epidemiology* 2006

**Cook, Dr. Wendy L**

- Salter AE, Khan KM, Donaldson MG, Davis JC, Buchanan J, Abu-Laban RB, Cook WL, Lord SR, McKay HA. Community-dwelling seniors who present to the emergency department with a fall do not receive Guideline care and their fall risk profile worsens significantly: a 6-month prospective study. *Osteoporosis International*. 2006; 17(5):672-83. Epub 2006 Feb 21.
- Cook WL, Tomlinson G, Donaldson M, Markowitz SN, Naglie G, Sobolev B, Jassal SV. Falls and fall- related injuries in older dialysis patients. *Clinical Journal of the American Society of Nephrology*. 2006; 1:1197-1204. Epub 2006 August 30

**Lee, Dr. Philip E**

- Lee PE, Gill SS and Rochon PA. "Atypical antipsychotics to Treat Neuropsychiatric Symptoms of Dementia. *Neuropsychiatric Disease and Treatment* 2006; 2(4): 1-9

**Madden, Dr. Kenneth M**

- Madden KM, Levy WC, Stratton J. Exercise Training and Heart Rate Variability in Older Adult Female Subjects. *Clinical Investigative Medicine*, 29(1):20-28, 2006.
- Madden KM. Primary Presentations of Syncope in the Older Adult Population. *Geriatrics and Aging*. 9(2), 82-86, 2006.
- Madden KM, Levy WC, Stratton J. Normal aging impairs upregulation of the beta-adrenergic but not the alpha-adrenergic response: aging and adrenergic upregulation. *Journal of Cardiovascular Pharmacology*. 48(4):153-9, 2006.

**McElhaney, Dr. Janet E**

- McElhaney JE, Goel V, Toane B, Hooten J, Shan JJ. Efficacy of COLD-fX in the Prevention of Respiratory Symptoms in Community-Dwelling Adults: A Randomized, Double-Blinded, Placebo Controlled Trial. *J Altern Complement Med*. 2006; 12(2):153-7.

**Meneilly, Dr. Graydon S**

- Fung M, Thompson D, Shapiro RJ, Warnock GL, Andersen DK, Elahi D, Meneilly GS. Effect of glucagon-like peptide-1 on beta cell function after islet transplantation in type I diabetes. *Diabetes Res Clin Pract* 74: 189-193 (2006).
- Meneilly GS, Veldhuis JD, Elahi D. Pulsatile insulin secretion in elderly patients with diabetes. *Diabetes Res Clin Pract* 73: 218-220 (2006).
- Meneilly GS, Elahi D. Effect of GLP-1 on the  $\beta$  cell response to GIP in elderly patients with diabetes. In press. *J Am Geriatric Soc*.

**Wong, Dr. Roger Y**

- Wong RY, Chittock DR, McLean N, Wilbur K. Discharge Outcomes of Older Medical In-patients in a Specialized Acute Care for Elders Unit Compared with Non-specialized Units. *Can J Geriatr* 2006; 9: 96-101

**HEMATOLOGY**

**Barnett, Dr. Michael J**

- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *Leuk Lymphoma* 47:



---

1245-1252, 2006.

- Johny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Chanabhai M, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Voss NJ, Connors JM. Primary therapy for adults with T-cell lymphoblastic lymphoma with hematopoietic stem-cell transplantation results in favourable outcomes. *Annals of Oncology*, Dec 8, 2006, epub.
- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.
- Laneville PJ, Barnett MJ, Belanger R, Couban S, Forrest DL, Roy D-C, Lipton JH. Recommendations of the Canadian Consensus Group on the Management of Chronic Myeloid Leukemia (CCGM-CML). *Curr Onc* 13: 1-20, 2006.

#### **Broady, Dr. Raewyn**

- Foltz LM, Dalal BI, Wadsworth LD, Broady R, Chi K, Eisenhauer E, Kobayashi K, Kollmannsburger C. Recognition and management of methemoglobinemia and hemolysis in a G6PD-deficient patient on experimental anticancer drug Triapine. *Am J Hematol* 81: 210-1, 2006.

#### **Eaves, Dr. Allen C**

- Jorgensen HG, Copland M, Allan EK, Jiang X, Eaves A, Eaves C & Holyoake TL. Intermittent exposure of primitive quiescent chronic myeloid leukaemia cells to granulocyte colony-stimulating factor in vitro promotes their elimination by imatinib mesylate. *Clin Cancer Res* 12:626-633, 2006.
- Yang H, Eaves C, de Lima M, Lee M-S, Champlin RE, McMannis JD, Robinson SN, Decker WK, Xing D, Ng J, Li S, Yao X, Eaves AC, Jones R, Andersson BS & Shpall EJ. A novel triple purge strategy for eliminating chronic myelogenous leukemia (CML) cells from autografts. *Bone Marrow Transplant* 37: 575-582, 2006.

#### **Eaves, Dr. Connie**

- Asselin-Labat M-L, Shackleton M, Stingl J, Vaillant F, Forrest NC, Eaves CJ, Visvader JE & Lindeman GJ. Steroid hormone receptor status of mouse mammary stem cells. *J Natl Cancer Inst* 98: 948-951, 2006.
- Bowie MB, McKnight KD, Kent DG, McCaffrey L, Hoodless PA & Eaves CJ. Hematopoietic stem cells proliferate until after birth and show a reversible phase-specific engraftment defect. *J Clin Invest* 116: 2808-2816, 2006.
- Chung Y-J, Park B-B, Kang Y-J, Kim T-M, Eaves C & Oh I-H. Unique effects of STAT3 on the early phase of hematopoietic stem cell regeneration. *Blood* 108: 1208-1215, 2006.
- Dykstra B, Ramunas J, Kent D, McCaffrey L, Szumsky E, Kelly L, Farn K, Blaylock A, Eaves C & Jervis E. High-resolution video monitoring of hematopoietic stem cells cultured in single-cell arrays identifies new features of self-renewal. *Proc Natl Acad Sci USA* 103: 8185-8190, 2006.
- Fischer M, Schmidt M, Klingenberg S, Eaves CJ, von Kalle C & Glimm H. Short term repopulating cells with myeloid potential in human mobilized peripheral blood do not have a side population (SP)

---

phenotype. *Blood* 108: 2121-2123, 2006.

- Glover CH, Marin M, Eaves CJ, Helgason CD, Piret JM & Bryan J. Meta-analysis of mouse embryonic stem cell differentiation kinetics reveals consistent early down-regulation of a small gene set. *PLoS Comput Biol* 2: 1463-1474, 2006.
- Jorgensen HG, Copland M, Allan EK, Jiang X, Eaves A, Eaves C & Holyoake TL. Intermittent exposure of primitive quiescent chronic myeloid leukaemia cells to granulocyte colony-stimulating factor in vitro promotes their elimination by imatinib mesylate. *Clin Cancer Res* 12: 626-633, 2006.
- Sieburg H, Cho R, Dykstra B, Uchida N, Eaves C & Muller-Sieburg C. Discrete stem cell subsets. *Blood* 108: 3950 2006.
- Sieburg HB, Cho RH, Dykstra B, Uchida N, Eaves CJ & Muller-Sieburg CE. The hematopoietic stem compartment consists of a limited number of discrete stem cell subsets. *Blood* 107: 2311-2316, 2006.
- Stingl J, Eirew P, Ricketson I, Shackleton M, Vaillant F, Choi D, Li HI & Eaves CJ. Purification and unique properties of mammary epithelial stem cells. *Nature* 439: 993-997, 2006.
- Yang H, Eaves C, de Lima M, Lee M-S, Champlin RE, McMannis JD, Robinson SN, Decker WK, Xing D, Ng J, Li S, Yao X, Eaves AC, Jones R, Andersson BS & Shpall EJ. A novel triple purge strategy for eliminating chronic myelogenous leukemia (CML) cells from autografts. *Bone Marrow Transplant* 37: 575-582, 2006.

#### **Foltz, Dr. Lynda**

- Foltz L, Song K, Connors J. Hodgkin's lymphoma in adolescents. *J Clin Oncol* 2006; 24(16): 2520-2526.
- Foltz LM, Dalal BI, Wadsworth LD, Broady R, Chi K, Eisenhauer E, Kobayashi K, Kollmannsburger C. Recognition and management of methemoglobinemia and hemolysis in a G6PD-deficient patient on experimental anticancer drug Triapine. *Am J Hematol* 81: 210-211, 2006.

#### **Forrest, Dr. Donna L**

- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH & Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *Leuk Lymphoma* 47: 1245-1252, 2006.
- Johnny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.
- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Laneville PJ, Barnett MJ, Belanger R, Couban S, Forrest DL, Roy D-C, Lipton JH. Recommendations of the Canadian Consensus Group on the Management of Chronic Myeloid Leukemia (CCGM-CML). *Curr Onc* 13: 1-20, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Chanabhai M, Forrest DL, Hogge DE, Lavoie JC, Nantel SH,

---

Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Voss NJ, Connors JM. Primary therapy for adults with T-cell lymphoblastic lymphoma with hematopoietic stem-cell transplantation results in favourable outcomes. *Annals of Oncology*, Dec 8, 2006, epub.

### **Hogge, Dr. Donna**

- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *Leuk Lymphoma* 47: 1245-1252, 2006.
- Hogge DE, Yalcintepe L, Wong SH, Gerhard B, Frankel AE. Variant diphtheria toxin-interleukin-3 fusion proteins with increased receptor affinity have enhanced cytotoxicity against acute myeloid leukemia progenitors. *Clin Cancer Res* 12: 1284-1291, 2006.
- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Johny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Chanabhai M, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Voss NJ, Connors JM. Primary therapy for adults with T-cell lymphoblastic lymphoma with hematopoietic stem-cell transplantation results in favourable outcomes. *Annals of Oncology*, Dec 8, 2006, epub.
- Yalcintepe I, Frankel AE, Hogge DE. Expression of interleukin-3 receptor subunits on defined subpopulations of acute myeloid leukemia blasts predicts the cytotoxicity of diphtheria toxin interleukin-3 fusion protein against malignant progenitors that engraft in immunodeficient mice. *Blood* 108(10): 3530-7, 2006.
- Brune M, Castaigne S, Catalano J, Gehlsen K, Ho AD, Hofmann WK, Hogge DE, Nilsson B, Or R, Romero AI, Rowe JM, Simonsson B, Spearing R, Stadtmauer EA, Szer J, Wallhult E, Hellstrand K. Improved leukemia-free survival after postconsolidation immunotherapy with histamine dihydrochloride and interleukin-2 in acute myeloid leukemia: results of a randomized phase 3 trial. *Blood* 108: 88-96, 2006.

### **Humphries, Dr. Richard Keith**

- Fisher CL, Randazzo F, Humphries RK & Brock HW. Characterization of Asx11, a murine homolog of Additional sex combs, and analysis of the Asx-like gene family. *Gene* 369: 109-118, 2006.
- Palmqvist L, Argiropoulos B, Pineault N, Abramovich C, Sly LM, Krystal G, Wan A, Humphries RK. The Flt3 receptor tyrosine kinase collaborates with NUP98-HOX fusions in acute myeloid leukemia. *Blood* 108: 1030-1036, 2006.
- Gurevich RM, Rosten PM, Schwieger M, Stocking C & Humphries RK. Retroviral integration site analysis identifies ICSBP as a collaborating tumor suppressor gene in NUP98-TOP1 induced leukemia. *Exp Hematol* 34:1191-1036, 2006.
- Deshpande AJ, Cusan M, Rawat VPS, Krause A, Reuter H, Quintanilla-Martinez L, Pott C, Kuchenbauer F, Ahmed F, Lichter P, Kneba M, Hiddemann W, Humphries RK, Bohlander SK, Feuring-Buske M & Buske C. Acute myeloid leukemia is propagated by a transformed lymphoid

---

progenitor in a mouse model of CALM/AF10 positive leukemia. *Cancer Cell* 10: 363-374, 2006.

- Zhang XB, Beard BC, Beebe K, Storer B, Humphries RK & Kiem HP. Differential effects of HOXB4 on nonhuman primate short- and long-term repopulating cells. *PLoS Med* 3: e173-0687-0698, 2006.

### **Lansdorp, Dr. Peter M**

- Savage SA, Stewart BJ, Weksler BB, Baerlocher GM, Lansdorp PM, Chanock SJ & Alter BP. Mutations in the reverse transcriptase component of telomerase (TERT) in patients with bone marrow failure. *Blood Cells, Molecules and Diseases* 37: 134-136, 2006.
- Cheung I, Schertzer M, Rose A & Lansdorp PM. High incidence of rapid telomere loss in telomerase-deficient *Caenorhabditis elegans*. *Nucleic Acids Res* 34: 96-103, 2006.
- Lansdorp PM. Stress, social rank and leukocyte telomere length. *Aging Cell* 5: 583-584, 2006.

### **Lavoie, Dr. Julie C**

- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol*. 2006 May; 17(5)763-768.
- Johnny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Chanabhai M, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Voss NJ, Connors JM. Primary therapy for adults with T-cell lymphoblastic lymphoma with hematopoietic stem-cell transplantation results in favourable outcomes. *Annals of Oncology*, Dec 8, 2006, epub.
- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.

### **Leger, Dr. Chantal S**

- Leger C, Sabloff M, McDiarmid S, Bence-Bruckler I, Atkins H, Bredeson C, Zhang H, Huebsch L. Outpatient autologous hematopoietic stem cell transplantation for patients with relapsed follicular lymphoma. *Ann Hematol* 85: 723-729, 2006.

### **Nantel, Dr. Stephen H**

- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as

---

a predictor of death during remission induction in acute myeloid leukemia. *Leuk Lymphoma* 47: 1245-1252, 2006.

- Johnny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Chanabhai M, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Voss NJ, Connors JM. Primary therapy for adults with T-cell lymphoblastic lymphoma with hematopoietic stem-cell transplantation results in favourable outcomes. *Annals of Oncology*, Dec 8, 2006, epub.
- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.

#### **Nevill, Dr. Thomas J**

- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL & Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: A prospective experience. *Annals of Oncology*, 2006.
- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *Leuk Lymphoma* 47: 1245-1252, 2006.
- Johnny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *euk Lymphoma* 47: 1245-1252, 2006.
- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.
- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Foltz LM, Dalal BI, Wadsworth LD, Broady R, Chi K, Eisenhauer E, Kobayashi K, Kollmannsburger

- 
- C. Recognition and management of methemoglobinemia and hemolysis in a G6PD-deficient patient on experimental anticancer drug Triapine. *Am J Hematol* 81: 210-211, 2006.
- Hogge DE, Yalcintepe L, Wong SH, Gerhard B, Frankel AE. Variant diphtheria toxin-interleukin-3 fusion proteins with increased receptor affinity have enhanced cytotoxicity against acute myeloid leukemia progenitors. *Clin Cancer Res* 12: 1284-1291, 2006.
  - Brune M, Castaigne S, Catalano J, Gehlsen K, Ho AD, Hofmann WK, Hogge DE, Nilsson B, Or R, Romero AI, Rowe JM, Simonsson B, Spearing R, Stadtmauer EA, Szer J, Wallhult E, Hellstrand K. Improved leukemia-free survival after postconsolidation immunotherapy with histamine dihydrochloride and interleukin-2 in acute myeloid leukemia: results of a randomized phase 3 trial. *Blood* 108: 88-96, 2006.
  - Meunch MO, Ohkubo T, Smith C, Suskind DL, Barcena A. Effects of cytokines on the maintenance of proliferative capacity and retroviral transduction of human fetal CD34+ CD38- cells. *Stem Cells and Development* 15: 97-108, 2006.
  - Spidlen J, Gentleman RC, Haaland P, Langille M, LeMeur N, Ochs MF, Schmitt C, Smith CA, Treister A, Brinkman R. Bioinformatics data standards for flow cytometry. *OMICS* 10: 209-214, 2006.
  - Li S, Ferguson MJ, Hawkins CJ, Smith C, Elwood N. Human telomerase reverse transcriptase protects hematopoietic progenitor TF-1 cells from death and quiescence induced by cytokine withdrawal. *Leukemia* 20: 1270-1278, 2006.
  - Foltz LM, Song KW, Connors JM. Hodgkin's lymphoma in adolescents. *J Clin Oncol* 24: 2520-2526, 2006.
  - Leger C, Sabloff M, McDiarmid S, Bence-Bruckler I, Atkins H, Bredeson C, Zhang H, Huebsch L. Outpatient autologous hematopoietic stem cell transplantation for patients with relapsed follicular lymphoma. *Ann Hematol* 85: 723-729, 2006.
  - Yong RL, Holmes DT, Sreenivasan GM. Aluminum toxicity due to intravenous injection of boiled methadone. *N Engl J Med* 354: 1210-1211, 2006.
  - Baker A, Beed S, Fenwick J, Kjerulf M, Bell H, Logier S, Shepherd J. Number of deaths by neurological criteria, and organ and tissue donation rates at three critical care centres in Canada: [Le nombre de morts selon des criteres neurologiques et les taux de dons d'organes et de tissue dans trois centres de soins intensifs au Canada]. *Can J Anaesth* 53:722-726, 2006.
  - Laneville PJ, Barnett MJ, Belanger R, Couban S, Forrest DL, Roy D-C, Lipton JH. Recommendations of the Canadian Consensus Group on the Management of Chronic Myeloid Leukemia (CCGM-CML). *Curr Onc* 13: 1-20, 2006.
  - Song KW, Barnett MJ, Gascoyne RD, Chanabhai M, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Voss NJ, Connors JM. Primary therapy for adults with T-cell lymphoblastic lymphoma with hematopoietic stem-cell transplantation results in favourable outcomes. *Annals of Oncology*, Dec 8, 2006, epub.

### **Shepherd, Dr. John D**

- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Johny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Johny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for Refractory Acute Leukemia after Salvage Therapy with High-Dose Etoposide and Cyclophosphamide.

---

Biol Blood Marrow Transplant 12: 480-489, 2006.

- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.
- Baker A, Beed S, Fenwick J, Kjerulf M, Bell H, Logier S, Shepherd J. Number of deaths by neurological criteria, and organ and tissue donation rates at three critical care centres in Canada: [Le nombre de morts selon des criteres neurologiques et les taux de dons d'organes et de tissue dans trois centres de soins intensifs au Canada]. *Can J Anaesth* 53:722-726, 2006.
- Druker BJ, Guilhot F, O'Brien SG, Gathmann I, Kantarjian H, Gattermann N, Deininger MW, Silver RT, Goldman JM, Stone RM, Cervantes F, Hochaus A, Powell BL, Gabilove JL, Rousselot P, Reiffers J, Cornelissen JJ, Hughes T, Agis H, Fischer T, Verhoef G, Shepherd J, Saglio G, Gratwohl A, Nielson JL, Radich JP, Simonsson B, Taylor K, Baccarani M, So C, Letvak L, Larson RA. Five-year follow-up of patients receiving imatinib for chronic myeloid leukemia. *N Engl J Med*, 355(23):2408-17, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Chanabhai M, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Voss NJ, Connors JM. Primary therapy for adults with T-cell lymphoblastic lymphoma with hematopoietic stem-cell transplantation results in favourable outcomes. *Annals of Oncology*, Dec 8, 2006, epub.

#### **Smith, Dr. Clayton A**

- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *Leuk Lymphoma* 47: 1245-1252, 2006.
- Johny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *euk Lymphoma* 47: 1245-1252, 2006.
- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.
- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Meunch MO, Ohkubo T, Smith C, Suskind DL, Barcena A. Effects of cytokines on the maintenance of proliferative capacity and retroviral transduction of human fetal CD34+ CD38- cells. *Stem Cells and Development* 15: 97-108, 2006.
- Spidlen J, Gentleman RC, Haaland P, Langille M, LeMeur N, Ochs MF, Schmitt C, Smith CA, Treister A, Brinkman R. Bioinformatics data standards for flow cytometry. *OMICS* 10: 209-214, 2006.

- 
- Li S, Ferguson MJ, Hawkins CJ, Smith C, Elwood N. Human telomerase reverse transcriptase protects hematopoietic progenitor TF-1 cells from death and quiescence induced by cytokine withdrawal. *Leukemia* 20: 1270-1278, 2006.
  - Walsh, CJ., Luer VA, Bodine AB, Smith CA, Cox HL, Noyes DR and Gasparetto M. Elasmobranch immune cells as a source of novel tumor cell inhibitors: Implications for public health. *Integr. Comp. Biol.* 46:1072-1081, 2006.

#### **Song, Dr. Kevin W**

- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL & Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: A prospective experience. *Annals of Oncology*, 2006.
- Foltz LM, Song KW, Connors JM. Hodgkin's Lymphoma in Adolescents. *Journal of Clinical Oncology* 24: 2520-26, 2006.
- Johny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *euk Lymphoma* 47: 1245-1252, 2006.
- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.
- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Foltz LM, Song KW, Connors JM. Hodgkin's lymphoma in adolescents. *J Clin Oncol* 24: 2520-2526, 2006.

#### **Sreenivasan, Dr. Gayatri M**

- Yong RL, Holmes DT, Sreenivasan GM. Aluminum toxicity due to intravenous injection of boiled methadone. *N Engl J Med* 354: 1210-1211, 2006.

#### **Sutherland, Dr. Heather J**

- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *Leuk Lymphoma* 47: 1245-1252, 2006.
- Johny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory



---

acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.

- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Chanabhai M, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Voss NJ, Connors JM. Primary therapy for adults with T-cell lymphoblastic lymphoma with hematopoietic stem-cell transplantation results in favourable outcomes. *Annals of Oncology*, Dec 8, 2006, epub.
- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.

#### **Toze, Dr. Cynthia L**

- Savoie ML, Nevill TJ, Song KW, Forrest DL, Hogge DE, Nantel SH, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Lavoie JC. Shifting to outpatient management of acute myeloid leukemia: a prospective experience. *Ann Oncol* 17: 763-768, 2006.
- Greenwood MJ, Seftel MD, Richardson C, Barbaric D, Barnett MJ, Bruyere H, Forrest DL, Horsman DE, Smith C, Song K, Sutherland HJ, Toze CL, Nevill TJ, Nantel SH, Hogge DE. Leukocyte count as a predictor of death during remission induction in acute myeloid leukemia. *Leuk Lymphoma* 47: 1245-1252, 2006.
- Johnny A, Song KW, Nantel SH, Lavoie JC, Toze CL, Hogge DE, Forrest DL, Sutherland HJ, Le A, Nitta JY, Barnett MJ, Smith CA, Shepherd JD, Nevill TJ. Early stem cell transplantation for refractory acute leukemia after salvage therapy with high-dose etoposide and cyclophosphamide. *Biol Blood Marrow Transplant* 12: 480-489, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol* 133: 634-637, 2006.
- Song KW, Barnett MJ, Gascoyne RD, Chanabhai M, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Toze CL, Voss NJ, Connors JM. Primary therapy for adults with T-cell lymphoblastic lymphoma with hematopoietic stem-cell transplantation results in favourable outcomes. *Annals of Oncology*, Dec 8, 2006, epub.
- Lin Y, Bruyere H, Horsman DE, Pantzar T, Barnett MJ, Hogge DE, Nevill TJ, Nantel SH, Sutherland HJ, Toze CL, Shepherd JD, Lavoie JC, Song KW, Smith CA, Forrest DL. Philadelphia-negative clonal hematopoiesis following imatinib therapy in patients with chronic myeloid leukemia: a report of nine cases and analysis of predictive factors. *Cancer Genet Cytogenet* 170: 16-23, 2006.

#### **Tsang, Dr. Peter W**

- Al-Tourah AJ, Tsang PWT, Skinnider BF, Hoskins PJ. Paraneoplastic Erythropoietin-Induced Polycythemia Associated with Small Lymphocytic Lymphoma. *J Clin Oncol* 24(15): 2388-9, 2006.

#### **Zypchen, Dr. Leslie N**

- Zypchen, Leslie N. Approaching the anemias. *Canadian Journal of Diagnosis*. 23 (12): 61-64, 2006 Dec.

---

## INFECTIOUS DISEASES

### Av-Gay, Dr. Yossef Y

- Newton GL, Koledin T, Ko M, Av-Gay Y, Fahey RC (2006). N-Acetyl-1-D-myo-inositol-2-amino-2-deoxy-D-glucopyranoside Deacetylase, a Mycothiol Biosynthetic Enzyme (MshB), is a metalloprotein subject to feedback inhibition by Mycothiol. *Protein Expression and Purification*. 47:542-550.
- Pick N, Rawat M, Arad D, Lan J, Fan J, Kende AS, Av-Gay Y. (2006). In Vitro Properties of Antimicrobial Bromo-Tyrosine Alkaloids, *J Med. Micro*. 55: 407-415.
- Ung S.E.K., and Av-Gay, Y. (2006). Mycothiol Dependent Mycobacterial Response to Oxidative Stress. *FEBS Letters*. 580:2712-2716.
- Pérez, J., Garcia, R. L., Bach, H., H de Waard, J., Jacobs, W. R. Jr., Av-Gay, Y., Bubis, J and Takiff H. (2006). Mycobacterium tuberculosis transporter MmpL7 is a potential substrate for kinase PknD. *BBRC*. 348:6-12.
- Bach, H., Sun, J., Wong, D., Hmama, Z. and Av-Gay Y. (2006), Mycobacterium avium ssp paratuberculosis PtpA is an endogenous tyrosine phosphatase secreted during infection. *Infection and Immunity*. 4:6540-6546.

### Bowie, Dr. William R

- Skowronski DM, Martin Petric M, Daly P, Parker RA, Bryce E, Doyle PW, Noble MA, Roscoe DL, Tomblin J, Yang TC, Patrick DM, Kraiden M, Pourbohloul B, Goh SH, Bowie WR, Booth TF, Tweed SA, Perry TL, McGeer A, Brunham RC. Coordinated response to SARS, Vancouver, Canada. *Emerging Infectious Diseases* 2006; 12: 155-158

### Brunham, Dr. Robert C

- Skowronski DM, Petric M, Daly P, Parker RA, Bryce E, Doyle P, Noble M, Roscoe DL, Tomblin J, Yang TC, Kraiden M, Patrick DM, Pourbohloul B, Goh S, Bowie WR, Booth TF, Tweed SA, Perry TL, McGeer A, Brunham R. Coordinated Response to SARS, Vancouver, Canada. *Emerging Infectious Diseases*. 12.1 (January 2006):155-158.
- Skowronski D, Woolcott JC, Tweed SA, Brunman R, Marra F. Potential cost-effectiveness of annual influenza immunization for infants and toddlers: Experience from Canada. *VACCINE* 2006
- See HR, Zakhartchouk AN, Petric M, Lawrence EJ, Mok CPY, Hogan RJ, Rowe T, Zitzow LA, Karunakaran KP, Hitt MM, Graham FL, Prevec L, Rini JM, Tingle AJ, Scheifele DW, Skowronski DM, Patrick DM, Voss TG, Babiuk LA, Gauldie J, Roper RL, Brunham R, Finlay BB. Comparative evaluation of two severe acute respiratory syndrome (SARS) vaccine candidates in mice challenged with SARS coronavirus." *Journal of General Virology* 87 (2006)
- Pourbohloul, Babak, Rick White, Sunny Mak, Robert C Brunham and Michael L Rekart. "Reply to hagdu and to moss et Al.". *JOURNAL OF INFECTIOUS DISEASES*. 193.9 (May 1, 2006): , 1338 - 1339.
- Lacap, Phillip, Francis A Plummer, Yoav Keynan, Ma Luo and Robert Brunham. "Identification of two novel HLA-C alleles, Cw\*070105 and Cw\*1408, from East African women.". *HUMAN IMMUNOLOGY*. 67.4-5 (2006): , 359 - 362.
- Brunham, , Plummer, Gill, Luo, Leligdowicz and Bielawny. "Identification of Four Novel HLA-A Alleles from an East African Population by High-Resolution Sequence-Based Typing.". *HUMAN IMMUNOLOGY*. 67.10 (Oct, 2006): , 833 - 838.
- Mahony, James B, Lorne A Babiuk, Danuta M Skowronski, Raymond H See, Jack Gauldie, Thomas Rowe, Thomas G Voss, David W Scheifele, Martin Petric, Catherine P Y Mok, David J Lawrence, Chetna Sharon, Frank L Graham, Alexander N Zakhartchouk, Robert C Brunham, David M Patrick,

---

Lois A Zitzow, Thierry C Auperin, Aubrey J Tingle, B Brett Finlay, Robert J Hogan, Karuna P Karunakaran, Mary M Hitt, James M Rini, Rachel L Roper and Ludvik Prevec. "Comparative evaluation of two severe acute respiratory syndrome (SARS) vaccine candidates in mice challenged with SARS coronavirus.". *JOURNAL OF GENERAL VIROLOGY*. 87.Pt 3 (Mar, 2006): , 641 - 650.

- Marra, Fawziah, Danuta M Skowronski, John C Woolcott, Robert C Brunham and S Aleina Tweed. "Potential cost-effectiveness of annual influenza immunization for infants and toddlers: experience from Canada.". *VACCINE*. 24.19 (May 8, 2006): , 4222 - 4232.
- Rahmanian, R, David Lawrence, Danuta Skowronski, V Lei, Martin Petric, Mel Krajden, Yan Li, Robert Brunham, SweeHan Goh, Tim Booth and Annie Mak. "Longitudinal Analysis of Genotype Distribution of Influenza A Virus from 2003 to 2005.". *JOURNAL OF CLINICAL MICROBIOLOGY*. 44.10 (2006): 3583 - 3588.

#### **Cherkasov, Dr. Artem**

- Cherkasov A, Nandan A, Lee SJ, Reiner NE. Large-scale Survey for Potentially Targetable Indels in Bacterial and Protozoan Proteins. *Proteins: Structure, Function and Bioinformatics*, 62(2):371-380, 2006

#### **Grigg, Dr. Michael E**

- Nowakowska D, Colon I, Remington IS, Grigg ME, Wilczynski J, and Sibley LD. (2006) Genotyping of congenital toxoplasmosis cases from Poland by multiplex PCR and peptide-based serological testing. *J Clin. Microbiol.* 44(4):1-9.

#### **Harrigan, Dr. Paul R**

- Galli R, Wynhoven B, Harrigan P. Quality management of sequence-based methods for measuring HIV-1 drug resistance. *Am Clin Lab*. 2002 Jan-Feb;21(1):13-5.
- Wood E, Hogg RS, Yip B, Harrigan PR, Montaner JS. Using baseline CD4 cell count and plasma HIV RNA to guide the initiation of highly active antiretroviral therapy. *Rev Invest Clin*. 2004 Mar-Apr;56(2):232-6.
- Cheung PK, Wynhoven B, Harrigan PR. 2004: which HIV-1 drug resistance mutations are common in clinical practice? *AIDS Rev*. 2004 Apr-Jun;6(2):107-16.
- Bangsberg DR, Acosta EP, Gupta R, Guzman D, Riley ED, Harrigan PR, Parkin N, Deeks SG. Adherence-resistance relationships for protease and non-nucleoside reverse transcriptase inhibitors explained by virological fitness. *AIDS*. 2006 Jan 9;20(2):223-31.
- Ho JK, Harrigan PR, Sherlock CH, Steinbrecher UP, Erb SR, Mo T, Chung SW, Buczkowski AK, Intaraprasong P, Scudamore CH, Yoshida EM. Utilization of a liver allograft from a hepatitis B surface antigen positive donor. *Transplantation*. 2006 Jan 15;81(1):129-31.
- Snoeck J, Kantor R, Shafer RW, Van Laethem K, Deforche K, Carvalho AP, Wynhoven B, Soares MA, Cane P, Clarke J, Pillay C, Sirivichayakul S, Ariyoshi K, Holguin A, Rudich H, Rodrigues R, Bouzas MB, Brun-Vezinet F, Reid C, Cahn P, Brigido LF, Grossman Z, Soriano V, Sugiura W, Phanuphak P, Morris L, Weber J, Pillay D, Tanuri A, Harrigan RP, Camacho R, Schapiro JM, Katzenstein D, Vandamme AM. Discordances between interpretation algorithms for genotypic resistance to protease and reverse transcriptase inhibitors of human immunodeficiency virus are subtype dependent. *Antimicrob Agents Chemother*. 2006 Feb;50(2):694-701.
- Levy AR, James D, Johnston KM, Hogg RS, Harrigan PR, Harrigan BP, Sobolev B, Montaner JS. The direct costs of HIV/AIDS care. *Lancet Infect Dis*. 2006 Mar;6(3):171-7
- Cote HC, Magil AB, Harris M, Scarth BJ, Gadawski I, Wang N, Yu E, Yip B, Zalunardo N, Werb R, Hogg R, Harrigan PR, Montaner JS. Exploring mitochondrial nephrotoxicity as a potential mechanism of kidney dysfunction among HIV-infected patients on highly active antiretroviral therapy. *Antivir Ther*. 2006;11(1):79-86.

- 
- Braithwaite, RS, Shechter S, Roberst MS, Schaefer A, Bansberg DR, Harrigan PR, Justice AC. Explaining variability in the relationship between antiretroviral adherence and HIV mutation accumulation. *J Antimicrob Chemother* 2006 Nov;58(5):1036-43
  - Skrabal K, Low AJ, Dong W, Sing T, Cheung PK, Mammano F, Harrigan PR. Is there a gold standard for determining HIV co-receptor use in clinical samples? The degree of correlation between two phenotypic assays and a bioinformatic model. *J Clin Microbiol.* 2006
  - Deforche K, Camacho R, Grossman Z, Silander T, Soares MA, Moreau Y, Shafer RW, Van Laethem K, Carvalho AP, Wynhoven B, Cane P, Snoeck J, Clarke J, Sirivichayakul S, Ariyoshi K, Holguin A, Rudich H, Rodrigues R, Bouzas MB, Cahn P, Brigido LF, Soriano V, Sugiura W, Phanuphak P, Morris L, Weber J, Pillay D, Tanuri A, Harrigan PR, Shapiro JM, Katzenstein DA, Kantor R, Vandamme AM. Bayesian network analysis of resistance pathways against protease inhibitors. *Infect Genet Evol.* 2006.
  - Gross R, Yip B, Re VL 3rd, Wood E, Alexander CS, Harrigan PR, Bangsberg DR, Montaner JS, Hogg RS. A Simple, Dynamic Measure of Antiretroviral Therapy Adherence Predicts Failure to Maintain HIV-1 Suppression. *J Infect Dis.* 2006 Oct 15;194(8):1108-14
  - Hogg RS, Bangsberg DR, Lima VD, Alexander C, Bonner S, Yip B, Wood E, Dong WW, Montaner JS, Harrigan PR. Emergence of Drug Resistance Is Associated with an Increased Risk of Death among Patients First Starting HAART. *PLoS Med.* 2006 Sep 19;3(9)
  - Hunt PW, Harrigan PR, Huang W, Bates M, Williamson DW, McCune JM, Price RW, Spudich SS, Lampiris H, Hoh R, Leigler T, Martin JN, Deeks SG. Prevalence of CXCR4 Tropism among Antiretroviral-Treated HIV-1-Infected Patients with Detectable Viremia. *J Infect Dis.* 2006 Oct 1;194(7):926-30.
  - Law JK, Ali JA, Harrigan PR, Sherlock CH, Savage KJ, Yoshida EM. Fatal postlymphoma chemotherapy hepatitis B reactivation secondary to the emergence of a YMDD mutant strain with lamivudine resistance in a noncirrhotic patient. *Am J Hematol.* 2006 Aug 25
  - Montaner JS, Hogg R, Wood E, Kerr T, Tyndall M, Levy AR, Harrigan PR. The case for expanding access to highly active antiretroviral therapy to curb the growth of the HIV epidemic. *Lancet.* 2006 Aug 5;368(9534):531-6
  - Brumme ZL, Harrigan PR. The impact of human genetic variation on HIV disease in the era of HAART. *AIDS Rev.* 2006 Apr-Jun;8(2):78-87
  - Chui C, Cheung PK, Brumme CJ, Mo T, Brumme ZL, Montaner JS, Badley AD, Harrigan PR. HIV VprR77Q mutation does not influence clinical response of individuals initiating highly active antiretroviral therapy. *AIDS Res Hum Retroviruses.* 2006 Jul;22(7):615-8.
  - Cote HC, Brumme ZL, Chan JW, Guillemi S, Montaner JS, Harrigan PR. HIV therapy, hepatitis C virus infection, antibiotics and obesity, a mitochondria killer mix? *AIDS.* 2006 Jun 12;20(9):1343-5.
  - Wood E, Hogg RS, Yip B, Moore D, Harrigan PR, Montaner JS. Impact of baseline viral load and adherence on survival of HIV-infected adults with baseline CD4 cell counts  $\geq$  200 cells/microl. *AIDS.* 2006 May 12;20(8):1117-23
  - Skrabal K, Low AJ, Dong W, Sing T, Cheung PK, Mammano F, Harrigan PR. Is there a gold standard for determining HIV co-receptor use in clinical samples? The degree of correlation between two phenotypic assays and a bioinformatic model. *J Clin Microbiol.* 2006

#### **Hmama, Dr. Zakaria**

- Horacio B, Jim S, Hmama Z, Av-Gay Y. Mycobacterium avium ssp paratuberculosis PtpA is an endogenous tyrosine phosphatase secreted during infection. *Infect Immun,* 2006, 74:6540-46.

#### **Kerr, Dr. Thomas H**

- Kuyper L, Kerr T, Li K, Hogg R, Montaner J, Schechter MT, Spittal P, Wood E. Factors associated

- 
- with buying and selling syringes among injection drug users in a setting with one of North America's largest syringe exchange programs. *Substance Use and Misuse*, 2006; 41(6-7): 883-899.
- Miller CL, Kerr T, Frankish JC, Spittal PM, Li K, Schechter MT, Wood E. Binge drug use independently predicts HIV seroconversion among injection drug users: Implications for public health strategies. *Substance Use & Misuse*, 2006; 41(2): 199-210
  - Miller C, Strathdee S, Kerr T, Small W, Li K, Wood E. Factors associated with willingness to participate in a heroin prescription program among injection drug users. *Journal of Opioid Management*, 2005; 1(4): 201-203.
  - Fairbairn N, Wood E, Small W, Stoltz J, Li K, Kerr T. Risk profile of individuals who provide assistance with illicit drug injections. *Drug and Alcohol Dependence*, 2006; 82(1): 41-46.
  - Kerr T, Strathdee S, Li K, Hogg RS, Montaner JS, Wood E. The impact of sex partners' HIV status on HIV seroconversion in a prospective cohort of injection drug users. *JAIDS*, 2006; 41(1): 119-123
  - Kerr T, Stoltz J, Tyndall M, Li K, Zhang R, Montaner J, Wood E. Impact of a medically supervised safer injection facility on community drug use patterns: a before and after study. *British Medical Journal*, 2006; 332: 220-222.
  - Shannon K, Ishida T, Morgan R, Bear A, Oleson M, Kerr T, Tyndall MW. Potential community and public health impacts of medically supervised safer smoking facilities for crack cocaine users. *Harm Reduction Journal*, 2006; 3(1): 1
  - Callon C, Wood E, Marsh D, Li K, Montaner J, Kerr T. Barriers and facilitators to methadone maintenance therapy use among illicit opiate injection drug users in Vancouver. *Journal of Opioid Management*, 2006; 2(1): 35-41.
  - Wood E, Kerr T, Palepu A, Zhang R, Strathdee SA, Tyndall MW, Montaner JS, Hogg RS. Slower uptake of HIV antiretroviral therapy among Aboriginal injection drug users. *J Infect*. 2006; 52: 233-236.
  - Tyndall MW, Kerr T, Shang R, King E, Montaner JG, Wood E. Attendance, drug use patterns, and referrals made from North America's first supervised injection facility. *Drug and Alcohol Dependence*, 2006; 83(3): 193-198.
  - Kerr T, Small W, Peeace W, Douglas D, Pierre A, Wood E. Harm reduction by a "user-run" organization: A case study of the Vancouver Area Network of Drug Users (VANDU). *International Journal of Drug Policy*, 2006; 17: 61-69.
  - Wood E, Stoltz J, Li K, Montaner J, Kerr T. Changes in Canadian heroin supply coinciding with the Australian heroin shortage. *Addiction*, 2006; 101: 689-695.
  - Lloyd-Smith E, Brodtkin E, Wood E, Kerr T, Tyndall E, Montaner J, Hogg R. The impact of HAART and injection drug use on life expectancy of two HIV-positive cohorts in British Columbia. *AIDS*, 2006; 20(3):445-450
  - Miller C, Strathdee S, Kerr T, Li K, Wood E. Factors associated with early adolescent initiation into injection drug use: Implications for injection drug use intervention programs. *Journal of Adolescent Health*, 38(4): 462-464.
  - Wood E, Lim R, Kerr T. Initiation of opiate addiction in a Canadian prison: a case report. *Harm Reduction Journal*, 2006; 3(1): 11.
  - Miller CL, Strathdee SA, Spittal PM, Kerr T, Li K, Schechter MT, Wood E. Elevated rates of HIV infection among young Aboriginal injection drug users in a Canadian setting. *Harm Reduction Journal*, 2006; 3(1): 9.
  - Wood E, Stoltz J, Li K, Montaner J, Kerr T. The cause of the Australian heroin shortage: Time to reconsider? *Addiction*, 2006; 101: 623-625.
  - Wood E, Kerr T. What do you do when you hit rock bottom? Responding to drugs in the city of Vancouver. *International Journal of Drug Policy*, 2006; 17: 55-60.
  - Lima VD, Kretz P, Palepu A, Bonner S, Kerr T, Moore D, Daniel M, Montaner JS, Hogg RS.

---

Aboriginal status is a prognostic factor for mortality among antiretroviral naïve HIV-positive individuals first initiating HAART. *AIDS Research and Therapy*, 2006; 3(1): 14.

- Wood E, Tyndall MW, Zhang R, Stoltz JA, Lai C, Montaner JS, Kerr T. Attendance at supervised injecting facilities and use of detoxification services. *New England Journal of Medicine*, 2006; 354(23): 2512-2514.
- Wood E, Stoltz J, Montaner JSG, Kerr T. Evaluating methamphetamine use and risks of injection initiation among street youth: The ARYS study. *Harm Reduction Journal*, 2006; 3(1): 18.
- Wood E, Tyndall MW, Lai C, Montaner JSG, Kerr T. Impact of a medically supervised safer injecting facility on drug dealing and other drug-related crime. *Substance Abuse Treatment, Prevention, and Policy*, 2006; 1(1): 13.
- Wood E, Tyndall MW, Qui Z, Zhang R, Montaner JS, Kerr T. Service uptake and characteristics of injection drug users utilizing North America's first medically supervised safer injecting facility. *American Journal of Public Health*, 2006; 96(5): 770-773.
- Wood E, Kerr T, Hogg RS, Zhang Z, Tyndall MW, Montaner JSG. Validity of self-reported antiretroviral therapy use among injection drug users. *Journal of Acquired Immune Deficiency Syndromes*, 2006; 41(4): 530-531.
- Montaner JS, Hogg R, Wood E, Kerr T, Tyndall M, Levy AR, Harrigan PR. The case for expanding access to highly active antiretroviral therapy to curb the growth of the HIV epidemic. *Lancet*, 2006; 368(9534): 531-536.
- Maas B, Kerr T, Fairbairn N, Montaner J, Wood E. Pharmacokinetic interactions between HIV antiretroviral therapy and drugs used to treat opioid dependence. *Expert Opinion on Drug Metabolism & Toxicology*, 2006; 2(4): 533-543.
- Wood E, Kerr T. Needle exchange and the HIV outbreak among injection drug users in Vancouver, Canada. *Substance Use & Misuse*, 2006; 41(6-7): 841-843.
- McKnight B, McKnight I, Kerr T, Li K, Montaner J, Wood E. Prevalence and correlates of cervical cancer screening among injection drug users. *Journal of Obstetrics and Gynaecology Canada*, 2006; 28(8): 695-699.
- Kerr T. Reconsidering the public health failings of the criminal justice system: A reflection on the case of Scott Ortiz. *Harm Reduction Journal*, 2006; 3(1): 25.
- Palepu A, Tyndall MW, Joy R, Kerr T, Wood E, Press N, Hogg RS, Montaner JS. Antiretroviral adherence and HIV treatment outcomes among HIV/HCV co-infected injection drug users: the role of methadone maintenance therapy. *Drug and Alcohol Dependence*, 2006; 84(2): 188-194.
- Braitstein P, Li K, Kerr T, Montaner JSG, Hogg RS, Wood E. Differences in access to care among injection drug users infected either with HIV and hepatitis C or hepatitis C alone. *AIDS Care*, 2006; 18(7): 690-693.
- Rhodes T, Kimber J, Small W, Fitzgerald J, Kerr T, Hickman M, Holloway G. Public injecting and the need for 'safer environment interventions' in the reduction of drug-related harm. *Addiction*, 2006; 101: 1384-1393.
- Wood E, Tyndall MW, Montaner JS, Kerr T. Summary of findings from the evaluation of a pilot medically supervised safer injecting facility. *Canadian Medical Association Journal*, 2006; 175(11): 1399-1404.
- Wood E, Kerr T, Hogg RS, Palepu A, Zhang R, Strathdee SA, Montaner JSG. Impact of HIV testing on uptake of HIV therapy among antiretroviral naïve HIV-infected injection drug users. *Drug and Alcohol Review*, 2006; 25(5): 451-454.
- Kerr T, Tyndall MW, Lai C, Montaner JSG, Wood E. Drug-related overdoses within a medically supervised safer injection facility. *International Journal of Drug Policy*, 2006; 17: 436-441.
- Fairbairn N, Kerr T, Buxton JA, Li K, Montaner JS, Wood E. Increasing use and associated harms of crystal methamphetamine injection in a Canadian setting. *Drug and Alcohol Dependence*, 2006 Nov

---

30 [Epub ahead of print].

- Tyndall MW, Wood E, Zhang R, Lai C, Montaner JS, Kerr T. HIV seroprevalence among participants at a Supervised Injection Facility in Vancouver, Canada: implications for prevention, care and treatment. *Harm Reduction Journal*, 2006; 3(1): 36.

### **Montaner, Dr. Julio S**

- Braitstein P, Zala C, Yip B, Brinkhof MW, Moore D, Hogg RS, Montaner JS. Immunologic response to antiretroviral therapy in hepatitis C virus-coinfected adults in a population-based HIV/AIDS treatment program. *J Infect Dis* 2006;193(2):259-68
- Kerr T, Stoltz J, Strathdee S, Li K, Hogg RS, Montaner JS, Wood E. The impact of sex partners' HIV status on HIV seroconversion in a prospective cohort of injection drug users. *JAIDS* 2006;41(1):119-23
- Alfonso V, Geller J, Bermbach N, Drummond A, Montaner JS. Becoming a 'treatment success': what helps and what hinders patients from achieving and sustaining undetectable viral loads. *AIDS Patient Care & STDS* 2006;20(5):326-34.
- Alfonso V, Bermbach N, Geller J, Montaner JS. Individual variability in barriers affecting people's decision to take HAART: A qualitative study identifying barriers to being on HAART. *AIDS Patient Care & STDS* 2006;20(12): 848-57.
- Braitstein P, Zala C, Yip B, Brinkhof MW, Moore D, Hogg RS, Montaner JS. Immunologic response to antiretroviral therapy in hepatitis C virus-coinfected adults in a population-based HIV/AIDS treatment program. *J Infect Dis* 2006;193(2):259-68.
- Braitstein P, Justice A, Bangsberg DR, Yip B, Alfonso V, Schechter MT, Hogg RS, Montaner JS. Hepatitis C coinfection is independently associated with decreased adherence to antiretroviral therapy in a population-based HIV cohort. *AIDS* 2006;20(3):323-31.
- Callon C, Wood E, Marsh D, Li K, Montaner J, Kerr T. Barriers and facilitators to methadone maintenance therapy use among illicit opiate injection drug users in Vancouver. *J Opioid Management*, 2006; 2(1): 35-41.
- Christie TK, Montaner JS. The perverted irony of Health Canada's Special Access Programme. *CMAJ* 2006;174(12):1746.
- Chui C, Cheung PK, Brumme CJ, Mo T, Brumme ZL, Montaner JS, Badley AD, Harrigan PR. HIV VprR77Q mutation does not influence clinical response of individuals initiating highly active antiretroviral therapy. *AIDS Res Hum Retroviruses*. 2006;22(7):615-8.
- Cote HC, Brumme ZL, Chan JW, Guillemi S, Montaner JS, Harrigan PR. HIV therapy, hepatitis C virus infection, antibiotics and obesity, a mitochondria killer mix? *AIDS*. 2006;20(9):1343-5.
- Côté HCF, Magil AB, Harris M, Scarth BJ, Gadawski I, Wong N, Yu E, Yip B, Zalunardo N, Werb R, Harrigan PR, Montaner JS. Exploring mitochondrial nephrotoxicity as a potential mechanism of kidney dysfunction among HIV-infected patients on highly active antiretroviral therapy. *Antiviral Therapy* 2006;11(1):79-86.
- Dhalla S, Chan KJ, Montaner JS, Hogg RS. Complementary and alternative medicine use in British Columbia-A survey of HIV positive people on antiretroviral therapy. *Complement Ther Clin Pract* 2006;12(4):242-8.
- Gross R, Yip B, Re VL 3rd, Wood E, Alexander CS, Harrigan PR, Bangsberg DR, Montaner JS, Hogg RS. A Simple, Dynamic Measure of Antiretroviral Therapy Adherence Predicts Failure to Maintain HIV-1 Suppression. *J Infect Dis* 2006;194(8):1108-14.
- Hammer SM, Saag MS, Schechter M, Montaner JS, Schooley RT, Jacobsen DM, Thompson MA, Carpenter CC, Fischl MA, Gazzard BG, Gatell JM, Hirsch MS, Katzenstein DA, Richman DD, Vella S, Yeni PG, Volberding PA; International AIDS Society-USA Panel. Treatment for adult HIV

---

infection: 2006 recommendations of the International AIDS Society-USA Panel. *JAMA* 2006;296(7):827-43.

- Hammer SM, Saag MS, Schechter M, Montaner JS, Schooley RT, Jacobsen DM, Thompson MA, Carpenter CC, Fischl MA, Gazzard BG, Gatell JM, Hirsch MS, Katzenstein DA, Richman DD, Vella S, Yeni PG, Volberding PA; International AIDS Society-USA Panel. Treatment for adult HIV infection: 2006 recommendations of the International AIDS Society-USA Panel. *Top HIV Med* 2006;14(3):827-43.
- Harris M, Joy R, Larsen G, Valyi M, Walker E, Frick LW, Palmatier RM, Wring SA, Montaner JSG. Enfuvirtide plasma levels and injection site reactions using a needle-free gas-powered injection system (Biojector). *AIDS* 2006;20:719-23.
- Harris M, Larsen G, Valyi M, Walker E, Montaner JSG. Transient neuropathy following needle-free injection outside of recommended sites. *AIDS* 2006;20:784-5.
- Hogg RS, Bangsberg DR, Lima VD, Alexander C, Bonner S, Yip B, Wood E, Dong WW, Montaner JS, Harrigan PR. Emergence of drug resistance is associated with an increased risk of death among patients first starting HAART. *PLoS Med*. 2006 Sep 19;3(9).
- Kerr T, Stoltz J, Strathdee S, Li K, Hogg RS, Montaner JS, Wood E. The impact of sex partners' HIV status on HIV seroconversion in a prospective cohort of injection drug users. *JAIDS* 2006;41(1):119-23.
- Kerr T, Stoltz J, Tyndall M, Li K, Zhang R, Montaner J, Wood E. Impact of a medically supervised safer injection facility on community drug use patterns: A before and after study. *British Medical Journal* 2006; 332: 220-22.
- Kerr T, Fairbairn N, Tyndall M, Marsh D, Li K, Montaner J, Wood E. Predictors of non-fatal overdose among a cohort of polysubstance-using injection drug users. *Drug Alcohol Depend* 2006;Sept 5 (Epub ahead of print).
- Kerr T, Tyndall MW, Lai C, Montaner JSG, Wood E. Drug-related overdoses within a medically supervised safer injection facility. *Internat J Drug Policy* 2006;17(5):436-41.
- Kuyper LM, Kerr T, Li K, Hogg RS, Tyndall MW, Montaner JSG, Wood E. Factors associated with buying and selling syringes among injection drug users in a setting with one of North America's largest syringe exchange programs. *Subst Use Misuse*, 2006; 41(6-7): 883-899.
- Levy AR, James D, Johnston K, Hogg RS, Harrigan PR, Harrigan BP, Sobolev B, Montaner JS. The direct costs of HIV/AIDS care: a review of the published studies. *Lancet Infect Dis* 2006;6:171-77.
- Lima VD, Kretz P, Palepu A, Bonner S, Kerr T, Moore D, Daniel M, Montaner JS, Hogg RS. Aboriginal status is a prognostic factor for mortality among antiretroviral naive HIV-positive individuals first initiating HAART. *AIDS Research and Therapy* 2006; 3(1): 14.
- Lloyd-Smith E, Brodtkin E, Wood E, Kerr T, Tyndall MW, Montaner JSG, Hogg RS. Impact of HAART and injection drug use on life expectancy of two HIV-positive cohorts in British Columbia. *AIDS* 2006; 20(3): 445-50.
- McKnight B, McKnight I, Kerr T, Li K, Montaner J, Wood E. Prevalence and correlates of cervical cancer screening among injection drug users. *J Obstet Gynaecol Can* 2006;28(8):695-99.
- Maas B, Fairbairn N, Li K, Kerr T, Montaner J, Wood E. Neighborhood and HIV infection among IDU: Place of residence independently predicts HIV infection among a cohort of injection drug users. *Health Place*, 2006 Jun 22 [Epub ahead of print].
- Maas B, Kerr T, Fairbairn N, Montaner J, Wood E. Pharmacokinetic interactions between HIV antiretroviral therapy and drugs used to treat opioid dependence. *Expert Opin Drug Metab Toxicol* 2006; 2(4): 533-543.
- Montaner JS, Hogg R, Wood E, Kerr T, Tyndall M, Levy AR, Harrigan PR. The case for expanding access to highly active antiretroviral therapy to curb the growth of the HIV epidemic. *Lancet* 2006; 368(9534):531-536.



- 
- Montaner JSG, Schutz M, Schwart R, Jayaweera DT, Burnside AF, Walmsley S, Saag MS. Efficacy, safety and pharmacokinetics of once-daily saquinavir soft-gelatin capsule/ritonavir in antiretroviral-naive, HIV-infected patients. *eJournal of the International AIDS Society. Medscape General Medicine* 2006;8(2):36. (Posted May 10, 2006)
  - Moore DM, Hogg RS, Chan K, Tyndall M, Yip B, Montaner JSG. Disease progression in patients with virological suppression in response to HAART is associated with the degree of immunological response. *AIDS* 2006;20(3):371-77.
  - Moore DM, Hogg RS, Yip B, Craib K, Wood E, Montaner JS. CD4 percentage is an independent predictor of survival in patients starting antiretroviral therapy with absolute CD4 cell counts between 200 and 350 cells/microL. *HIV Med* 2006;7(6):383-8.
  - Moore DM, Hogg RS, Yip B, Wood E, Harris M, Montaner JS. Regimen-dependent variations in adherence to therapy and virological suppression in patients initiating protease inhibitor-based highly active antiretroviral therapy. *HIV Med* 2006;7(5):311-6.
  - Moore DM, Mermin J, Awor A, Yip B, Hogg RS, Montaner JS. Performance of immunologic responses in predicting viral load suppression: Implications for monitoring patients in resource-limited settings. *JAIDS* 2006;43(4):436-39.
  - Palepu A, Tyndall MW, Joy R, Kerr T, Wood E, Press N, Hogg RS, Montaner JS. Antiretroviral adherence and HIV treatment outcomes among HIV/HCV co-infected injection drug users: the role of methadone maintenance therapy. *Drug Alcohol Depend* 2006;84(2):188-94.
  - Petrar S, Kerr T, Tyndall MW, Zhang R, Montaner JS, Wood E. Injection drug users' perceptions regarding use of a medically supervised safer injecting facility. *Addict Behav* 2006 Aug 21 (Epub ahead of print).
  - Sterling RK, Lissen E, Clumeck N, Sola R, Correa MC, Montaner JS, Sulkowski M, Torriani FJ, Dieterich DT, Thomas DL, Messinger D, Nelson M; APRICOT Clinical Investigators. Development of a simple noninvasive index to predict significant fibrosis in patients with HIV/HCV coinfection. *Hepatology* 2006;43(6):1317-25.
  - Tyndall MW, Kerr T, Zhang R, King E, Montaner JSG, Wood E. Attendance, drug use patterns, and referrals made from North America's first supervised injection facility. *Drug Alcohol Depend* 2006;83(3):193-8.
  - Tyndall MW, McNally M, Lai C, Zhang R, Wood E, Kerr T, Montaner JSG. Directly observed therapy programmes for antiretroviral treatment amongst injection drug users in Vancouver: Access, adherence and outcomes. *Internat J Drug Policy* 2006 Dec 27 (online).
  - Wood E, Hogg RS, Yip B, Moore D, Harrigan PR, Montaner JS. Impact of baseline viral load and adherence on survival of HIV-infected adults with baseline CD4 cell counts =200 cells/microl. *AIDS* 2006;20(8):1117-23.
  - Wood E, Kerr T, Hogg RS, Zhang R, Tyndall MW, Montaner JSG. Validity of self-reported antiretroviral therapy use among injection drug users. *J Acquir Immune Defic Syndr* 2006;41(4):530-31.
  - Wood E, Kerr T, Palepu A, Zhang R, Strathdee SA, Tyndall MW, Montaner JSG, Hogg RS. Slower uptake of HIV antiretroviral therapy among Aboriginal injection drug users. *J Infect Dis* 2006;52: 233-36.
  - Wood E, Stoltz J, Li K, Montaner J, Kerr T. The cause of the Australian heroin shortage: Time to reconsider? *Addiction* 2006;101:623-625.
  - Wood E, Stoltz J, Li K, Montaner JSG, Kerr T. Changes in Canadian heroin supply coinciding with the Australian heroin shortage. *Addiction* 2006;101:689-695.
  - Wood E, Stoltz J, Montaner JSG, Kerr T. Evaluating methamphetamine use and risks of injection initiation among street youth: The ARYS study. *Harm Reduction Journal* 2006;3(1):18.
  - Wood E, Tyndall MW, Lai C, Montaner JSG, Kerr T. Impact of a medically supervised safer injecting

- 
- facility on drug dealing and other drug-related crime. *Subst Abuse Treat Prev Policy* 2006;1(1):13.
- Wood E, Tyndall MW, Qui Z, Zhang R, Montaner JS, Kerr T. Service uptake and characteristics of injection drug users utilizing North America's first medically supervised safer injecting facility. *Amer J Public Health* 2006;96(5):770-73.
  - Wood E, Tyndall MW, Zhang R, Stoltz JA, Lai C, Montaner JS, Kerr T. Attendance at supervised injecting facilities and use of detoxification services. *New Engl J Med* 2006;354(23):2512-14.
  - Wood E, Kerr T, Hogg R, Palepu A, Zhang R, Strathdee S, Montaner JSG. Impact of HIV testing on uptake of HIV therapy among antiretroviral naive HIV-infected injection drug users. *Drug Alcohol Rev* 2006;25(5):451-54.
  - Wood E, Tyndall MW, Montaner JS, Kerr T. Summary of findings from the evaluation of a pilot medically supervised safer injecting facility. *CMAJ* 2006;175(11):1399-1404.

### **Montessori, Dr. Valentina C**

- Christie T, Jiwani B, Asrat G, Montessori V, Mathias R, Montaner J. Ethical and scientific issues surrounding solid organ transplantation in HIV-positive patients: Absence of evidence is not evidence of absence. *Can J Infect Dis Med Microbiol* 2006;17(1):15-18.

### **Moore, Dr. David M**

- Moore D, Hogg RS, Yip B, Craib K, Wood E, Montaner JSG. CD4 percentage is an independent predictor of survival in patients starting antiretroviral therapy with absolute CD4 cell counts between 200 and 350 cells/uL. *HIV Med* 2006 7(6):383- 388.
- Moore D, Hogg RS, Chan K, Tyndall M, Yip B, Montaner JSG. Disease progression in patients with virologic suppression in response to HAART is associated with the degree of immunologic response. *AIDS* 2006 14;20(3):371-7.
- Moore D, Copes R, Fisk R, Brauer M. Population Health Effects of Forest Fires in British Columbia, Canada: Estimates from Physician-Visit Billing Data, July - September 2003. *2006 CJPH* 97(2):105-108
- Moore D, Hogg RS, Braitstein P, Yip B, Wood E, Montaner JSG. Stratification of risk for mortality by baseline CD4 cell counts in hepatitis C positive and negative individuals initiating highly active antiretroviral therapy (HAART). *Antivir Ther* 2006;11(1):125-9.
- Braitstein P, Zala C, yip B, Brinkhof MWG, Moore D, Hogg RS, Montaner JSG. Immunologic Response to Antiretroviral Therapy in Hepatitis C Virus-Coinfected Adults in a Population-Based HIV/AIDS Treatment Program. *J Inf Dis* 2006. 193: 259-268
- Moore D, Hogg RS, Yip B, Wood E, Harris M, Montaner JSG. Regimen dependent variations in adherence to therapy and virologic suppression in patients initiating protease inhibitor-based highly active antiretroviral therapy (HAART). *HIV Med* 2006 7(5): 311- 318.
- Lima VD, Kretz P, Palepu A, Bonner S, Kerr T, Moore D, Daniel M, Montaner JS, Hogg RS. Aboriginal status is a prognostic factor for mortality among antiretroviral naive HIV-positive individuals first initiating HAART. *AIDS Res Ther.* 2006 May 24;3(1):14.
- Wood E, Hogg RS, Yip B, Moore D, Harrigan PR, Montaner JS. Impact of baseline viral load and adherence on survival of HIV-infected adults with baseline CD4 cell counts > or = 200 cells/microl. *AIDS.* 2006 May 12; 20(8):1117-23.

### **Nandan, Dr. Devki**

- Cherkasov, A., Nandan, D and NE Reiner (2006). Large scale survey of targetable indels in bacterial and protozoan proteins. *Proteins.* 62(2): 371-80.
- Leon, C, Nandan, D., M Lopez Moeenrezakhanlou, A and NE Reiner (2006) Annexin V associates with the interferon-gamma receptor and regulates IFN-gamma signaling. *J Immunol.* 176(10):5934-

**Phillips, Dr. Peter**

- Austin J, Singhal N, Voigt R, Smaill F, Gill MJ, Walmsley S, Salit I, Gilmour J, Schlech WF, Choudhri S, Rachlis A, Cohen J, Trottier S, Toma E, Phillips P, Ford PM, Woods R, Singer J, Zarowny DP, Cameron DW \*for the CTN 091/CRIT Carotenoids Study Group. A community randomized controlled clinical trial of mixed carotenoids and micronutrient supplementation of patients with acquired immunodeficiency syndrome. *Eur J Clin Nutr* 2006;1-11.

**Press, Dr. Natasha M**

- Nelson A, Press N, Bautista CT, Arevalo J, Quiroz C, Calderon M, Campos K, Bryant A, Shantz-Dunn J, Dahodwala N, Vera M, Vivar A, Saito M, Gilman RH. Prevalence of Sexually Transmitted Infections and High-Risk Sexual Behaviors in Heterosexual Couples Attending Sexually Transmitted Disease Clinics in Peru. *Sex Transm Dis*. 2006 Oct 25
- Palepu A, Tyndall MW, Joy R, Kerr T, Wood E, Press N, Hogg RS, Montaner JS. Antiretroviral adherence and HIV treatment outcomes among HIV/HCV co-infected injection drug users: the role of methadone maintenance therapy. *Drug Alcohol Depend*. 2006 Sep 15;84(2):188-94.

**Reiner, Dr. Neil E**

- Noubir S, Lee JS, Reiner NE (2005) Pleiotropic effects of phosphatidylinositol 3-kinase in monocyte cell regulation. *Prog Nuc Acid Res & Mol Biol*. 81:51-95.
- Al-Rawahi, G and NE Reiner (2006) Amoebic liver abscess, *Microbiology* 49(2):17-31.
- AlShukairi, A, MG Morshed and NE Reiner (2006) Q fever presenting as recurrent, culture negative endocarditis with aortic prosthetic valve failure: case report and review of the literature. *Can J of Inf Dis and Med Microb*. 17:341-344.

**Rekart, Dr. Michael L**

- Rekart ML. Sex-work harm reduction. *Lancet* 2006; 266(9503): 2123-2134.

**Steiner, Dr. Theodore S**

- Steiner TS, Samie A, and Guerrant RL. Infectious Diarrhea: New pathogens and new challenges in developed and developing areas. *Clin. Infect. Dis*. 2006; 43(4):408-410.

**Stiver, Dr. H. G**

- Allen UD, Aoki FY, Stiver HG. The use of antiviral drugs for influenza: recommendations for practitioners. *Can J Infect Dis Med Microbiol* 2006;17:273-84

**Tyndall, Dr. Mark W**

- Wood E, Kerr T, Palepu A, Zhang R, Strathdee S, Tyndall M, Montaner JS, Hogg R. Slower uptake of HIV antiretroviral therapy among Aboriginal injection drug users. *J Infect* 2006; 52(4):233-6.
- Tyndall MW, Kerr T, Zhang R, King E, Montaner JG, Wood E. Attendance, drug use patterns, and referrals made from North America's first supervised injection facility. *Drug Alcohol Depend*. 2006; 83(3):193-8.
- Kerr T, Stoltz J, Tyndall M, Li K, Zhang R, Montaner J, Wood E. Impact of a medically supervised safer injection facility on community drug use patterns: a before and after study. *Brit Med J* 2006; 332: 220-2.
- Palepu A, Tyndall MW, Joy R, Kerr T, Wood E, Press N, Hogg RS, Montaner JS. Antiretroviral adherence and HIV treatment outcomes among HIV/HCV co-infected injection drug users: the role of methadone maintenance therapy. *Drug Alcohol Depend* 2006; 15;84(2):188-94.
- Moore D, Hogg R, Chan K, Tyndall M, Yip B, Montaner JS. Disease progression in patients with

---

virological suppression in response to HAART is associated with the degree of immunological response. *AIDS* 2006; 20(3): 371-7.

- Wood E, Tyndall MW, Qui Z, Zhang R, Montaner JS, Kerr T. Service uptake and characteristics of injection drug users utilizing North America's first medically supervised safer injecting facility. *Am J Public Health* 2006; 96(5):770-3.
- Lloyd-Smith E, Brodtkin E, Wood E, Kerr T, Tyndall MW, Montaner JS, Hogg RS. Impact of HAART and injection drug use on life expectancy of two HIV-positive cohorts in British Columbia. *AIDS* 2006; 20(3): 445-50.
- Wood E, Tyndall MW, Lai C, Zhang R, Montaner JS, Kerr T. Detoxification service use associated with the opening of a safer injecting facility for injection drug users. *N Engl J Med*. 2006;354(23):2512-4.
- Shannon K, Ishida T, Morgan R, Bear A, Oleson M, Kerr T, Tyndall MW. Potential community and public health impacts of medically supervised safer smoking facilities for crack cocaine users. *Harm Reduction J* 2006; Jan10:3.
- Small D, Palepu A, Tyndall MW. The establishment of North America's first state sanctioned supervised injection facility: A case study in cultural change. *Int J Drug Pol* 2006; 17:73-82.
- Shannon K, Kerr T, Lai C, Ishida T, Tyndall MW. The impact of unregulated single room occupancy hotels on the health status of illicit drug users in Vancouver. *Int J Drug Pol* 2006; 17:107-14.
- Kuyper LM, Kerr T, Li K, Hogg RS, Tyndall MW, Montaner JS, Wood E. Factors associated with buying and selling syringes among injection drug users in a setting of one of North America's largest syringe exchange programs. *Subst Use Misuse* 2006;41(6-7):883-99.
- Wood E, Kerr T, Hogg RS, Zhang R, Tyndall MW, Montaner JS. Validity of self-reported antiretroviral therapy use among injection drug users. *J Acquir Immune Defic Syndr* 2006; 41(4):530-1.
- Montaner JS, Hogg R, Wood E, Kerr T, Tyndall M, Levy AR, Harrigan PR. The case for expanding access to highly active antiretroviral therapy to curb the growth of the HIV epidemic. *Lancet* 2006;368(9534):531-6.
- Petrar S, Kerr T, Tyndall MW, Zhang R, Montaner JS, Wood E. Injection drug users' perceptions regarding use of a medically supervised safer injecting facility. *Addict Behav*. 2006 Aug 21; [Epub ahead of print]
- Monga N, Rehm J, Fischer B, Brissette S, Bruneau J, El-Guebaly N, Noel L, Tyndall M, Wild C, Francesco, Fallu JS, Bahl S. Using latent class analysis (LCA) to analyze patterns of drug use in a population of illegal opioid users. *Drug Alcohol Depend*. 2006 Oct 16; [Epub ahead of print]
- Noel L, Fischer B, Tyndall MW, Bradet DR, Rehm J, Brissette S, Brochu S, Bruneau J, El-Guebaly N, Wild TC. Health and social services accessed by a cohort of Canadian illicit opioid users outside of treatment. *Can J Public Health* 2006; 97(3):166-70.
- Kerr T, Fairbairn N, Tyndall M, Marsh D, Li K, Montaner J, Wood E. Predictors of non-fatal overdose among a cohort of polysubstance-using injection drug users. *Drug Alcohol Depend*. 2006 Sep 5; [Epub ahead of print]
- Wood E, Tyndall MW, Lai C, Montaner JS, Kerr T. Impact of a medically supervised safer injecting facility on drug dealing and other drug-related crime. *Subst Abuse Treat Prev Policy* 2006; 8:1:13.
- Grebaly J, Conway B, Raffa J, Lai C, Kraiden M, Tyndall MW. Hepatitis C Virus reinfection in injection drug users. *Hepatology* 2006; 44:1139-45.
- Steenbeek A, Tyndall M, Rothenberg R, Sheps S. Determinants of sexually transmitted infections among Canadian Inuit adolescent populations. *Public Health Nurs* 2006; 23(6):531-4.
- Wood E, Tyndall MW, Montaner JS, Kerr T. Summary of findings from the evaluation of a pilot medically supervised safer injecting facility. *CMAJ* 2006; 175(11):1399-404.
- Fischer B, Rehm J, Patra J, Kalousek K, Haydon E, Tyndall M, El-Guebaly N. Crack across Canada:

---

Comparing crack users and crack non-users in a Canadian multi-city cohort of illicit opioid users. *Addiction* 2006; 101(12):1760-70.

- Tyndall MW, Wood E, Zhang R, Lai C, Montaner JS, Kerr T. HIV seroprevalence among participants at a Supervised Injection Facility in Vancouver, Canada: implications for prevention, care and treatment. *Harm Reduct J* 2006; 18;3:36.

### **Wood, Dr. Evan**

- Kerr T, Small W, Peeace W, Pierre A, Wood E. Harm reduction by a 'user-run' organization: A case study of the Vancouver Area Network of Drug Users (VANDU). *International Journal of Drug Policy*, 2006; 17: 61-69.
- Braitstein P, Li K, Spittal PM, Montaner JS, Hogg RS, Schechter MT, Wood E. Differences in access to care among injection drug users infected either with HIV and hepatitis C or Hepatitis C alone. *AIDS Care*, 2006; 18(7): 690-693.
- Corneil TA, Kuyper LM, Shoveller J, Hogg RS, Li K, Spittal PM, Schechter MT, Wood E. Unstable housing, associated risk behaviour, and increased risk for HIV infection among injection drug users. *Health & Place*, 2006; 12:79-85
- Wood E, Kerr T, Palepu A, Zhang R, Strathdee SA, Tyndall MW, Montaner JSG, Hogg RS. Slower uptake of HIV antiretroviral therapy among Aboriginal injection drug users. *Journal of Infection*, 2006; 52: 233-236).
- Tyndall MW, Kerr T, Zhang R, King E, Montaner JG, Wood E, Attendance, drug use patterns, and referrals made from North America's first supervised injection facility. *Drug and Alcohol Dependence*, 2006; 83(3); 193-198.
- Kerr T, Stoltz J, Strathdee S, Li K, Hogg RS, Montaner JS, Wood E. The impact of sex partners' HIV status on HIV seroconversion in a prospective cohort of injection drug users. *Journal of Acquired Immune Deficiency Syndrome*, 2006; 41(1):119-123
- Spittal PM, Hogg RS, Li K, Craib KJ, Reesky M, Johnston C, Montaner JS, Schechter MT, Wood E. Drastic elevations in mortality among female injection drug users in a Canadian setting. *AIDS Care*, 2006; 18(2):101-8
- Miller CL, Kerr T, Frankish JC, Spittal PM, Li K, Schechter MT, Wood E. Binge drug use independently predicts HIV seroconversion among injection drug users: Implications for public health strategies. *Substance Use and Misuse*, 2006; 41(2):119-210
- Kerr T, Stoltz J, Tyndall M, Li K, Zhang R, Montaner J, Wood E. Impact of a medically supervised safer injection facility on community drug use patterns: a before and after study. *British Medical Journal*, 2006; 332:220-222.
- Wood E, Tyndall MW, Qui Z, Zhang R, Montaner JS, Kerr T. Service uptake and characteristics of injection drug users using North America's first medically supervised safer injecting facility. *Am J Pub Health*, 2006; 96(5): 770-773.
- Wood E, Stoltz J, Li K, Montaner JSG, Kerr T. Changes in Canadian heroin supply coinciding with the Australian heroin shortage. *Addiction*, 2006, 101(5): 689-695.
- Wood E, Kerr T. Needle exchange and the HIV outbreak among injection drug users in Vancouver Canada. *Substance use & Misuse*, 2006; 41(6-7): 841-843.
- Miller C, Strathdee SA, Kerr T, Li K, Wood E. Factors associated with early adolescent initiation into injection drug use: implications for injection drug use intervention programs. *J Adol Health*, 2006; 38(4): 462-464.
- Callon C, Wood E, Marsh D, Li K, Montaner J, Kerr T. Barriers and facilitators to methadone maintenance therapy use among illicit opiate injection drug users in Vancouver. *Journal of Opioid Management*, 2006; 2(1): 35-41.
- Moore DM, Hogg RS, Braitstein P, Wood E, Yip B, Montaner JSG. Risks of non-accidental mortality

---

by baseline CD4+ T-cell strata in hepatitis-C-positive and -negative individuals initiating highly active antiretroviral therapy. *Antiviral Therapy*, 2006; 11(1): 125-129.

- Wood E, Stoltz J, Li K, Montaner J, Kerr T. The cause of the Australian heroin shortage: Time to reconsider? *Addiction*, 2006; 101: 623-625.
- Lloyd-Smith E, Brodtkin E, Wood E, Kerr T, Tyndall MW, Montaner JSG, Hogg RS. Impact of HAART and injection drug use on life expectancy of two HIV-positive cohorts in British Columbia. *AIDS*, 2006; 20(3): 445-450.
- Wood E, Kerr T, Hogg RS, Zhang Z, Tyndall MW, Montaner JSG. Validity of self-reported antiretroviral therapy use among injection drug users. *Journal of Acquired Immune Deficiency Syndromes*, 2006; 41(4): 530-531.
- Wood E, Lim R, Kerr T. Initiation of opiate addiction in a Canadian prison: a case report. *Harm Reduction Journal*, 2006; 3(1): 11.
- Miller CL, Strathdee SA, Spittal PM, Kerr T, Li K, Schechter MT, Wood E. Elevated rates of HIV infection among young Aboriginal injection drug users in a Canadian setting. *Harm Reduction Journal*, 2006; 3(1): 9.
- Wood E, Hogg RS, Yip B, Moore D, Harrigan PR, Montaner JSG. Impact of baseline viral load and adherence on survival of HIV-infected adults with baseline CD4 cell counts = 200 cells/μl. *AIDS*, 2006; 20(8): 1117-1123.
- Moore DM, Hogg RS, Yip B, Wood E, Harris M, Montaner JSG. Regimen-dependent variations in adherence to therapy and virological suppression in patients initiating protease inhibitor-based highly active antiretroviral therapy. *HIV Medicine*, 2006; 7: 311-316.
- Wood E, Tyndall MW, Zhang R, Stoltz JA, Lai C, Montaner JS, Kerr T. Attendance at supervised injecting facilities and use of detoxification services. *New England Journal of Medicine*, 2006; 354(23): 2512-2514.
- Wood E, Stoltz J, Montaner JSG, Kerr T. Evaluating methamphetamine use and risks of injection initiation among street youth: The ARYS study. *Harm Reduction Journal*, 2006; 3(1): 18.
- Kuyper LM, Kerr T, Li K, Hogg RS, Tyndall MW, Montaner JSG, Wood E. Factors associated with buying and selling syringes among injection drug users in a setting with one of North America's largest syringe exchange programs. *Substance Use & Misuse*, 2006; 41(6-7): 883-899.
- Wood E, Tyndall MW, Lai C, Montaner JSG, Kerr T. Impact of a medically supervised safer injecting facility on drug dealing and other drug-related crime. *Substance Abuse Treatment, Prevention, and Policy*, 2006; 1(1): 13.
- Wood E, Kerr T. What do you do when you hit rock bottom? Responding to drugs in the city of Vancouver. *International Journal of Drug Policy*, 2006; 17: 55-60.
- Montaner JS, Hogg R, Wood E, Kerr T, Tyndall M, Levy AR, Harrigan PR. The case for expanding access to highly active antiretroviral therapy to curb the growth of the HIV epidemic. *Lancet*, 2006; 368(9534): 531-536.
- Moore DM, Hogg RS, Yip B, Craib K, Wood E, Montaner JSG. CD4 percentage is an independent predictor of survival in patients starting antiretroviral therapy with absolute CD4 cell counts between 200 and 350 cells/mL. *HIV Medicine*, 2006; 7: 383-388.
- Maas B, Kerr T, Fairbairn N, Montaner J, Wood E. Pharmacokinetic interactions between HIV antiretroviral therapy and drugs used to treat opioid dependence. *Expert Opinion on Drug Metabolism & Toxicology*, 2006; 2(4): 533-543.
- McKnight B, McKnight I, Kerr T, Li K, Montaner J, Wood E. Prevalence and correlates of cervical cancer screening among injection drug users. *Journal of Obstetrics and Gynaecology Canada*, 2006; 28(8): 695-699.
- Palepu A, Tyndall MW, Joy R, Kerr T, Wood E, Press N, Hogg RS, Montaner JS. Antiretroviral adherence and HIV treatment outcomes among HIV/HCV co-infected injection drug users: the role of

---

methadone maintenance therapy. *Drug and Alcohol Dependence*, 2006; 84(2): 188-194.

- Wood E, Kerr T, Hogg RS, Palepu A, Zhang R, Strathdee SA, Montaner JSG. Impact of HIV testing on uptake of antiretroviral therapy among HIV-infected injection drug users. *Drug & Alcohol Review*, 2006; 25(5): 451-454.
- Hogg RS, Bangsberg DR, Lima VD, Alexander C, Bonner S, Yip B, Wood E, Dong WWY, Montaner JSG, Harrigan PR. Emergence of drug resistance is associated with an increased risk of death among patients first starting HAART. *PloS Medicine*, 2006; 3(9): 1570-1578.
- Kerr T, Tyndall MW, Lai C, Montaner JSG, Wood E. Drug-related overdoses within a medically supervised safer injection facility. *International Journal of Drug Policy*, 2006; 17(5): 436-441.
- Gross R, Yip B, Re VL 3rd, Wood E, Alexander CS, Harrigan PR, Bangsberg DR, Montaner JSG, Hogg RS. A simple, dynamic measure of antiretroviral therapy adherence predicts failure to maintain HIV-1 suppression. *Journal of Infectious Diseases*, 2006; 194(8): 1108-1114.
- Miller CL, Spittal PM, Wood E, Chan K, Schechter MT, Montaner JS, Hogg RS. Inadequacies in antiretroviral therapy use among Aboriginal and other Canadian populations. *AIDS Care*, 2006; 18(8): 968-976.
- Petrar S, Kerr T, Tyndall MW, Zhang R, Montaner JSG, Wood E. Injection drug users' perceptions regarding use of a medically supervised safer injecting facility. *Addictive Behaviors*, 2006 Aug 21 [Epub ahead of print].
- Kerr T, Fairbairn N, Tyndall M, Marsh M, Li K, Montaner J, Wood E. Predictors of non-fatal overdose among a cohort of polysubstance-using injection drug users. *Drug and Alcohol Dependence*, 2006 Sep 5 [Epub ahead of print].
- Wood E, Tyndall MW, Montaner JS, Kerr T. Summary of findings from the evaluation of a pilot medically supervised safer injecting facility. *Canadian Medical Association Journal*, 2006; 175: 1399-1404.
- Tyndall MW, Wood E, Zhang R, Lai C, Montaner JS, Kerr T. HIV seroprevalence among participants at a Supervised Injection Facility in Vancouver, Canada: implications for prevention, care and treatment. *Harm Reduction Journal*, 2006; 3(1): 36.

## **MEDICAL ONCOLOGY**

### **Chi, Dr. Kim N**

- Tinker A, Winquist E, Canil C, Moore M, Murray RN, Chi KN. Cisplatin, gemcitabine and weekly docetaxel for patients with advanced transitional cell cancer (TCC). *Am J Clin Oncol*, 29(1):3-7, 2006.
- Michels JE, Montemurro T, Kollmannsberger C, Murray N, Chi KN. First- and second-line chemotherapy with docetaxel or mitoxantrone in patients with hormone-refractory prostate cancer (HRPC): Does sequence matter? *Cancer*, 106(5):1041-6, 2006.
- Foltz LM, Dalal BI, Wadsworth LD, Broady R, Chi K, Eisenhauer E, Kobayashi K, Kollmannsberger C. Recognition and management of methemoglobinemia and hemolysis in a G6PD-deficient patient on experimental anticancer drug Triapine. *American Journal of Hematology*. 81(3):210-1, 2006.
- D.Y.C. Heng, Kim N. Chi. Prednisone chemotherapy in asymptomatic hormone refractory prostate cancer. *The Canadian Journal of Urology*; 13(6):3035, 2006.
- Beer TM, Venner PM, Ryan CW, Petrylak DP, Chatta G, Dean Ruether J, Chi, KN, Curd JG, DeLoughery TG. High dose calcitriol may reduce thrombosis in cancer patients. *British Journal of Haematology* 135(3):392-4, Nov 2006.

### **Connors, Dr. Joseph M**

- Iqbal J, Neppalli VT, Wright G, Dave BJ, Horsman DE, Rosenwald A, Lynch J, Hans CP, Weisenburger DD, Greiner TC, Gascoyne RD, Campo E, Ott G, Muller-Hermelink HK, Delabie J, Jaffe ES, Grogan TM, Connors JM, Vose JM, Armitage JO, Staudt LM, Chan WC. BCL2 expression

---

is a prognostic marker for the activated B-cell-like type of diffuse large B-cell lymphoma. *J Clin Oncol* 2006;24:961-8.

- Dave SS, Fu K, Wright GW, Lam LT, Kluin P, Boerma EJ, Greiner TC, Weisenburger DD, Rosenwald A, Ott G, Muller-Hermelink HK, Gascoyne RD, Delabie J, Rimsza LM, Braziel RM, Grogan TM, Campo E, Jaffe ES, Dave BJ, Sanger W, Bast M, Vose JM, Armitage JO, Connors JM, Smeland EB, Kvaloy S, Holte H, Fisher RI, Miller TP, Montserrat E, Wilson WH, Bahl M, Zhao H, Yang L, Powell J, Simon R, Chan WC, Staudt LM; Lymphoma/Leukemia Molecular Profiling Project. Molecular diagnosis of Burkitt's lymphoma. *N Engl J Med*. 2006;354:2431-42.
- Foltz LM, Song KW, Connors JM. Hodgkin's lymphoma in adolescents. *J Clin Oncol*. 2006;24:2520-6.
- Song KW, Barnett MJ, Gascoyne RD, Horsman DE, Forrest DL, Hogge DE, Lavoie JC, Nantel SH, Nevill TJ, Shepherd JD, Smith CA, Sutherland HJ, Voss NJ, Toze CL, Connors JM. Haematopoietic stem cell transplantation as primary therapy of sporadic adult Burkitt lymphoma. *Br J Haematol*. 2006;133:634-7.
- Macpherson N, Belch A, Taylor M, Sutherland J, Czaykowski P, Connors J. Liposomal encapsulated doxorubicin (Caelyx) in the treatment of relapsed aggressive non-Hodgkin's lymphoma: a phase II study. *Leukemia & lymphoma* 2006 Jul;47:1327-32.
- Savage KJ, Al-Rajhi N, Voss N, Paltiel C, Klasa R, Gascoyne RD, Connors JM. Favorable outcome of primary mediastinal large B-cell lymphoma in a single institution: the British Columbia experience. *Ann Oncol* 2006;17:123-30.
- Shah J, Yoshida EM, Connors J, Gill S. Hepatic dysfunction during and after lymphoma chemotherapy in patients with hepatitis C. *J Clin Gastroenterology* 2006;40:636-8.

#### **Ellard, Dr. Susan L**

- Robinson AG, Turbin D, Thomson T, Yorida E, Ellard S, Bajdik C, Huntsman D, Gelmon K. Molecular predictive factors in patients receiving trastuzumab-based chemotherapy for metastatic disease. *Clinical Breast Cancer*. 7(3):254-61, Aug 2006.

#### **Gelmon, Dr. Karen A**

- Cheang Maggie CU, Treaba Diana O, Speers Caroline H, Olivotto Ivo A, Bajdik Chris D, Chia Stephen K, Goldstein Lynn C, Gelmon Karen A, Huntsman David, Gilks C Blake, Nielsen Torsten O, Gown Allen M. Immunohistochemical detection of estrogen receptor in breast cancer using the new rabbit monoclonal antibody SPI predicts survival better than mouse monoclonal antibody ID5. *Jour Clin Oncol* 2006: 5637-5644.
- Kennecke Hagen F, Olivotto Ivo A, Speers Caroline, Gelmon Karen A, Norris Brian, Chia Stephen K, Bryce Cicely. Late risk of relapse and mortality among post-menopausal women with estrogen receptor-positive early breast cancer after 5 years of tamoxifen. *Accepted Annals of Oncology*, 2006
- Turbin, DA, Cheang MC, Bajdik CD, Gelmon KA, Yorida E, De Luca A, Nielsen TO, Huntsman DG, Gilks CB. MDM2 protein Expression is a negative prognostic marker in breast cancer. *Modern Pathology* 2006; 19(1): 69-74.
- Kennecke HF, Ellard S, O'Reilly S, Gelmon KA. New guidelines for treatment of early hormone positive breast cancer with tamoxifen and aromatase inhibitors. *BCM J* 2006; 48: 121 - 126.
- Troussard AA, McDonald PC, Wederell ED, Mawji NM, Filipenko NR, Gelmon KA, Kucab JE, Dunn SE, Emerman JT, Bally MB, Dedhar S. Preferential Dependence of Breast Cancer Cells versus Normal Cells on Integrin Linked Kinase for PKB-Akt Activation and Cell Survival. *Cancer Research* 2006; 66(1): 393-403.
- Suter TM, Procter M, van Veldhuisen D, Muschol M, Gelmon KA Suto T, Gelber RD Piccart Gebhart M. Trastuzumab Associated Cardiac Side Effects in Herceptin Adjuvant Trial (HERA). Accepted for publication *JCO* 2006



- 
- Gelmon KA, Chan A, Harbeck N. Capecitabine in Metastatic Breast Cancer. A Review. *The Oncologist*, 2006; 11(suppl\_1): 42-51.
  - Waterhouse, DN, Gelmon KA, Klasa R, Chi K, Huntsman D, Ramsay E, Wasan E, Edwards L, Tucker C, Zastre J, Zhang YZ, Yapp D, Dargowksa W, Dunn S, Dedhar S, Bally MB. Development and assessment of conventional and targeted drug combinations for use in the treatment of aggressive breast cancers. *Current Cancer Drug Targets* 2006; 6: 455- 489.
  - Chia Stephen, Clemons Mark, Martin Lee Ann, Rodgers Angela, Gelmon Karen, Pond Gregory R, Panasci Lawrence Pegylated liposomal doxorubicin and trastuzumab inHER2 overexpressing metastatic breast cancer. a multicentre phase II Trial. *J Clin Oncol* 2006; 24: 2773 - 2778
  - Lohrisch Caroline, Paltiel Charles, Gelmon Karen, Speers Caroline, Taylor Suzanne, Barnett Jeff, and Olivotto Ivo A. Impact on Survival of Time From Definitive Surgery to Initiation of Adjuvant Chemotherapy for Early-Stage Breast Cancer. *Jour Clin Oncol*, 2006; 24:4888-4894.

#### **Gill, Dr. Sharlene**

- Gill S and Sargent D. Surrogate Endpoints in Oncology, *The Oncologist*, 2006, [CME online], Jun 2006; 11:624-629
- Shah J, Yoshida E, Connors JM and Gill S. Hepatic Dysfunction During and After Lymphoma Chemotherapy in Patients with Hepatitis C. *J of Clin Gastroenterology*, August 2006; 40(7): 636-638
- Renouf D and Gill S. Capecitabine-induced Cerebellar Toxicity, *Clinical Colorectal Cancer*, May 2006; 6(1): 70-71

#### **Hoskins, Dr. Paul J**

- Harrison ML, Hoskins P, du Bois A, Quinn M, Rustin GJ, Ledermann JA, Baron-Hay S, Friedlander ML. Small cell of the ovary, hypercalcemic type-analysis of combined experience and recommendation for management. A GCIG Study. *Gynecol Oncol* 100(2):233-8, 2006.

#### **Kennecke, Dr. Hagen F**

- Kennecke H., Ellard S, O'Reilly S, Gelmon K. New guidelines for treatment of early hormone – positive breast cancer with tamoxifen and aromatase inhibitors. *BC Medical Journal* 2006; 48(3):121-126.

#### **Klasa, Dr. Richard J**

- Tucker CA. Bebb G. Klasa RJ. Chhanabhai M. Lestou V. Horsman DE. Gascoyne RD. Wiestner A. Masin D. Bally M. Williams ME. Four human t(11;14)(q13;q32)-containing cell lines having classic and variant features of Mantle Cell Lymphoma. [Journal Article] *Leukemia Research*. 30(4):449-57, 2006 Apr.
- Savage KJ. Al-Rajhi N. Voss N. Paltiel C. Klasa R. Gascoyne RD. Connors JM. Favorable outcome of primary mediastinal large B-cell lymphoma in a single institution: the British Columbia experience. [Journal Article] *Annals of Oncology*. 17(1):123-30, 2006 Jan.
- Waterhouse DN. Gelmon KA. Klasa R. Chi K. Huntsman D. Ramsay E. Wasan E. Edwards L. Tucker C. Zastre J. Zhang YZ. Yapp D. Dragowska W. Dunn S. Dedhar S. Bally MB. Development and assessment of conventional and targeted drug combinations for use in the treatment of aggressive breast cancers. [Journal: Review] *Current Cancer Drug Targets*. Vol. 6(6)(pp 455-489), 2006.
- Sehn LH, Berry B, Chhanabhai M, Fitzgerald C, Gill K, Hoskins P, Klasa R, Savage KJ, Shenkier T, Sutherland J, Gascoyne RD, Connors JM. Revised International Prognostic Index (R-IPI) is a better predictor of outcome than the Standard IPI for patients with DLBCL treated with R-CHOP. *Blood*. 2006 Nov 14; [Epub ahead of print] PMID: 17105812 [PubMed - as supplied by publisher]
- Belch A, Kouroukis CT, Crump M, Sehn L, Gascoyne RD, Klasa R, Powers Wright J, Eisenhauer EA. A phase II study of bortezomib in mantle cell lymphoma: the National Cancer Institute of Canada

---

Clinical Trials Group trial IND.150. *Ann Oncol.* 2006 Sep 13; [Epub ahead of print] PMID: 16971665 [PubMed - as supplied by publisher]

- Van Oers MH, Klasa R, Marcus RE, Wolf M, Kimby E, Gascoyne RD, Jack A, Van'Veer M, Vranovsky A, Holte H, van Glabbeke M, Teodorovic I, Rozewicz C, Hagenbeek A. Rituximab maintenance improves clinical outcome of relapsed/resistant follicular non-Hodgkin lymphoma in patients both with and without rituximab during induction: results of a prospective randomized phase 3 intergroup trial. *Blood.* 2006 Nov 15;108(10):3295-301. Epub 2006 Jul 27. PMID: 16873669 [PubMed - in process]

#### **Knowling, Dr. Margaret (Meg) A**

- Knowling, M, Blackstein, M, Tozer, R, Bramwell, V, Dancey, J, Dore, N, Matthews, S, Eisenhauer, E. A phase II study of perifosine (D-21226) in patients with previously untreated metastatic or locally advanced soft tissue sarcoma: A National Cancer Institute of Canada Clinical Trials Group trial. *Invest New Drugs.* 2006 Sep;24(5):435-9.

#### **Kollmannsberger, Dr. Christian**

- Michels J., Montemurro T., Murray N., Kollmannsberger C., Nguyen K. Chi.: First- and second-line chemotherapy with docetaxel or mitoxantrone in patients with hormone-refractory prostate cancer: does sequence matter? *Cancer.* 106: 1041-1046, 2006
- Kollmannsberger C., Nichols C., Bokemeyer C.: Recent advances in the management of patients with platinum-refractory germ cell tumors. *Cancer* 106:1217-26, 2006
- McArthur HL., Dalal BI., Kollmannsberger C.: Intravascular hemolysis as a complication of clostridium perfringens sepsis. *J Clin Oncol.* 24: 2387-2388, 2006.
- Kollmannsberger C., Schittenhelm M., Honecker F., Tillner J, Weber D., Oechsle K., Kanz L., Bokemeyer C.: A Phase I Study of the Humanized Monoclonal Anti-Epidermal Growth Factor Receptor (EGFR) Antibody EMD 72000 (Matuzumab) in Combination with Paclitaxel in Patients with EGFR-Positive Advanced Non-Small Cell Lung Cancer (NSCLC). *Ann Oncol* 17:1007-1013, 2006

#### **Lohrisch, Dr. Caroline A**

- Caroline Lohrisch, Charles Paltiel, Karen Gelmon, Caroline Speers, Suzanne Taylor, Jeff Barnett, and Ivo A. Olivotto. Impact on Survival of Time From Definitive Surgery to Initiation of Adjuvant Chemotherapy for Early-Stage Breast Cancer. *J Clin Oncol* 24:4888-489, 2006

#### **Murray, Dr. Robert Nevin C**

- Michels J, Montemurro T, Murray N, Kollmannsberger C, Chi K. First and second-line chemotherapy with docetaxel or mitoxantrone in patients with hormone refractory prostate cancer: does sequence matter? *Cancer* 106:1041-6, 2006
- Murray N, Turrisi, A. A review of first-line treatment for small cell lung cancer. *J Thorac Oncol* 1: 270-278, 2006
- Ho C, Bebb G, Murray N. Promising new treatment schedule for gefitinib responders after severe hepatotoxicity with daily administration. *J Clin Oncol* 24: 3212-3213, 2006
- Nemunaitis J, Murray N. Immune-modulating vaccines in non-small cell lung cancer. *J Thorac Oncol* 1:756-761, 2006

#### **Norris, Dr. Brian D**

- Kennecke HF, Olivotto IA, Speers C, Norris B, Chia SK, Bryce C, Gelmon KA. Late relapse and mortality among postmenopausal women with estrogen responsive early breast cancer after 5 years of tamoxifen. *Annals of Oncology* 2006. Accepted August 14th 2006

---

**Savage, Dr. Kerry J**

- Savage KJ, A Nasser, Voss N, Paltiel C, Klasa R, Gascoyne RD and Connors JM. Favourable Outcome of Primary Mediastinal Large B-cell Lymphoma: The British Columbia Experience. *Annals of Oncology*. 2006 17 (1): 123-130.
- Savage KJ. Primary Mediastinal Large B-cell Lymphoma. *The Oncologist*. May 2006. 11(5). 488 - 495.
- Law JK, Ali JA, Harrigan PR, Sherlock CH, Savage KJ, Yoshida E. Fatal postlymphoma chemotherapy hepatitis B reactivation secondary to the emergence of a YMDD mutant strain with lamivudine resistance in a noncirrhotic patient. *American Journal of Hematology*. 2006. 81: 969-972
- Sehn LH, Berry B, Chhanabhai M, Fitzgerald C, Gill K, Hoskins P, Klasa R, Savage KJ, Shenkier T, Sutherland J, Gascoyne RD, Connors JM. Revised International Prognostic Index (R-IPI) is a better predictor of outcome than the Standard IPI for patients with DLBCL treated with R-CHOP. 2006 Nov 14 epub

**Sehn, Dr. Laurie H**

- Sehn LH, Connors. Treatment of diffuse large B-cell lymphoma: a risk-based approach. *Clin Lymphoma Myeloma*, 7 suppl 1, 14-9, 2006
- Sehn LH, Berry B, Chhanabhai M, Fitzgerald C, Gill K, Hoskins P, Klasa R, Savage KJ, Shenkier T, Sutherland J, Gascoyne RD, Connors JM. Revised International Prognostic Index (R-IPI) is a better predictor of outcome than the Standard IPI for patients with DLBCL treated with R-CHOP. *Blood*, Nov 14, 2006 (e-pub)
- Sehn LH. Optimal use of prognostic factors in non-hodgkin lymphoma. *Hematology Am Soc Hematol Educ Program*, 296-302, 2006

**Shah, Dr. Amil M**

- Dranitsaris G, Maroun J, Chiritescu G, Shah A, Thirwell M. The development of a prediction tool for severe diarrhea in patients with colorectal cancer receiving chemotherapy. *Supportive and Palliative Cancer Care* 2006.
- Maroun J, Kocha W, Kvoles L, Bjarnason G, Chen E, Germond C, Hanna S, Poitras P, Rayson D, Reid R, Rivera J, Roy A, Shah A, Sideras L, Siu L, Wong R. Guidelines for the diagnosis and management of carcinoid tumours. Part 1: The Gastrointestinal Tract. A statement from the Canadian National Carcinoid Expert Group. *Current Oncology* 13:67-76, 2006
- Shah A. Treating metastatic colorectal cancer: current chemotherapy regimens with incorporation of targeted therapies. *Oncology Exchange* 5:23-28, 2006.

**Shenkier, Dr. Tamara N**

- Jahnke K, Korfel A, O'Neill B P, Blay JY, Abrey LE, Martus P, Poortmans PM, Shenkier TN et al. International study on low-grade primary central nervous system lymphoma. *Ann Neurol* 2006; 59(5):755-762.
- Perez EA, Josse RG, Pritchard KI, Ingle JN, Martino S, Findlay BP, Shenkier TN, Tozer RG, Palmer MJ, Shepherd LE, Liu S, TU D, Goss PE. Effect of letrozole versus placebo on bone mineral density in women with primary breast cancer completing 5 or more years of adjuvant tamoxifen: a companion study. *Journal of Clinical Oncology*. 24(22):3629-35, 2006 Aug 1.
- Sehn L, Berry B, Chhanabhai M, Fitzgerald C, Gill K, Hoskins P, Klasa R, Savage K, Shenkier T, Sutherland J, Gascoyne R, Connors J. Revised international prognostic index (R-IPI) is a better predictor of outcome than the standard IPI for patients with DLBCL treated with R-CHOP. *Blood* 2006 Nov 14; (Epub ahead of print)

---

**Swenerton, Dr. Kenneth D**

- Plante M, Lau S, Brydon L, Swenerton K, LeBlanc R, Roy M. Neoadjuvant chemotherapy followed by vaginal radical trachelectomy in bulky stage IB1 cervical cancer: Case Report. *Gynecol Oncol* February 2006.
- de Lemos ML, Hsieh T, Hamata L, Levin A, Swenerton K, Djurdjev O, Vu T, Hu F, Conklin J, and Taylor SCM. Evaluation of predictive formulae for glomerular filtration rate for carboplatin dosing in gynaecological malignancies. *Gynecol Oncol* 2006.
- de Lemos ML, Hamata L, Conklin J and Swenerton K. Potential underdosing of carboplatin in gynaecological malignancies. *Gynecol Oncol* 2006.

**Wilson, Dr. Kenneth S**

- Wilson K S. Clinical activity of celecoxib in metastatic malignant melanoma. *Cancer Invest* 2006, 24, 740-746.
- Shustik C, Belch A, Robinson S, Rubin SH, Dolan SP, Kovacs MJ, Grewal KS, Walde D, Barr R, Wilson J, Gill K, Vickars L, Rudinskas L, Sicheri DA, Wilson K, Djurfeldt M, Shepherd LE, Ding K, Meyer RM. A randomized comparison of Melphalan with Prednisone or Dexamethasone as induction therapy and Dexamethasone or observation as maintenance therapy in multiple myeloma. *Brit J Hematol* 2007, 136, 2, 203- 211.

**MEDICINE****Towle, Dr. Angela**

- Towle A. Where's the patients' voice in health professional education? *Nurse Education in Practice* 2006; 6: 300-302.
- Towle A, Godolphin W, Alexander T. Doctor-patient communication in the Aboriginal community: towards the development of educational programs. *Patient Education and Counseling* 2006; 62: 340-346.
- Towle A, Godolphin W, Grams G, LaMarre A\*. Putting informed and shared decision making into practice. *Health Expectations* 2006; 9 (4): 321-332.
- Towle A, Weston W. Patients' voice in health professional education. *Patient Education and Counseling* 2006; 63: 1-2.

**NEPHROLOGY****Gill, Dr. John S**

- Tonelli M, Klarenbach S, Manns B, Culleton BF, Hemmelgarn B, Bertazzon S, Wiebe N and Gill JS. Association between residence location and likelihood of kidney transplantation in Aboriginal patients. *Kidney Int. Kidney International Advance online publication* June 21, 2006
- Gill JS, Potential Advantages and Limitations of Applying The Chronic Kidney Disease Classification to Kidney Transplant Recipients. *American Journal of Transplantation* December 2006 6 (12) Page 2821-2826
- Tonelli M, Klarenbach S, Manns B, Culleton B, Hemmelgarn B, Bertazzon S, Wiebe N, Gill JS. Association between residence location and likelihood of kidney transplantation. 2006 *CMAJ* Aug 29;175(5):478-82.

**Jastrzebski, Dr. Jacek**

- Komenda P, DaRoza G, Chen J & Jastrzebski J. Timing of Vascular Access Creation (Manuscript completed, for submission to *Nephrology Dialysis Transplant*)

**Levin, Dr. Adeera**

- 
- Khan, N, Thompson C, Sarnak M, Deep, A, and Levin A. , “ Re-analysis of the SOLVD trial: the importance of kidney function in predicting outcomes. *JASN*: 2006 Jan; 17(1): 244-53
  - Komenda P, Levin A, “Analysis of cardiovascular disease and kidney outcomes in multidisciplinary chronic kidney disease clinics: complex disease requires complex care models”, *Curr Opin Neph Hypertens*, 2006 Jan;15(1):61-6
  - Levin A, “ Kidneys, hearts, hormones and immunomodulators: integrated understandings”, *Blood Purif*, 2006; 24(1):46-50
  - Mendelssohn DC, Toffelmire EB, Levin A, “Attitudes of Canadian nephrologists toward multidisciplinary team-based CKD clinic care”, *AJKD*, 2006 Feb;47(2):277-84
  - Levin, A., Djurdjev, O., Duncan, J., Rosenbaum, D., Werb, R., “Hemoglobin at time of referral, prior to dialysis predicts survival: evidence for an independent effect of hemoglobin on long-term outcomes”, *NDT* 2006 Feb; Vol 21 (2): 370-77
  - de Lemos, Mario, Hsieh, Teresa, Hamata, Linda, Levin , Adeera, Swenerton, Ken, Djurdjev, Onjenka, Vu,Thanh, Hu, Francis, Conklin, James, Taylor, Suzanne, “Evaluation of predictive formulae for glomerular filtration rate for carboplatin dosing in gynecological malignancies”, *Gynecologic Oncology*, Accepted
  - Rossert, J, Levin, A, Roger, SD, Horl, WH, Fouquieray, B, Gassmann-Mayer, C, Frei, D, McClellan, WM, “Effect of early correction of anemia on the progression of CKD”, *AJKD* 2006 May; 47(5): 738-50
  - Zalunardo, N, Levin, A, “Anemia and the Heart in Chronic Kidney Disease”, *Seminars in Nephrology*, 2006 July; Vol 26, No 4: 290-5
  - Levin, A, Bakris, G, Molitch, M, Smulders, M, Tian, J, Williams, L, Andress, D, “Prevalence of Abnormal Vitamin D, PTH, Calcium and Phosphorus in CKD: Study to Evaluate Early Kidney Disease (SEEK), *Kidney International*, Accepted
  - Levin A, Pate G, Shalansky S, Al-Shamari A, Webb J, Buller CE and Humphries K, “N-acetylcysteine reduces urinary albumin excretion following cotnqrst administration: evidence of biological effect”, *Nephrology Dialysis and Transplantation* 2006, Accepted
  - Nisha Bansal, Hocine Tighiouart, Daniel Weiner, John Griffith, Panagiotis Vlagopoulos, Deeb Salem, Adeera Levin, Mark J. Sarnak, “Anemia as a Risk Factor for Kidney Function Decline in Individuals with Heart Failure”, *American Journal of Cardiology* 2006, Accepted
  - de Lemos M, Taylor S, Barnett J, Hu F, Levin A, Moravan V, O’Reilly S, “Renal safety of 1-hour pamidronate infusion for breast cancer and multiple myeloma patients: comparison between clinical trials and population-based database”, *J Oncol Pharm Practice* 2006; 12: 193-9

**Quamme, Dr. Gary A**

- Kim SJ, Kang JS, Jeong CW, Park SY, Kim IS, Kim NS, Kim SZ, Kwak YG, Kim JS and GA Quamme. Immunosuppressants inhibit hormone-stimulated Mg(2+) uptake in mouse distal convoluted tubule cells. *Biochem Biophys Res Commun*. 2006 Jan 19; [Epub ahead of print] PMID: 16438932

**NEUROLOGY**

**Barton, Dr. Jason J**

- Barton JJS, Greenzang C, Hefter R, Edelman J, Manoach DS. Switching, plasticity and prediction in a saccadic task-switch paradigm. *Exp Brain Res* 2006; 168:76-87
- Edelman J, Valenzuela N, Barton J. Antisaccade velocity, but not latency, results from a lack of saccade visual guidance. *Vision Res* 2006; 46(8-9):1411-21.
- Barton JJS, Raoof M, Jameel O, Manoach DS. Task-switching with antisaccades versus no-go trials: a comparison of inter-trial effects. *Exp Brain Res* 2006; 172:114-9.

- 
- Polli FE, Barton JJS, Vangel MG, Goff DC, Iguchi L, Manoach DS. Schizophrenia patients show intact immediate error-related performance adjustments on an antisaccade task. *Schizophrenia Res* 2006; 82:191-201.
  - Barton JJS, Radcliffe N, Cherkasova MV, Edelman J, Intrilligator JM. Information processing during face recognition: the effects of familiarity, inversion and morphing on scanning fixations. *Perception*, 2006: 353:1089-105
  - Barton JJS, Manoach DS, Goff D. The inter-trial effects of stimulus and saccadic direction on prosaccades and antisaccades, in controls and schizophrenic patients. *Exp Brain Res* 2006; 174:487-98.
  - Dalrymple KA, Kingstone A, Barton JJS. Seeing trees OR seeing forests in simultanagnosia: attentional capture can be local or global. *Neuropsychologia*, epub
  - Fox CJ, Barton JJS. What is adapted in face adaptation? The neural representations of expression in the human visual system. *Brain Res*, epub.

#### **Briemberg, Dr. Hannah**

- \*Richardson PG, \*Briemberg H, Jagannath S, Wen PY, Barlogie B, Berenson J, Singhal S, Siegel DS, Kayd E, Irwin D, Schuster M, Srkalovic G, Alexanian R, Rajkumar SV, Limentani S, Alsina M, Orlowski RZ, Najarian K, Esseltine D, Collins D, Anderson KC, Amato, AA. Frequency, characteristics, and reversibility of peripheral neuropathy during treatment of advanced multiple myeloma with bortezomib. *Journal of Clinical Oncology* 2006;24(19):3113-3120.  
\*Dr. Briemberg and Dr. Richardson are co-first authors.

#### **Calne, Dr. Donald B**

- Wszolek ZK, Baba Y, Mackenzie IR, Uitti RJ, Strongosky AJ, Broderick DF, Baker MC, Melquist S, Hutton ML, Tsuboi Y, Allanson JE, Carr J, Kumar A, Calne SM, Miklossy J, McGeer PL, Calne DB, Stoessl AJ (2006). Autosomal dominant dystonia-plus with cerebral calcifications. *Neurology* 67: 620-625.

#### **Cashman, Dr. Neil R**

- Kalra S, Vitale A, Cashman NR, Jirsch J, Genge A, Arnold DL. MR spectroscopic biomarkers of neuronal integrity predict survival in ALS and can contribute to diagnosis. *J Neurol Neurosurg Psychiatry*. 77:1253-5, 2006.

#### **Chapman, Dr. Kristine M**

- Mehdiratta M, Woolfenden AR, Johnston DCC, Chapman KM, Teal PA. Reduction of IV tPA Door to Needle Times with an Acute Stroke Triage Pathway. *Canadian J of Neurol Sciences* 2006;33:214-16.

#### **Curt, Dr. Armin E**

- Hedel van H, Wirz M, Curt A. Improving walking assessment in subjects with an incomplete spinal cord injury: Responsiveness. *Spinal Cord* 2006; 44: 352-6
- Werner CM, Weishaupt D, Blumenthal S, Favre P, Gerber C. Effect of experimental suprascapular nerve block on active glenohumeral translation in vivo. *J Orthop Res* 2006, 24: 491-500
- Halder P, Curt A, Brem S, Lang-Dullenkopf, Bucher Kerstin, Kollias S, Brandeis D. Preserved aspects of corticofugal control in paraplegia. *Neuro-Image* 2006; 31: 692-8
- Dobkin B, Curt A, Guest J. Cellular Transplants in China: Observational Study from the Largest Human Experiment in Chronic Spinal Cord Injury. *Neurorehabilitation and Neural Repair* 2006; 20: 1-9

- Diehl P, Kliesch U, Dietz V, Curt A. Impaired facilitation of motor evoked potentials in incomplete spinal cord injury. *J Neurology* 2006; 253: 51-7
- Werner CM, Blumenthal S, Curt A, Gerber C. Subacromial pressures in vivo and effects of selective experimental suprascapular nerve block. *J Shoulder Elbow Surg* 2006; 15: 319-23
- Dietz V, Curt A. Neurological aspects of spinal cord repair: promises and challenges. *Lancet Neurology* 2006; 5: 688-94
- Wydenkeller S, Liechti M, Müller R, Curt A. Impaired scaling of responses to vestibular stimulation in incomplete SCI. *Exp Brain* 2006; 175(1): 191-5
- Wirz M, van Hedel HJ, Rupp R, Curt A, Dietz V. Muscle force and gait performance: relationships after spinal cord injury. *Arch Phys Med Rehabil.* 2006; 87(9): 1218-22
- Schmid MR, Kissling RO, Curt A, Jaschko G, Hodler J. Sympathetic Skin Response: Monitoring of CT-guided Lumbar Sympathetic Blocks. *Radiology* 2006; 241: 595-602
- Hedel van H, Curt A. Fighting for Each Segment: Estimating the Clinical Value of Cervical and Thoracic Segments in SCI. *J Neurotrauma* 2006; 23: 1621-1631

#### **Devonshire, Dr. Virginia A**

- Tremlett H, Paty D, Devonshire V. Disability progression in MS is slower than previously reported. *Neurology.* 2006;66:172-177.
- Tremlett H, Devonshire V. Does the season or month of birth influence disease progression in multiple sclerosis? *Neuroepidemiology* 2006;26:195-198
- Tremlett H, Devonshire V. Is late onset multiple sclerosis associated with a worse outcome? *Neurology* 2006; 67:954-959

#### **Doudet, Dr. Doris J**

- Doudet D.J., Ruth T., Holden J.E. "Sequential vs Non sequential measurement of density and affinity of dopamine D2 receptors with [<sup>11</sup>C]raclopride: 2: Effects of DAT inhibitors" In revision: *J. Cereb. Blood Flow Metab.* 26:28-37 (2006)
- Doudet DJ, Rosa-Netto P, Ruth TJ, Juvan S, Cuming P. "Mapping of markers for monoaminergic neurons of normal and MPTP-lesioned rhesus monkeys: A multi-tracer PET study" *NeuroImage*, 30:26-35 (2006)
- Miklossy J, Doudet DJ, Schwab C, Yu S, McGeer EG, McGeer PL. "Role of ICAM-1 in persisting inflammation in Parkinson's Disease and MPTP monkeys" *Exp. Neurol.* 197:275-283 (2006).
- Strome E, Cepeda I, Sossi V, Doudet DJ "Evaluation of the integrity of the dopamine system in a rodent model of Parkinson's disease: small animal pet compared to behavioral assessment and autoradiography" *MIB* (8:292-299 (2006)
- Kim S, Doudet DJ, Studenov AR, Ruth TJ, Gambhir SS, McIntosh CHS "Quantitative micro positron emission tomography (PET) imaging for the in vivo determination of pancreatic islet graft survival" *Nature Medicine* 12:1423-1428 (2006)
- Wong JT, Kim PT, Peacock JW, Yau TY, Mui AL, Sossi V, Doudet DJ, Ruth TJ, Parsons R, Verchere CB, Ong CJ "Pten haploinsufficiency promotes insulin hypersensitivity" *Diabetologia* (2006) epub

#### **Feldman, Dr. Howard H**

- Feldman HH, Schmitt FA, and Olin JT. Activities of Daily Living in Moderate to Severe Alzheimer's Disease: An analysis of the treatment effects of memantine in patients receiving stable donepezil treatment. *Alzheimer Dis Assoc Disord.* 2006; 20(4): 263-268.
- Neumann M, Sampathu DM, Kwong LK, Truax AC, Misceniyi MC, Chou TT, Bruce J, Schuck T, Grossman M, Clark C, McKlusky L, Miller BL, Masliah E, Mackenzie IR, Feldman H, Feiden W, Kretzschmar HA, Trojanowski JQ and Lee VM-Y. TDP-43 is the major disease protein ubiquitinated in frontotemporal lobar degeneration and amyotrophic lateral sclerosis. *Science.* 2006; 314 (5796):

- Gass J, Cannon A, Mackenzie IR, Boeve B, Baker M, Adamson J, Crook R, Melquist S, Kuntz K, Petersen R, Josephs K, Graff-Radford N, Dickson D, Wsolek Z, Gonzales J, Beach T, Bigio E, Mesalum M, White C, Feldman H, Knopman D, Hutton M and Rademakers R. Mutations in progranulin are a major cause of ubiquitin-positive frontotemporal lobar degeneration. *Hum Mol Genet.* 2006; 15(20): 2988-3001.
- Mackenzie IRA, Baker M, Pickering-Brown S, Hsiung G-YR, Lindholm C, Dwosh E, Gass J, Cannon A, Hutton M and Feldman HH. The neuropathology of frontotemporal lobar degeneration caused by mutations in the progranulin gene. *Brain.* 2006; 129: 3081-3090.
- Mackenzie IR, Butland SL, Devon RS, Dwosh E, Feldman H, Lindholm C, Neal SJ, Ouellette BF, and Leavitt BR. Familial Frontotemporal Dementia with Neuronal Intranuclear Inclusions is not a Polyglutamine Expansion Disease. *BMC Neurology.* 2006; 6: 32.
- Jacova C, Hsiung GYR, and Feldman HH. Dropouts and Refusals in Observational Studies: Lessons for Prevention Trials. *Neurology.* 2006; 67 (9 Suppl 3): S17-20.
- Hsiung, G-Y. R., Donald A, Grand J, Black SE, Bouchard RW, Gauthier SG, Loy-English I, Hogan DB, Kertesz A, Rockwood K and Feldman H. Outcomes of Cognitively Impaired Not Demented (CIND) at 2-years in the Canadian Cohort Study of Cognitive Impairment and Related Dementias (ACCORD). *Dem Ger Cog Dis.* 2006 22(5-6): 413-420.
- Baker M, Mackenzie IR, Pickering Brown SM, Gassi J, Rademaker R, Lindholm C, Snowden J, Adamson J, Sadovnick AD, Rollinson S, Crut M, Cannon A, Dwosh E, Neary D, van der Zee J, Melquist S, Richardson A, Gijselincka I, Eriksen J, Robinson T, Zehr C, Dickey CA, McGowan E, Mann D, Boeve B, Feldman H, and Hutton M Mutations in Progranulin cause tau-negative frontotemporal dementia linked to chromosome 17. *Nature* 2006; 442 (7105): 916-919.
- Grundman M, Petersen RC, Bennett D, Feldman H, Salloway S, Visser PJ, Thal LJ, Schenk D, Khachaturian Z, Thies W, for the Alzheimer's Association Research Roundtable. Alzheimer Association Research Roundtable Meeting on Mild Cognitive Impairment: What have we learned? *Alzheimer's & Dementia (JALZ)* 2006; 2(3): 220-233.
- Gauthier S, Reisberg B, Zaudig M, Peterson R, Ritchie K, Broich K, Belleville S, Brodaty H, Bennett D, Chertkow H, Cummings JL, Feldman H, Ganguli M, Hampel H, Scheltens P, Tierney M, Whitehouse P, Winblad B, on behalf of the participants of the IPA Conference on MCI. *Mild Cognitive Impairment. Lancet* 2006; 367:1262-1270.
- Mackenzie IR, Baker M, Adamson J, Qadi N, Feldman H, Lindholm C, Melquist S, Sadovnik D, Dwosh E, Hutton M, Pickering-Brown SM. Familial Tau-Negative Frontotemporal Dementia with Neuronal Intranuclear Inclusions is Linked to Chromosome 17. *Brain* 2006; 129(4): 853-867.
- Peters KR, Rockwood K, Gauthier S, Kertesz A, Sadovnick D, Beattie L, and Feldman H. Characterizing Neuropsychiatric Symptoms Across the Spectrum of Cognitive Impairment. *Neurology.* 2006; 66:523-529.
- Feldman H, Gauthier S, Chertkow H, Conn DK, Freedman M, MacKnight C on behalf of the 2nd Canadian Conference on Antidementia Guidelines Committee. Canadian Guidelines for the Development of Antidementia Therapies: a conceptual summary. *Can J Neurol Sci.* 2006; 33(1): 1-26.
- Rockwood K, Song X, Hogan DB, Black SE, Gauthier S, MacKnight C, Vandorpe R, Guzman A, Montgomery P, Kertesz A, Bouchard RM, and Feldman H. Clinical and radiographic subtypes of Vascular Cognitive Impairment in a clinical-based cohort study. *J Neurol Sci* 2006; 240(1-2): 7-14.
- Alagiakrishnan K, McCracken P, and Feldman H. Treating vascular risk factors and maintaining vascular health: Is this the way towards successful cognitive ageing and preventing cognitive decline? *Postgrad Med J.* 2006; 82(964):101-5.
- Burns A, O'Brien J; BAP Dementia Consensus group; Auriacombe S, Ballard C, Broich K, Bullock R, Feldman H, Ford G. Knapp M, McCaddon A, Iliffe S, Jacova C, Jones R, Lennon S, McKeith I,



---

Orgogozo JM, Purandare N, Richardson M, Ritchie C, Thomas A, Warner J, Wilcock G, Wilkinson D; British Association for Psychopharmacology. Burns A, and O'Brien J. Clinical practice with anti-dementia drugs: a consensus statement from the British Association for Psychopharmacology (BAP). *J Psychopharmacol.* 2006; 20(6): 732-755.

### **Hsiung, Dr. Ging-Yuek R**

- Jacova C, Hsiung GR, Feldman H, ACCORD Investigators. Dropouts and Refusals in Observational Studies: Lessons for Prevention Trials. *Neurology.* 2006 Nov 14;67(9 Suppl 3):S17-20.
- Mackenzie IRA, Baker M, Pickering-Brown S, Hsiung G-YR, Lindholm C, Dwosh E, Gass J, Cannon A, Hutton M, Feldman H. The neuropathology of frontotemporal lobar degeneration caused by mutations in the Progranulin gene. *Brain.* 2006 Nov;129(Pt 11):3081-90.
- Hsiung GR, Donald A, Grand J, Black S; Bouchard R; Gauthier S; Loy-English I; Hogan D; Kertesz A; Rockwood K & Feldman H. Outcomes of Cognitively Impaired Not Demented (CIND) at 2-years in the Canadian Cohort Study of Cognitive Impairment and Related Dementias (ACCORD) 2006 *Dement Geriatr Cogn Disord.* 2006;22(5-6):413-20.
- Gass J, Cannon A, Mackenzie IR, Boeve B, Baker M, Adamson J, Crook R, Melquist S, Kuntz K, Petersen R, Josephs K, Pickering-Brown S, Graff-Radford N, Uitti R, Dickson D, Wszolek Z, Gonzalez J, Beach TG, Bigio E, Johnson N, Weintraub S, Mesulam M, White CL III, Woodruff B, Caselli R, Hsiung G-Y, Feldman H, Knopman D, Hutton M, and Rademakers R. Mutations in progranulin are a major cause of ubiquitin-positive frontotemporal lobar degeneration. *Hum Mol Genet.* 2006 Oct 15;15(20):2988-3001.
- Spacey SD, Adams PJ, Lam PCP, Materek LA, Stoessl J, T.P. Snutch TP, Hsiung GR. A second gene for Paroxysmal Non-Kinesigenic Dyskinesia. 2006 *Neurology* :66(10):1588-90.
- Gauthier S, Reisberg B, Zaudig M,... for the expert committee (Hsiung R) on Mild Cognitive Impairment. *Mild Cognitive Impairment. Lancet* 2006;367:1262-1270.

### **Hurwitz, Trevor**

- Mandat TS, Hurwitz TA, Honey CR, Hypomania as an adverse effect of subthalamic nucleus stimulation. *Acta Neurochir (Wien)* 148:895-898, 2006.
- Hurwitz TA, Prichard JW. Conversion disorder and fMRI. *Neurology.* 12; 67(11):1914-5. 2006
- Hurwitz TA, Mandat T, Forster B, Honey C. Tract identification by novel MRI signal changes following stereotactic anterior capsulotomy. *Stereotact Funct Neurosurg;*84(5-6):228-35. 2006

### **Johnston, Dr. Dean C**

- Mehdiratta M, Woolfenden AR, Johnston DCC, Chapman KM, Teal PA. Reduction of IV tPA Door to Needle Times with an Acute Stroke Triage Pathway. *Canadian J of Neurol Sciences* 2006;33:214-16.

### **Kastrukoff, Dr. Lorne F**

- Kastrukoff LF, Jones CM, Reading P, Smyth MJ, Carbone FR: Natural killer (NK) cells and the induction of anti-herpes simplex virus type 1 (HSV 1) cytotoxic T-lymphocytes (CTL) in C57BL/6 mice. (in preparation), 2006.
- Kastrukoff LF, Lau AS, Jones CM, Carbone FR, Smyth MJ, Wilson E, Takai F: The immune response to Herpes simplex virus type 1 (HSV 1) infection of the oral mucosa in C57BL/6 (BL/6) mice. (in preparation), 2006.
- Kastrukoff LF, Lau AS, Wilson E, Scalzo A, Carbone FR, Takai F: Resistance to central nervous system (CNS) involvement by Herpes simplex virus type 1 (HSV 1) in C57BL/6 (BL/6) mice is dominant and mediated by a locus in the natural killer complex (NKC). (in preparation), 2006.

- 
- Kastrukoff LF, Lau AS, Wilson E, Takei F, Carbone FR: Central nervous system (CNS) involvement by herpes simplex virus 1 (HSV 1) is restricted in C57BL/6 (BL/6) mice. *Journal of Neuroimmunology* 178:72, 2006

#### **Leavitt, Dr. Blair R**

- Shehadeh, J., Fernandes, H.B., Zeron Mullins, M.M., Graham, R.K., Leavitt, B.R., Hayden, M.R., Raymond, L.A. (2006) Striatal neuronal apoptosis is preferentially enhanced by NMDA receptor activation in YAC transgenic mouse model of Huntington disease. *Neurobiology of Disease*, 21(2):392-403. PMID 16165367.
- Graham, R.K., Slow, E., Deng, Y., Bissada, N., Lu, G., Pearson, J., Shehadeh, J., Raymond, L.A., Leavitt, B.R., Hayden, M.R. (2006) Levels of mutant huntingtin influence the phenotype of HD. *Neurobiology of Disease*, 21(2):444-455.
- Leavitt, B.R., van Raamsdonk, J., Shehadeh, J., Fernandes, H., Wellington, C.L., Raymond, L.A., Hayden, M.R. (2006) Wild-type huntingtin protects neurons from excitotoxicity. *Journal of Neurochemistry*, 96(4):1121-1129.
- RS Devon, PC Orban1\*, K Gerrow2, MA Barbieri3, C Schwab1, LP Cao1, JR Helm1, N Bissada1, R Cruz-Aguado1, T-L Davidson1, J Witmer1, JD Topp4, SR Severson4, M Metzler1, EMSimpson1, JM McCaffery5, BF Horazdovsky4, AE El-Husseini2, BR Leavitt1, MR Hayden1 (2006) Als2 deficient mice exhibit disturbances in endosome trafficking, reduction in cortical motor neuron size and locomotor deficits. IN REVISION PNAS.
- Graham, R.K., Deng, Y., Slow, E.J., Bissada, N., Lu, G., Pearson, P., Bertram, L., Shehadeh, J., Murphy, Z., Warby, S., Roy, S., Wellington, C.L., Leavitt, B.R., Raymond, L.A., Nicholson, D.W., Hayden, M.R. (2006) Cleavage at the caspase-6 site in huntingtin is required for motor dysfunction, neurodegeneration and excitotoxicity in Huntington Disease. *Cell*, 125:1179-1191.

#### **Li, David**

- Laule C, Leung E, **Li DK**, Traboulsee AL, Paty DW, MacKay AL, Moore GR Myelin water imaging in multiple sclerosis: quantitative correlations with histopathology. **Mult Scler**. 2006 Dec;12(6):747-53.
- Mercado R, Mandat T, Moore GR, **Li D**, MacKay A, Honey CR. Three-tesla magnetic resonance imaging of the ventrolateral thalamus: a correlative anatomical description. **J Neurosurg**. 2006 Aug;105(2):279-83.
- Li DK, Held U, Petkau J, Daumer M, Barkhof F, Fazekas F, Frank JA, Kappos L, Miller DH, Simon JH, Wolinsky JS, Filippi M; Sylvia Lawry Centre for MS Research. MRI T2 lesion burden in multiple sclerosis: a plateauing relationship with clinical disability. *Neurology*. 2006 May 9;66(9):1384-9.
- O'Connor PW, Li D, Freedman MS, Bar-Or A, Rice GP, Confavreux C, Paty DW, Stewart JA, Scheyer R; Teriflunomide Multiple Sclerosis Trial Group; University of British Columbia MS/MRI Research Group. A Phase II study of the safety and efficacy of teriflunomide in multiple sclerosis with relapses. *Neurology*. 2006 Mar 28;66(6):894-900.
- Simon JH, Li D, Traboulsee A, Coyle PK, Arnold DL, Barkhof F, Frank JA, Grossman R, Paty DW, Radue EW, Wolinsky JS. Standardized MR imaging protocol for multiple sclerosis: Consortium of MS Centers consensus guidelines. *AJNR Am J Neuroradiol*. 2006 Feb;27(2):455-61

#### **McKeown, Dr. Martin J**

- Rui L, Krolik JL and McKeown MJ.. 'Isolation and minimization of head motion-induced signal variations in fMRI data using independent component analysis'. *Magnetic Resonance in Medicine*. 55.6: 1396 - 413, 2006.
- McKeown MJ, Palmer SJ, Au WL, McCaig RG, Saab R, Abu-Gharbieh R. 'Cortical muscle coupling in Parkinson's disease (PD) bradykinesia'. *Journal Of Neural Transmission-Supplement*. 70: 31 - 40,

---

2006

- Saab, R., O. Yilmaz, M. J. McKeown and R. Abugharbieh. 'Underdetermined Anechoic Blind Source Separation via  $\ell^q$ -Basis-Pursuit, with  $q < 1$ '. IEEE Transactions on Signal Processing. 2006.
- McKeown, M J, Z.J. Wang, R. Abu-Gharbieh and T. Handy. 'Getting more in less time: ICA Denoising Increases the Effect Size in Event-Related fMRI Studies. '. IEEE Engineering in Medicine and Biology Magazine. (February 2006).
- McKeown M and Wang J. Entropy Considerations In Reaching Movements'. Proceedings Editors. Canadian EMBS Society Meeting, 2006. Canadian EMBS society.
- Wang J and McKeown M. Relevance Network Modeling For Discovering "Synergy Associations" Among Muscles In Reaching Movements'. Proceedings Editors. Canadian EMBS Society Meeting, 2006. Vancouver, British Columbia, Canada.
- McKeown, M J, Z.J. Wang, R. Abu-Gharbieh and T. Handy. 'Getting more in less time: ICA Denoising Increases the Effect Size in Event-Related fMRI Studies. '. IEEE Engineering in Medicine and Biology Magazine. (February 2006).
- Li, J, Wang J and McKeown M. 'Bayesian Network Modeling For Discovering "Directed Synergies" Among Muscles in Reaching Movements'. *Proceedings of IEEE ICASSP 2006*. IEEE Acoustics, Speech and Signal Processing, 2006. May, 2006. II-1156 - II-1159. IEEE.
- Shape vs. volume: invariant shape descriptors for 3D region of interest characterization in MRI'. 3rd IEEE International Symposium on Biomedical Imaging: Macro to Nano, 2006. Washington, United States. Apr, 2006. 754 - 757. IEEE.
- Chiang, J, Wang ZJ and McKeown MJ. A Time-varying Eigenspectrum/SVM Method for sEMG Classification of Reaching Movements in Healthy and Stroke Subjects'. Proceedings Editors. *Proceedings 2006 ICASSP*. IEEE Acoustics, Speech and Signal Processing, 2006. May, 2006. II-1188 - II-1191. IEEE.
- Chiang, J, Wang ZJ and McKeown M. Hidden Markov Multivariate Autoregressive (HMM-MAR) Modeling Of Dynamic Muscle Association Patterns In Reaching Movements '. Proceedings Editors. Canadian EMBS Society Meeting, 2006. Feb, 2006.
- Ng, B, Abu-Gharbieh R, XM Huang and McKeown M. 'Characterizing fMRI Activations within Regions of Interest (ROIs) Using 3D Moment Invariants, Computer Society Workshop on '. *Proceedings of 2006 Conference on Computer Vision and Pattern Recognition*. 2006 Conference on Computer Vision and Pattern Recognition Workshop. New York, New York, United States. Jun, 2006. 63 - 63. IEEE.

#### **Oger, Dr. Joel**

- De Castro-Costa CM, AQC Araújo, M Menna-Barreto, OM Takayanagui, M Pucioni-Sohler , Leitao E, SMB de Paula, R. Ishak, JG Ribas, L. Cartier, H Carton, E Gotuzzo, W Hall, S Montano, EL Murphy, J.Oger, C Remondegui, G. Taylor. Proposals for Staging Diagnostic Criteria for Tropical Spastic Paraparesis/HTLV-I Associated Myelopathy (TSP/HAM). AIDS Research and Human Retroviruses. 2006. Oct;22(10):931-5.
- Oger J and E. Gibbs. Should neutralizing antibodies be monitored during interferon-beta treatment for multiple sclerosis. Nature. (Neurology) 2006;2(2):76-77.
- Toth C, McDonald D, Oger J and Brownell K. Acetylcholine receptor antibodies in myasthenia gravis are associated with greater risk of diabetes and thyroid disease. Acta Neurol Scand 2006: Aug 114(2):124-32.
- Kister I, S. Gulati, C. Boz, J Oger, R. Bergamaschi, G. Piccolo, M.L Swerdlow. Neuromyelitis optica in patients with myasthenia gravis who underwent thymectomy. Archives of Neurology. 2006 Jun;63(6):851-6.
- Basile E, Gibbs E, Aziz T, Oger J. During Long term treatment with glatiramer Acetate Specific antibodies switch from IgG1 to IgG4. J. Neuroimmunology. 2006 Aug;177(1-2):161-6.

- Tremlett, H, Silke Seemüller, Yinshan Zhao, Eric Yoshida, J Ogerand J. Petkau, Liver test abnormalities in multiple sclerosis: findings from placebo treated patients. *Neurology*. 2006;67:1291-1293.
- Oger J. Update on HTLV-I Associated Myelopathy In: Gilman S, editor. *MedLink Neurology*. San Diego: MedLink Corporation. Available at [www.medlink.com](http://www.medlink.com). Accessed May 15, 2006.
- Massart C, Gibassier J, Oger J, Le Page E, Edan G. Related Articles, Links: Neutralizing antibodies to interferon beta in multiple sclerosis: Analytical evaluation for validation of a cytopathic effect assay. *Clin Chim Acta*. 2006 Sep 30.

#### **Pelech, Dr. Steven**

- Shi, X., Zhang, H., Paddon, H.B., Lee, G. & Pelech, S.L. Phosphorylation of STAT3 serine 727 by cyclin-dependent kinase 1 is critical for nocodazole-induced mitotic arrest. *Biochemistry* 45:5857-5867 (2006).
- Lipinski, K.S., Pelech, S., Mountain, A., Irvine, A.S., Kraaij, R., Bangma, C., Mills, K.H.G., and Todryk, S.M. Nitroreductase-based therapy of prostate cancer, enhanced by raising expression of heat shock protein 70, acts through increased anti-tumour immunity. *Cancer Immunol Immunother*. 55:347-354 (2006).
- Klergis, A., Pelech, S., Giasson, B. I., Maaguire, J., Zhang, H., McGeer, E. G., & McGeer, P. L. Alpha-Synuclein activates stress signaling protein kinases in THP-1 cells and microglia. *Neurobiol. Aging* (2006, Dec 11; [Epub ahead of print]).
- Klegeris, A., Giasson, B. I., Zhang, H., Maguire, J., Pelech, S., & McGeer, P. L. Alpha-synuclein and its disease-causing mutants induce ICAM-1 and IL-6 in human astrocytes and astrocytoma cells. *FASEB J*. 20:2000-2008 (2006).
- Pelech, S. Dimerization in protein kinase signaling. *J Biol*. 19; 5(5): 12 (2006).
- Pelech, S.L. Kinase Profiling; The mysteries unraveled. *Future Pharmaceuticals*. 1:23-25 (2006).
- Pelech, S.L. Protein kinase profiling. Commentary: *Nature Biotechnology*. September (2006).

#### **Raymond, Dr. Lynn A**

- Shehadeh, J., Fernandes, H.B., Zeron Mullins, M.M., Graham, R.K., Leavitt, B.R., Hayden, M.R., Raymond, L.A. (2006) Striatal neuronal apoptosis is preferentially enhanced by NMDA receptor activation in YAC transgenic mouse model of Huntington disease. *Neurobiology of Disease*, 21(2):392-403. PMID 16165367.
- Graham, R.K., Slow, E., Deng, Y., Bissada, N., Lu, G., Pearson, J., Shehadeh, J., Raymond, L.A., Leavitt, B.R., Hayden, M.R. (2006) Levels of mutant huntingtin influence the phenotype of HD. *Neurobiology of Disease*, 21(2):444-455.
- Leavitt, B.R., van Raamsdonk, J., Shehadeh, J., Fernandes, H., Wellington, C.L., Raymond, L.A., Hayden, M.R. (2006) Wild-type huntingtin protects neurons from excitotoxicity. *Journal of Neurochemistry*, 96(4):1121-1129.
- Graham, R.K., Deng, Y., Slow, E.J., Bissada, N., Lu, G., Pearson, P., Bertram, L., Shehadeh, J., Murphy, Z., Warby, S., Roy, S., Wellington, C.L., Leavitt, B.R., Raymond, L.A., Nicholson, D.W., Hayden, M.R. (2006) Cleavage at the caspase-6 site in huntingtin is required for motor dysfunction, neurodegeneration and excitotoxicity in Huntington Disease. *Cell*, 125:1179-1191.
- Yanai, A., Huang, K., Kang, R., Singaraja, R.R., Arstikaitis, P., Gan, L., Orban, P.C., Mullard, A., Cowan, C.M., Raymond, L.A., Drisdell, R.C., Green, W.N., Ravikumar, B., Rubinsztein, D.C., El-Husseini, A., Hayden, M.R. (2006) Palmitoylation of huntingtin by HIP14 is essential for its trafficking and function. *Nature Neuroscience*, 9:824-831.
- Paulsen, J.S., Hayden, M., Stout, J.C., Langbehn, D.R., Aylward, E., Ross, C.A., Guttman, M., Nance, M., Kiebertz, K., Oakes, D., Shoulson, I., Kayson, E., Johnson, S., Penziner, E., and the Huntington

---

Study Group. (2006) Preparing for preventive clinical trials -- the Predict-HD study. *Archives of Neurology*, 63:883-890.

- The Huntington Study Group PHAROS Investigators. (2006) At risk for Huntington disease: The PHAROS (Prospective Huntington At Risk Observational Study) cohort enrolled. *Archives of Neurology*, 63:991-998.
- Truant, R., Raymond, L.A., Xia, J., Pinchev, D., Atwal, R. (2006) Polyglutamine Expansion Neurodegenerative Diseases. *Canadian Journal of Neuroscience*, 33:278-291.
- Cowan, C.M., Raymond, L.A. (2006) Selective neuronal degeneration in Huntington's disease. *Current Topics in Developmental Biology*, 75:25-71.

#### **Robinson, Dr. Gordon**

- William Pryse-Phillips, MD; Michel Aubé, MD; Peter Bailey, MD; Werner J. Becker, MD; Andre Bellavance, MD; Marek Gawel, MD; Rose Giammarco, MD; Gordon Mackie, MD; R. Allan Purdy, MD; Gordon Robinson, MD; Gary Shapero, MD; Keith Wilson, MD, PhD. A Clinical Study of Migraine Evolution. *Headache* November/December 2006; 46: 1480-4.

#### **Ruth, Dr. Thomas J**

- Koochesfahani KM, de la Fuente-Fernández R, Sossi V, Schulzer M, Yatham LN, Ruth TJ, Stoessl AJ (2006). Oral methylphenidate fails to elicit significant changes in extracellular dopamine levels in Parkinson's disease (PD) patients: positron emission tomographic studies (PET). *Movement Disorders* 21: 970-5.

#### **Sadovnick, Dr. Adele D**

- Dyment D, Yee I, Ebers GC, Sadovnick AD. Multiple Sclerosis in Stepsiblings: Recurrence Risk and Ascertainment. *JNNP* 2006; 77:258-259.
- Nievergelt CM, Kripke DF, Barrett TB, Burg E, Remick RA, Sadovnick AD, McElroy SL, Keck Jr PE, Schork NJ, Kelsoe JR. Suggestive evidence for association of the circadian genes *Period3* and *Arntl* with bipolar disorder. *Am J Med Gen Part B (Neuropsychiatric Genetics)* 141B:234-241, 2006.
- Mackenzie I, Baker M, West G, Woulfe J, Qadi N, Adamson J, Feldman H, Lindholm C, Melquist S, Pettman R, Sadovnick A, Dwosh E, Whiteheart S, Hutton M, Pickering-Brown SM. A Family With Tau-Negative Frontotemporal Dementia and Neuronal Intranuclear Inclusions Linked to Chromosome 17. *Brain* 2006, 129:853-867.
- Kennedy J, O'Connor P, Sadovnick AD, Perrara M, Yee I, Banwell B. Demographics of Multiple Sclerosis: Comparisons between pediatric and adult-onset Multiple Sclerosis patients in a multicultural city. *Neuroepidemiology* 2006;26:162-167. Epub 2006 Feb 21.
- Peters KR, Rockwood K, Black SE, Bouchard R, Gauthier S, Hogan D, Kertesz A, Loy-English R, Beattie BL, Sadovnick AD, Feldman H. Characterizing neuropsychiatric symptoms in subjects referred to dementia clinics. *Neurology* 2006; 66:523-528.
- Herrera BM, Cader MZ, Dyment DA, Bell JT, Ramagopalan SV, Lincoln MR, Orton S, Chao MJ, Sadovnick AD, Ebers GC. Follow-up investigation of 12 proposed linkage regions in multiple sclerosis. *Genes & Immunity*. Epub. Jun 1 2006.
- Saarela J, Kallio SP, Chen D, Montpetit A, Jokiaho A, Choi E, Asselta R, Bronnikov D, Lincoln MR, Sadovnick AD, Tienari PJ, Koivisto K, Palotie A, Ebers GC, Hudson TJ, Peltonen L. PRKCA and multiple sclerosis: association in two independent populations. *Plos Genet* 2006; 2:e42. Epub 2006 Mar 31.
- Willer CJ, Herrera BM, Morrison KME, Sadovnick AD, Ebers GC for the Canadian Collaborative Study on Genetic Susceptibility to MS. Association between microchimerism and multiple sclerosis in Canadian twins. *J Neuroimmunology*, 2006; 179:145-151.

- 
- Baker M, Mackenzie IR, Pickering-Brown SM, Gass J, Rademakers R, Lindholm C, Snowden J, Adamson J, Sadovnick AD, Rollinson R, Cannon A, Dwosh E, Neary D, Melquist S, Richardson A, Dickson D, Berge Z, Eriksen J, Robinson T, Zehr C, Dickey CA, Crook R, McGowan E, Mann D, Boeve B, Feldman H, Hutton M. Mutations in progranulin cause tau-negative frontotemporal dementia linked to chromosome 17. *Nature* 2006; 442:916-919.
  - Orton SM, Herrera BM, Yee I, Sadovnick AD, and Ebers GC for the Canadian Collaborative Study Group. Increasing sex ratio of multiple sclerosis in Canada. *Lancet Neurology* 2006; 5:932-936.
  - Ness JN, Chabas D, Sadovnick AD, Pohl D, Banwell B, Weinstock-Guttman B. Clinical Features of Children and Adolescents with multiple sclerosis. *Neurology Supplement*, accepted September 2006.
  - Herrera BM, Cader MZ, Dyment DA, Bell J, DeLuca GC, Willer CJ, Lincoln MR, Ramagopalan SV, Orton S, Chao MJ, Sadovnick AD, Ebers GC. Multiple sclerosis susceptibility and the X chromosome. *Multiple Sclerosis* (accepted December 2006)

#### **Sossi, Vesna**

- Koochesfahani KM, de la Fuente-Fernández R, Sossi V, Schulzer M, Yatham LN, Ruth TJ, Stoessl AJ (2006). Oral methylphenidate fails to elicit significant changes in extracellular dopamine levels in Parkinson's disease (PD) patients: positron emission tomographic studies (PET). *Movement Disorders* 21: 970-5.
- Sossi V, de la Fuente-Fernandez R, Schulzer M, Adams JR, Stoessl AJ (2006). Age-related differences in levodopa dynamics in Parkinson's: implications for motor complications. *Brain* 129: 1050-1058

#### **Spacey, Dr. Sian**

- Spacey SD, Adams P.J., Lam P.C.P., Materek L.A., Stoessl A.J., Snutch T.P., Hsiung R. G-Y. Genetic Heterogeneity in Paroxysmal Non-Kinesigenic Dyskinesia. *Neurology*. 2006 May 23;66(10):1588-90.
- Spacey SD, Adams PJ, Lam PCP, Materek LA, Stoessl AJ, Snutch TP, Hsiung GYR (2006). Genetic heterogeneity in paroxysmal nonkinesigenic dystonia. *Neurology* 66: 1588-1590.

#### **Stoessl, Dr. A J**

- Lang AE, Gill S, Patel NK, Lozano A, Nutt JG, Penn R, Brooks DJ, Hotton G, Moro E, Heywood P, Brodsky MA, Burchiel K, Kelly P, Dalvi A, Scott B, Stacy M, Turner D, Wooten GF, Elias WJ, Laws ER, Dhawan V, Stoessl AJ, Matcham J, Coffey RJ, Traub M. Randomized controlled trial of intraputamenal GDNF infusion in Parkinson disease. *Ann Neurol*. 2006 Mar;59(3):459-66.
- Koochesfahani KM, de la Fuente-Fernández R, Sossi V, Schulzer M, Yatham LN, Ruth TJ, Stoessl AJ (2006). Oral methylphenidate fails to elicit significant changes in extracellular dopamine levels in Parkinson's disease (PD) patients: positron emission tomographic studies (PET). *Movement Disorders* 21: 970-5.
- Mercado R, Constantoyannis C, Mandat T, Kumar A, Schulzer M, Stoessl AJ, Honey CR (2006). Expectation and the placebo effect in Parkinson's disease patients with subthalamic nucleus deep brain stimulation. *Movement Disorders* 21: 1457-61.
- Sossi V, de la Fuente-Fernandez R, Schulzer M, Adams JR, Stoessl AJ (2006). Age-related differences in levodopa dynamics in Parkinson's: implications for motor complications. *Brain* 129: 1050-1058.
- Spacey SD, Adams PJ, Lam PCP, Materek LA, Stoessl AJ, Snutch TP, Hsiung GYR (2006). Genetic heterogeneity in paroxysmal nonkinesigenic dystonia. *Neurology* 66: 1588-1590.
- Wszolek ZK, Baba Y, Mackenzie IR, Uitti RJ, Strongosky AJ, Broderick DF, Baker MC, Melquist S, Hutton ML, Tsuboi Y, Allanson JE, Carr J, Kumar A, Calne SM, Miklossy J, McGeer PL, Calne DB, Stoessl AJ (2006). Autosomal dominant dystonia-plus with cerebral calcifications. *Neurology* 67: 620-625.
- Lang AE, Langston JW, Stoessl AJ, Brodsky M, Brooks DJ, Dhawan V, Elias WJ, Lozano AM, Moro

---

E, Nutt JG, Stacy M, Turner D, Wooten GF. (2006). GDNF in treatment of Parkinson's disease: response to editorial. *Lancet Neurol.* 5: 200-2.

**Stowe, Dr. Robert M**

- Shimozaki S, Kingstone A, Olk B, Stowe R, Eckstein, M. Classification images of two right hemisphere patients (2006): A window into the attentional mechanisms of spatial neglect. *Brain Research* 1080(1):26-52.

**Teal, Dr. Philip A**

- Mehdiratta M, Woolfenden AR, Chapman KM, Johnston DC, Schulzer M, Beckman J, Teal PA. Reduction in IV t-PA Door to Needle Times using an Acute Stroke Triage Pathway. *Can J. Neurol. Sci.* 33:214-216, 2006
- Mehdiratta M, Woolfenden AR, Johnston DCC, Chapman KM, Teal PA. Reduction of IV tPA Door to Needle Times with an Acute Stroke Triage Pathway. *Canadian J of Neurol Sciences* 2006;33:214-16.

**Thiessen, Dr. Brian A**

- Edwards LA, Verreault M, Thiessen B, Dragowska WH, Hu Y, Yeung JH, Dedhar S, Bally MB. Combined inhibition of the phosphatidylinositol 3-kinase/Akt and Ras/mitogen-activated protein kinase pathways result in synergistic effects in glioblastoma cells. *Molecular Cancer Therapeutics* 2006, 5(3): 645-54.

**Traboulsee, Dr. Anthony**

- Laule C, Leung E, Li DIB, Traboulsee AL, Paty DW, MacKay AL et al. Myelin water imaging in multiple sclerosis: quantitative correlations with histopathology. *Multiple Sclerosis* 2006;12:747-753.
- Simon JH, Li D, Traboulsee A, Coyle PK, Arnold DL, Barkhof F et al. Standardized MR imaging protocol for multiple sclerosis. *American Journal of Neuroradiology* 2006;27(2):455-461.
- Kappos L, Traboulsee A, Constantinescu C, Eralinna JP, Correstal F, Jongen P et al. Long-Term subcutaneous interferon beta-1a therapy in patients with relapsing remitting MS. *Neurology* 2006;67(6):944-953.

**Tremlett, Dr. Helen L**

- Tremlett, H, Paty D, Devonshire V. Disability progression in MS is slower than previously reported. *Neurology* 2006; 66: 172-177
- Tremlett H, Devonshire V. Does the season or month of birth influence disease progression in multiple sclerosis? *Neuroepidemiology* 2006; 26: 195-198.
- Tremlett H, Devonshire V. Is late onset multiple sclerosis associated with a worse outcome? *Neurology* 2006; 67:954-959. Media coverage: Reuters <http://www.reutershealth.com/en/index.html> (accessed 10th Oct 2006) Outcome not always worse for late-onset MS Last Updated: 2006-10-06 14:51:46 -0400 (Reuters Health) Boggs, W, MD
- Tremlett H, Seemuller S, Zhao Y, Yoshida EM, Oger J, Petkau J. Liver test abnormalities in multiple sclerosis: findings from placebo treated patients. *Neurology* 2006; 67: 1291-1293.

**Wang, Dr. Yu Tian**

- Lise MF, TP Wong, A Trinh, RM, L Liu, R Kang, DJ Hines, J Lu, JR Goldenring, YT Wang, A El-Husseini, Involvement of myosin vb in glutamate receptor trafficking. *J.Biol.Chem.* 281 (6): 3669-3678, 2006
- Ryu J, L Liu, TP Wong, D Wu, A Burette, R Weinberg, Wang YT, Sheng M. A Critical role for myosin IIB in dendritic spine morphology and synaptic function, *Neuron*, 49:175-182, 2006

- 
- Fox, Christopher, K Russell, YT Wang, B Christie. Contribution of NR2A and NR2B NMDA subunits to bidirectional synaptic plasticity in the hippocampus in vivo, *Hippocampus* 16: 907-915, 2006.
  - Mielke JG, C Taghibiglou, YT Wang. Endogenous insulin signaling protects cultured neurons from oxygen-glucose deprivation-induced cell death, *Neuroscience* 143: 165-173, 2006.
  - Bi GQ et al, Recent advances in basic neurosciences and brain disease: from synapses to behavior. *Mol.Pain* 2:38, 2006.

**Woolfenden, Dr. Andrew R**

- Mehdiratta M, Woolfenden AR, Johnston DCC, Chapman KM, Teal PA. Reduction of IV tPA Door to Needle Times with an Acute Stroke Triage Pathway. *Canadian J of Neurol Sciences* 2006;33:214-16.

**PHYSICAL & REHAB MEDICINE**

**Guzman, Dr. Jaime**

- Guzmán J, Yassi A, Baril R, Loisel P. Decreasing Occupational Injury and Disability: The Convergence of Systems Theory, Knowledge Transfer and Action Research. *Work*. 2006; accepted for publication.

**Krassioukov, Dr. Andrei**

- Sipski MA., Marino R, Kennelly M., Krassioukov A. and Stiens S. Autonomic Standards and SCI: Preliminary Considerations. *Topics in Spinal Cord Injury Rehabilitation*, 11(3); 2006; p:101-109.
- Claydon, V.E., Hol, A.T., Eng, J.J., and Krassioukov, A.V. Cardiovascular control and post-exercise hypotension following arm cycling exercise in subjects with spinal cord injury. *Arch Phys Med Rehabil*. 2006 Aug;87(8):1106-14.
- Claydon, V.E., Elliott, S.L., Sheel, A.W., and Krassioukov, A.V. Electrocardiographic findings during sperm retrieval in men with spinal cord injury. *J Spinal Cord Med*. 2006;29(3):207-16.
- Krassioukov, A.V., and Harkema, S. Effect of body weight support harness application and postural changes on cardiovascular parameters of individuals with spinal cord injury. *Spinal Cord*. 2006 Dec;44(12):780-6. E-pub.Jun 27.
- Claydon, V.E. and Krassioukov, A.V. Orthostatic hypotension and autonomic pathways following spinal cord injury. *J Neurotrauma*.2006 Dec;23(12):1713-25.
- Claydon, V.E., Steeves, J., and Krassioukov, A.V. Orthostatic hypotension following spinal cord injury understanding clinical pathology. *Spinal Cord*. 2006 Jun;44(6):341-51
- Furlan JC, Krassioukov AV, Fehlings MG. Hematologic abnormalities within the first week after acute isolated traumatic cervical spinal cord injury: a case-control cohort study. *Spine*. 2006 Nov 1;31(23):2674-83.
- Dhawan,P., Krassioukov A., Rose,A., and B. Miller. Early interventions for mild traumatic brain injury: Reflections on experience. *BC Medical Journal*. 2006: 48(9):387-392.

**Yassi, Dr. Annalee**

- Brodtkin E, Copes R, Mattman A, Kennedy J, Kling R, Yassi A. Lead and mercury poisoning – still a concern? *Canadian Medical Association Journal* 2006, accepted for publication.
- Kling, R, Corbiere, M, Milord, R, Morrison, J, Craib, K, & Yassi, A. Examining the use of a violence risk assessment tool in an acute care hospital. *AAOHN Journal* 2006; accepted for publication.
- Yassi A, Lockhart K, Copes R, Kerr M, Corbiere M, Bryce EA. Determinants of healthcare workers compliance with infection control procedures in healthcare. *Healthcare Quarterly*. 2006; accepted for



---

publication.

- Lee E, Haddock M, Back C, Yu S, Yassi A. Using a Participatory Ergonomics Approach to Develop and Evaluate a Nursing Bag System for Home Care Nurses. *Home Healthcare Nurse*. 2006; accepted for publication.
- Ouellette V, Badii M, Lockhart K, Yassi A. Worker satisfaction with a workplace injury prevention and return-to-work program in a large Canadian hospital: the importance of an integrated approach. *Work* 2006; accepted for publication.
- Robinson D, Mah P, Jones Y, Raschke S, Hall R, Yassi A. A comparison of biomechanical stress during manual and mechanically assisted patient repositioning. *Applied Ergonomics* 2006; accepted for publication.
- Badii M, Keen D, Yu S, Yassi A. Evaluation of a comprehensive integrated workplace-based program to reduce occupational musculoskeletal injury and its associated morbidity in a large hospital. *Journal of Occupational and Environmental Medicine*. 2006; accepted for publication.
- Craib K, Hackett G, Back C, Cvitkovich Y, Yassi A. Injury rates, predictors of workplace injuries and results of an intervention program among community health workers. *Public Health Nursing* 2006; accepted for publication.
- Miller A, Engst C, Tate RB, Yassi A. Evaluation of the effectiveness of portable ceiling lifts in a new long-term care facility. *Applied Ergonomics* 2006 May;37(3):377-85.
- Spiegel J, Garcia M, Bonet M, Yassi A. Learning together: A Canada-Cuba research collaboration to improve the sustainable management of environmental health risks. *Canadian Journal of Public Health* 2006. Jan-Feb;97(1):50-5.

## **RESPIRATORY MEDICINE**

### **Ayas, Dr. Najib T**

- Ayas NT, FitzGerald JM, Fleetham J, Schulzer M, White DP, Ryan CF, Ghaeli R, Mercer GW, Marra CA. Cost-Effectiveness of Continuous Positive Airway Pressure (CPAP) for Moderate to Severe Obstructive Sleep Apnea Hypopnea. *Archives Internal Medicine* 2006. 166: 977-84.
- Lusina SC, Paul MK, Inglis JT, McKenzie DC, Ayas NT, Sheel W. Long Term Intermittent Hypoxia Increases Sympathetic Activity and Chemosensitivity During Acute Hypoxia in Humans. *Journal of Physiology* 2006. Epub ahead of print.
- Davidson WJ, Dorscheid D, Spragg R, Schulzer M, Mak E, Ayas NT. Exogenous Pulmonary Surfactant for the Treatment of Adult Patients with Acute Respiratory Distress Syndrome – Results of a Meta-Analysis. *Crit Care*. 2006 Mar 8;10(2):R41. (Epub ahead of print)

### **Bai, Dr. Tony R**

- Ernst P, McIvor A, Ducharme FM, Boulet LP, FitzGerald M, Chapman KR, Bai TR; Canadian Asthma Guideline Group. Safety and effectiveness of long-acting inhaled beta-agonist bronchodilators when taken with inhaled corticosteroids. *Ann Intern Med*. 145(9):692-4. Review. 2006

### **Cook, Dr. Victoria J**

- J. N. Wolfe, K. S. Blackwood-Antonation, M. K. Sharma and V. J. Cook. A Case of Acquired Rifampin Resistance in *Mycobacterium bovis* Bacillus Calmette-Guerin Induced Cystitis – Necessity for Treatment Guidelines. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2006;17(3):186-188
- Cook VJ, Stark G, Roscoe DL, Kwong A and Elwood RK. Investigation of suspected laboratory cross-contamination: interpretation of single smear negative, positive cultures for *Mycobacterium tuberculosis*. *Clinical Microbiology and Infection*. 2006;12(10):1021-1045

- 
- Cook VJ, Kurimoto L, Koertjojo K, Elwood RK, and FitzGerald JM. The prevalence of latent TB infection and the influence of BCG vaccination on tuberculin skin test sensitivity in an Aboriginal population. *International Journal of Tuberculosis and Lung Diseases*, 2006 Dec;10(12):1347-53

#### **Duronio, Dr. Vincent**

- Vilimek D, Duronio V. Cytokine-stimulated phosphorylation of GSK-3 is primarily dependent upon PKC $\delta$  rather than PKB. *Biochemistry and Cell Biology*, 84, 20-29 (2006).
- Marotta, A., Parhar, K., Hundal, R., Duronio V. and Salh, B. Differential Targeting of Protein Kinase B in Cell Death Induced by Sulindac And Its Metabolite Sulindac Sulfide. *International Journal of Oncology*, 28:1471-1479 (2006).

#### **Elwood, Dr. Richard K**

- Cook VJ, Stark G, Roscoe DL, Kwong A, Elwood RK. Investigation of suspected laboratory cross-contamination: interpretation of single smear-negative, positive cultures for *Mycobacterium tuberculosis*. *Clinical Microbiology and Infection*, Vol. 12, Number 10, October 2006
- Moniruzzaman A, Elwood, RK, Schulzer M, FitzGerald JM. A population based study of risk factors for drug resistant TB in British Columbia. *Int J Tuberc Lung Dis* 2006; 10(6): 631-638
- Moniruzzaman A, Elwood, RK, Schulzer M, FitzGerald JM. The Impact of country of Origin on Drug Resistant Tuberculosis among Foreign-Born Persons in British Columbia. *Int J Tuberc Lung Dis* 2006; 10(6): 844-850.

#### **Fitzgerald, Dr. J. Mark**

- Burnman W, Benator D, Vernon A, et al and the Tuberculosis Trials Consortium Acquired rifamycin resistance with twice weekly treatment of HIV related tuberculosis. *Am J Respir Crit Care Med* 2006;173: 350-356.
- Sin D, Man PSF, Marciniuk D, Ford G, FitzGerald JM, Wong E, York E, Ramesh W, Melenka L, Wilde E, Cowie R, Rousseau R on behalf of the ABC (Advair, Biomarkers in COPD) Investigators *BMC Pulmonary* 2006;6:3
- Moniruzzaman A, Elwood RK, Schulzer M, FitzGerald JM. A Population Based Study of Risk Factors for Drug Resistant TB in British Columbia. *International J TB and Lung Dis* 2006; 10:631-38.
- Cox G, Miller J, McWilliams A, FitzGerald JM, Lam S Bronchial thermoplasty for asthma. *Am J Respir Crit Care Med* 2006;173: 965-9.
- FitzGerald JM, Boulet L-P, Mc Ivor RA, Zimmerman S, Chapman KR. Asthma control in Canada remains sub optimal: the Reality of Asthma control (TRAC) study. *Can Resp J* 2006 ;13:253-259.
- Behbami N, FitzGerald JM. The assessment and management of patients with acute asthma. *Int J Tuberculosis and Lung Dis* 2006 ;10:356-364.
- FitzGerald JM, Gibson P, Asthma exacerbations: prevention. *Thorax* 2006;61:992-999.
- Ayas NT, FitzGerald JM, Fleetham J, White DP, Ryan CF, Ghaeli R, Merce GW, Marra C. The incremental cost effectiveness of CPAP therapy for the treatment of obstructive sleep apnoea. *Arch Intern Med*. 2006;166:977-984.
- Etminan M, Zhang B, FitzGerald JM, Brophy JM. Do angiotensin converting enzyme inhibitors or angiotensin 2 receptor blockers decrease the risk of hospitalizations secondary to community acquired pneumonia? A nested case control study. *Clinical Epidemiol* 2006;26:479-82.
- Numata, Y., Schulzer, M., van der Wal, R., Globerman, J., Semeniuk, P., Balka, E., FitzGerald, M. J. Nurse Staffing Levels and Hospital Mortality in Critical Care Settings: A Systematic Review. *Journal of Advanced Nursing* 2006;55:435-38.
- FitzGerald JM, The evaluation of the impact of asthma guidelines in Canada. *Can Resp J* 2006;13: 42A-43A.
- Marra F, Lynd L, Coombes M, Richardson K, Legal M, FitzGerald JM, Marra C. Does antibiotic

---

exposure during infancy lead to development of asthma? A systematic review and meta analysis. *Chest* 2006; 129:610-618.

- Sobolev B, Levy A, Kuramoto L, Hayden R, FitzGerald JM. Do longer delays for coronary artery bypass surgery contribute to pre-operative mortality in less urgent patients? *Medical Care* 2006;44:680-686.
- Turner MO, Mayo J, Muller N, FitzGerald JM. The value of thoracic CT scans in clinical diagnosis: a prospective study. *Can Resp J* 2006 13:311-316.
- Sobolev B, Levy A, Brophy J, Hayden R, Kuramoto L, FitzGerald JM. The risk of death associated with delayed coronary artery bypass surgery. *Health Services Outcomes Research Methodology* 2006;6: 85 (ePub ahead of print)
- Gamage B, Moore D, Copes R, Yassi A, Bryce E, and members of The BC Interdisciplinary Respiratory Protection Study Group. Protecting health care workers from SARS and other respiratory pathogens: A review of the infection control literature. *American Journal of Infection Control* 2005;33(2):114-121.
- Moore D, Gamage B, Bryce E, Copes R, Yassi A and members of The BC Interdisciplinary Respiratory Protection Study Group. Protecting health care workers from SARS and other respiratory pathogens: Organizational and individual factors that affect adherence to infection control guidelines. *American Journal of Infection Control* 2005;33(2):88-96
- Sobolev B, Levy A, Brophy J, Hayden R, Kuramoto L, FitzGerald JM. Do longer delays for coronary bypass surgery contribute to pre operative mortality in less urgent patients? *Med care* 2006;44:680-6.
- Mancini GBJ, Etminan M, Zang B, Levesque LE, FitzGerald JM, Brophy J. Reduction of morbidity and mortality by statins, angiotensin converting enzyme inhibitors and angiotensin receptor blockers in patients with chronic obstructive lung disease. *J Am Coll Cardiology* 2006;47;47:2554-60.
- Sterling TR, Bethel J, Goldberg S et al and the Tuberculosis Epidemiology Consortium. The scope and impact of latent tuberculosis infection in the United States and Canada. *Am J Respir Crit Care Med* 2006; 47:2554-60.
- Ernst P, McIvor A, Ducharme FM, Boulet L-P, FitzGerald JM, Chapman KR, Bai TR for the Canadian Asthma Guidelines Group. Safety and effectiveness of long acting inhaled B<sub>2</sub> agonist bronchodilators when taken with inhaled corticosteroids. *Annals of Internal Medicine* 2006;145:692-694.
- Moniruzzman A, Elwood RK, Schulzer M, FitzGerald JM. The impact of country of origin on drug resistant tuberculosis among foreign born persons in British Columbia. *Int J Tuberculosis and Lung Disease* 2006;10:844-850.
- Burman WJ, Goldberg S, Johnson JL and the Tuberculosis Trials Consortium. Moxifloxacin versus ethambutol in the first 2 months of treatment for pulmonary tuberculosis. 2006;174:331-338.
- McGregor, MJ Reid, RJ Schulzer M, FitzGerald JM, Levy AR and Cox MB. Socioeconomic status and hospital utilization among younger adult pneumonia admissions at a Canadian hospital *BMC Health Services Research* 2006; 6:152.
- Cook V, Hernandez E, Noertjojo K, Elwood RK, FitzGerald JM. Bacille Calmette- Guerin vaccination and the prevalence of latent tuberculosis infection in an aboriginal population. *Int J Tuberc Lung Dis* 2006;10:1347-1353.
- Etminan M, Gill S, FitzGerald M, Samii A. Challenges and opportunities for pharmacoepidemiology in drug therapy and decision making. *J Clin Pharmacol* 2006;46;6-9.
- Yeung M, Fitzgerald JM. Asthma: a framework for improving asthma care. *J Int Union TB and Lung Disease Editorial*; 2006;10:124.

#### **Khalil, Dr. Nasreen**

- Chen, G and Khalil, N. TGF-beta 1 induces airway smooth muscle proliferation by phosphorylation of MAPKs 2006 Jan 3;7(1):2 [Epub ahead of print] (Top 10 most accessed articles for last 30 days;

---

January 20,2006) (Total accesses to this article since publication (Jan. 3/06): 1270. The total access statistics for this article are likely to be significantly higher. Your article is 'Highly accessed' relative to age. See <http://www.biomedcentral.com/info/about/mostviewed/> for more information about the 'Highly accessed' designation).

### **Lam, Dr. Stephen C**

- McWilliams AM, Mayo JR, Ahn MI, MacDonald SLS, Lam S. Lung Cancer Screening Using Multi-Slice Thin-Section Computed Tomography and Autofluorescence Bronchoscopy. *Journal of Thoracic Oncology* 2006. 1(1):61-68
- Malhotra S, Lam S, Man Paul SF, Gan Wen Qi, Sin Don D. The Relationship Between STAGE 1 AND 2 Non-Small Cell Lung Cancer And Lung Function In Men and Women *BMC Pulm Med* 2006 Feb 1: 6:2
- Sin DD, Man Paul SF, McWilliams A, Lam S. Progression of Airway Dysplasia and C-reactive Protein in Smokers at High Risk of Lung Cancer. *Respiratory and Critical Care Medicine*. 2006. Mar 1; 173(5): 535-9. Epub 2005
- Cutz J.C., Guan J, Bayani J., Yoshimoto M., Xue H., Sutcliffe M., English J., Flint J., LeRiche J., Yee J., Squire J. A., Gout P. W., Lam S. and Wang YZ. Establishment in SCID Mice of Subrenal Capsule Xenografts and Transplantable Tumour Lines from a Variety of Primary Human Lung Cancers: Potential Models for Studying Tumour Progression-Related Changes. *Clinical Cancer Research*. July 2006 12(13): 4043-4054
- Lonergan, K., Chari, R., deLeeuw, R., Shadeo, A., Chi, B., Tsao, MS., Jones, S., Marra, M., Ling, V., Ng, R., MacAulay, M., Lam, S., Lam, W. Identification of novel lung genes in bronchial epithelium by serial analysis of gene expression. *Am J Respir Cell Mol Biol*. 2006 Dec; Vol 35 (6), 651-61.
- Coe, B. P., Lockwood, W.W., Girard, L., Chari, R., MacAulay, C., Lam, S., Gazdar, A.F., Minna, J.D., Lam, W. L. Differential Regulation of Cell Cycle Pathways in Small Cell and Non-Small Cell Lung cancer. *British Journal of Cancer* 94:1927-1935. 2006
- Lam S, McWilliams A, Leriche J, MacAulay C, Wattenburg L, Szabo E. A Phase I Study of Myo-inositol for Lung Cancer Chemoprevention. *Cancer Epidemiology Biomarkers & Prevention*. August 2006; 15(8): 1526-1531.
- Coe BP, Lockwood WW, Girard L, Chari R, MacAulay C, Lam S, Gazdar AF, Minna JD, Lam WL. Differential Disruption of Cell Cycle Pathways in Small Cell and Non-small Cell Lung Cancer. *British Journal of Cancer*. 2006; 94(12): 1927-1935.
- Shaipanich T, McWilliams A, Lam S. Early Detection and Chemoprevention of Lung Cancer. *Respirology*. July 2006; 11(4): 366-372.
- Garnis C, Lockwood WW, Vucic E, Ge Y, Girard L, Minna JD, Gazdar AF, Lam S, MacAulay C, Lam WL. (2006) Comparing canonical non-small cell lung squamous and adenocarcinoma model genomes. *International Journal of Cancer*. 118: 1556-1564.
- Coe BP, Lee EHL, Chi B, Girard L, Minna JD, Gazdar AF, Lam S, MacAulay C, Lam WL. (2006). Tiling genomic array profiling of small cell lung cancer cell lines identifies highly frequent copy number gains of MAD1L1. *Genes Chromosomes Cancer* 45: 11-19.

### **Levy, Dr. Robert D**

- de Jong PA, Dodd JD, Coxson HO, Storness-Bliss C, Paré PD, Mayo JR, Levy RD. Bronchiolitis obliterans following lung transplantation: early detection using CT. *Thorax* 2006;61:799-804.
- Ting LSL, Partovi N, Levy RD, Riggs KW, Ensom MHH. Pharmacokinetics of mycophenolic acid and its glucuronidated metabolites in stable lung transplant recipients. *Ann Pharmacother* 2006; 40:1509-1516.
- Silva CIS, Flint JD, Levy RD, Müller NL. Diffuse lung cysts in lymphoid interstitial pneumonia: High-resolution CT and pathologic findings. *J Thoracic Imaging* 2006;21:241-244.

---

**Man, Dr. S. F. P**

- Sin DD, and Man SFP. Corticosteroids and Adrenoceptor Agonists: The Compliments for Combination Therapy in Chronic Airways Diseases. *European Journal of Pharmacology* 2006; 28-35.
- Mannino DM, Watt G, Hole D, Gillis C, Hart C, McConnachie A, Smith GD, Upton M, Hawthorne V, Sinn DD, Man SFP, Van Eeden S, Mapel DW, and J Vestbo. The Natural History of Chronic Obstructive Pulmonary Disease. *European Respiratory Journal* 2006; 27:627-643
- Malhotra S, Lam S, Man SFP, Gan WQ, and Sinn DD. The Relationship Between Non-small Cell Lung Cancer and Lung Function in Men and Women. *Biomed Central Pulmonary Medicine* 2006;6(2)
- Sin DD, Man SFP, Marciniuk D, Ford G, FitzGerald M, Wong E, York E, Mainra RR, Ramesh W, Melenka LS, Wilde E, Cowie RL, Williams D, Rousseau R. Can Inhaled Fluticasone Alone or in Combination with Salmeterol Reduce Systemic Inflammation in Chronic Obstructive Pulmonary Disease. Study Protocol for a randomized Controlled Trial. *BMC Pulmonary Medicine* 2006;6:3
- Sin DD, Man SFP, McWilliams A, and Lam S. Progression of Airway Dysplasia and C-reactive Protein in Smokers at High Risk of Lung Cancer. *American Journal of Respiratory and Critical Care Medicine*, 2006, 173: 535-539.
- Sin DD, Man SFP. Skeletal Muscle Weakness, Reduced Exercise Tolerance and COPD: Is System Inflammation the Missing Link? *Thorax* 2006;61;1-3
- Jumpsen J, Brown N, Thomson A, Man SFP, Goh Y, Ma D, Clandinin M. Fatty acids in blood and intestine following docosahexaenoic acid supplementation in adults with cystic fibrosis? *J Cyst Fibros*. 2006; 5(2): 77-84.
- Gan WQ, Man SFP, Postma D, Camp P, and Sin D. Female smokers beyond the perimenopausal period are at increased risk of chronic obstructive pulmonary disease: a systematic review and meta-analysis. *Respiratory Research* 2006; 7:52.
- Cowie R, Underwood M, Sin D, Sharpe H, Bell N, Man SFP, Asthma Control and Management in the Community – Indices in 1997 compared with indices in 2002. *Can Fam Physician* 2006; 52: 750-751.
- Sin DD, Man SFP. Is Systemic Inflammation Responsible for Pulmonary Hypertension in COPD? *Chest*, 2006; 130 (1):310.
- Sin DD, Man SFP. Cooling the Fire Within: Inhaled Corticosteroids and Cardiovascular Mortality in COPD. *Chest*, 2006; 130: 629-631.
- Sin DD, Man SFP. Pharmacotherapy for Mortality Reduction in Chronic Obstructive Pulmonary Disease. *Proc Am Thorac Soc* 2006; 3: 624-629.

**McWilliams, Dr. Annette M**

- Sin D, Man P, McWilliams A, Lam S. Progression of Airway Dysplasia and C-reactive Protein in Smokers at High Risk of Lung Cancer. *Am J Respir Crit Care Med*. 2006;173:535-539.
- McWilliams A, Mayo J, Ahn MI, MacDonald S, Lam, S. Lung Cancer Screening Using Multi-Slice Thin-Section Computed Tomography and Autofluorescence Bronchoscopy. *J Thoracic Oncology* 2006;1(1):61-68.

**Pare, Dr. Peter D**

- Ishii T, Wallace AM, Zhang X, Gosselink J, Abboud RT, English JC, Paré PD, Sandford AJ. Stability of housekeeping genes in alveolar macrophages from COPD patients. *Eur Respir J*. 2006 Feb;27(2):300-6.
- He, JQ, Burkett, K, Connett, JE, Anthonisen, NR, Paré, PD, Sandford, AJ. Interferon gamma polymorphisms and their interaction with smoking are associated with lung function. *Human Genetics*. 2006 May;119(4):365-75. Epub 2006 Feb. 11.
- de Jong PA, Dodd JD, Coxson HO, Storness-Bliss C, Paré PD, Mayo JR, Levy RD. Bronchiolitis obliterans following lung transplantation: Early detection using CT. *Thorax*. 2006 Sep;61(9):799-804.

---

Epub 2006 May 2.

- Wallace AM, He JQ, Burkett KM, Ruan J, Connett JE, Anthonisen NR, Paré PD, Sandford AJ. Contribution of alpha- and beta-defensins to lung function decline and infection in smokers: an association study. *Respir Res.* 2006 May 15;7(1):76.
- Regalado J, Perez-Padilla R, Sansores R, Paramo-Ramirez JI, Brauer M, Paré PD, Vedal S. The Effect of Biomass Burning on Respiratory Symptoms and Lung Function in Rural Mexican Women. *Am J Respir Crit Care Med.* 2006 Oct 15;174(8):901-5. Epub Jun 23.
- Abboud RT, Wallace AM, English JC, Muller NL, Coxson H, Paré PD, Sandford AJ. Relationship of matrix metalloproteinase mRNA expression and genetic polymorphisms to emphysema. *Proc Am Thorac Soc.* 2006 Aug;3(6):475.
- Ogawa E, Ruan J, Connett JE, Anthonisen NR, Paré PD, Sandford AJ. Transforming growth factor-beta1 polymorphisms, airway responsiveness and lung function decline in smokers. *Respir Med.* 2006 Oct 26; [Epub ahead of print]
- McKone EF, Shao J, Frangolias DD, Keener CL, Shepard CA, Farin FM, Tonelli MR, Paré PD, Sandford AJ, Aitken ML, Kavanagh TH. Variants in the glutamate-cysteine-ligase gene are associated with cystic fibrosis lung disease. *Am J Respir Crit Care Med.* 2006 Aug 15;174(4):415-9. Epub 2006 May 11.
- Dai JM, Kuo KH, Leo JM, Paré PD, van Breemen C, Lee CH. Acetylcholine-Induced Asynchronous Calcium Waves in Intact Human Bronchial Muscle Bundle. *Am J Respir Cell Mol Biol.* 2006 Dec 14; [Epub ahead of print]

#### **Road, Dr. Jeremy**

- Scott A, Wang X, Road JD, Reid WD. Increased injury and intramuscular collagen of the diaphragm in COPD: Autopsy observations. *Eur Resp J.* 27:51-59, 2006.
- Miller JD, Mathener R, Goldsmith C, Goeree R, Road J. A randomized clinical trial of lung volume reduction surgery versus best medical care for patients with advanced emphysema. *Am J of Thor Surg.* 81:314-21, 2006.

#### **Ryan, Dr. Francis (Frank) C**

- Otsuka R, de Almedia FR, Lowe AA, Ryan CF. A comparison of responders and non-responders to oral appliance therapy used for the treatment of obstructive sleep apnea. *Am J Orthod Dentofacial Orthop* 129:2292-9, 2006.
- Ayas NT, FitzGerald JM, Fleetham JA, White DP, Schulzer M, Ryan CF, Ghaeli R, Mercer GW, Cooper P, Marra CA. Cost-effectiveness of CPAP therapy for obstructive sleep apnea hypopnea. *Arch Intern Med* 166:977-984, 2006
- Al-Alawi A, Mulgrew A, Tench E, Ryan CF. Prevalence, risk factors and impact on daytime sleepiness and hypertension of periodic limb movement disorder in patients with obstructive sleep apnea. *J Clin Sleep Med* 2006;2:281-287

#### **Sandford, Dr. Andrew J**

- Ishii T, Wallace AM, Zhang X, Abboud RT, English JC, Paré PD, Sandford AJ. Stability of housekeeping genes in alveolar macrophages from COPD patients. *Eur. Respir. J.* 2006;27:300-6.
- He J-Q, Burkett K, Connett JE, Anthonisen NR, Paré PD, Sandford AJ. Interferon gamma polymorphisms and their interaction with smoking are associated with lung function. *Hum. Genet.* 2006;119:365-375.
- McKone EF, Shao J, Frangolias DD, Keener CL, Shepard CA, Farin FM, Paré PD, Sandford AJ, Aitken ML, Kavanagh TJ. Variants in the glutamate-cysteine-ligase gene are associated with cystic fibrosis lung disease. *Am. J. Respir. Crit. Care Med.* 2006 May 11; Epub ahead of print.
- Wallace AM, He J-Q, Burkett KM, Ruan J, Connett JE, Anthonisen NR, Paré PD, Sandford AJ.

---

Contribution of alpha- and beta-defensins to lung function decline and infection in smokers: an association study. *Respir. Res.* 2006 May 15;7(1):76. Epub ahead of print.

- Zhang W, Zhang X, Qiu D, Sandford A, Tan WC. IL-4 receptor genetic polymorphisms and asthma in Asian populations. *Respir. Med.* 2006 Jun 4. Epub ahead of print.
- Tanaka G, Sandford AJ, Burkett K, Connett JE, Anthonisen NR, Paré PD, He J-Q. Tumor necrosis factor and lymphotoxin A polymorphisms and lung function in smokers. *Eur. Respir. J.* 2006 Sep 13 (Epub ahead of print).
- About RT, Wallace AM, English JC, Muller NL, Coxson H, Pare PD, Sandford AJ. Relationship of matrix metalloproteinase mRNA expression and genetic polymorphisms to emphysema. *Proc Am Thorac Soc.* 2006 Aug;3(6):475

### **Sin, Dr. Donald D**

- Tkacova R, Toth S and Sin,DD. Inhaled corticosteroids and survival in COPD patients receiving long-term home oxygen therapy. *Respir Med* 2006;100:385-92.
- Sin DD, Man SFP, McWilliams A, and Lam S. Progression of airway dysplasia and C-reactive protein in smokers at high risk of lung cancer. *American Journal of Respiratory and Critical Care Medicine* 2006;173:535-9.
- Cowie RL\*, Underwood MF, Sin DD, Sharpe HM, Bell NR, and Man SFP. Asthma control and management in the community: 1997 compared with 2002. *Canadian Family Physician* 2006;52:750-1.
- de Jong PA, Mayo JR, Golmohammadi K, Nakano Y, Lequin MH, Tiddens HA, Aldrich J, Coxson HO, and Sin DD. Estimation of cancer mortality associated with repetitive computed tomography scanning. *American Journal of Respiratory and Critical Care Medicine* 2006;173(2):199-203.
- Malhotra S, Lam S, Man SFP, Gan WQ, and Sin DD\*. The relationship between stage 1 and 2 non-small cell lung cancer and lung function in men and women. *Biomed Central Pulmonary Medicine* 2006; 6(2):
- Malholtra S, Man SFP, and Sin DD\*. Emerging drugs for the treatment of chronic obstructive pulmonary disease. *Expert Opinion on Emerging Drugs* 2006;11:275-291.
- Sin DD\*, and Man SFP. Corticosteroids and adrenergic agonists: the compliments for combination therapy in chronic airways disease. *European Journal of Pharmacology* 2006; 533:28-35.
- Sin DD\*, Anthonisen NR, Soriano JB, and Agusti A. Mortality in COPD: role of comorbidities. *European Respiratory Journal* 2006;28:1245-57.
- Man SFP, Connett JE, Anthonisen NR, Wise RA, Tashkin DP, and Sin DD\*. C-reactive protein and mortality in mild to moderate chronic obstructive pulmonary disease. *Thorax* 2006;61:849-53.
- Sin DD\*, and Man SFP. Pharmacotherapy for mortality reduction in COPD. *Proceedings of American Thoracic Society* 2006;3:624-9.
- Gan WQ, Man SFP, Postma D, Camp P, and Sin DD\*. Female smokers beyond the perimenopausal period are at increased risk of chronic obstructive pulmonary disease: a systematic review and meta-analysis. *Respiratory Research* 2006;7:52.
- Mannino DM, Watt G, Gillis C, Hart C, McConnachie A, Davey Smith G, Uton M, Hawthorne V, Sin DD, Man SFP, Van Eeden SF, Mapel DM, and Vestbo J. The natural history of COPD. *European Respiratory Journal* 2006;27:627-33.

### **Tan-Hogg, Dr. Wan C**

- Leng PH, Mosharraf-Hossain AK, Chan YH, Tan WC. The Clinical Predictors of Hypertension and Sleepiness in an Asian Population with Sleep-disordered Breathing. *Ann Academy Med Singapore.* (2006) Jan;35(1):6-5.
- Cao Z, Ong KC, Eng P, Tan WC, Ng TP. Frequent hospital readmissions for acute exacerbation of COPD & their associated factors. *Respirology.* (2006) Mar;11(2):188-95.
- Boulet L, Becker A, Bowie D, McIvor A, Hernandez P, Rouleau M, Bourbeau J, Graham I, Legare F,

---

Ward T, Cowie R, Drouin D, Harris SB, Tamblyn R, Ernst P, Tan WC, Partridge M, Godard P, Herrerias C, Wilson J, Stirling L, Rozitis EB, Garvey N, Lougheed D, Labrecque M, Rea R, Holroyde M, Fagnan D, Dorval E, Pogany L, Kaplan A, Cicutto L, Allen M, Moraca S, Fitzgerald M, Borduas F, Logan J. Implementing Practice Guidelines: A workshop on guidelines dissemination and implementation with a focus on asthma and COPD. *Can Respir J.*(2006) Mar;13 Suppl A:5-47.

- Chen YZ, Busse W, Pedersen S, Tan W, Lamm CJ, O'Byrne P. Early Intervention of Recent Onset Mild Persistent Asthma in Children Aged Under 11 Years: the Steroid Treatment As Regular Therapy in Early Asthma (START) Trial. *Pediatric Allergy and Immunology* (2006) May;17 Suppl 17:7-13.
- P.O'Byrne, S.Pedersen, W.Busse, W.Tan, Y-Z.Chen, S.Ohlsson, A.Ullman, C.Lamm and R.Pauwels. The effects of early intervention with budesonide on lung function in mild persistent asthma: results from the START study. *CHEST* (2006) 129(6):1478-1485.
- Zhang W, Zhang X, Qiu D, Sandford A, Tan WC. IL-4 receptor genetic polymorphisms and asthma in Asian populations. *Respir Med.* (2006) Jun 4; [Epub ahead of print].

#### **Van Eeden, Dr. Stephanus F**

- Denburg J, van Eeden SF. Bone marrow progenitors in inflammation and repair: new vistas in respiratory biology and pathophysiology. *Eur Respir J.* Mar;27(3):441-5 2006
- Haddrell AE, van Eeden SF, Agnes GR. Dose-Response Studies Involving Controlled Deposition of Less Than 100 Particles Generated and Levitated in an AC Trap onto Lung Cells, in vitro, and Quantitation of ICAM-1 Differential Expression. *Pharmacology Toxicol In Vitro.* 2006 Feb 27;
- Don D. Sin, S.F. Paul Man, Stephan Van Eeden. The Natural History of Chronic Obstructive Pulmonary Disease (COPD): Systemic Inflammation And Its Relevance To Cardiovascular Disease. *Eur Respir J* 2006;27:627-643.
- James V Dunne, Jan Dutz, Kam Shojania, Betty Ng, Stephan Van Eeden. Treatment of Severe Raynaud's with Bosentan in a Patient with Systemic Sclerosis. *Rheumatology* 2006 45: 911-912

#### **Ward, Dr. Helen**

- Dimich-Ward H. Y. Chow, J. Chung, C. Trask. Contact with livestock: a protective effect for allergies and asthma? *Clinical and Experimental Allergy*, 2006;36(9):1122-9.

### **RHEUMATOLOGY**

#### **Choi, Dr. Hyon K**

- Jick SS, Lieberman ES, Rahman MU, Choi HK. Glucocorticoid use, Other Associated Factors, and the Risk of Tuberculosis. *Arthritis Rheum* 2006;55(1):19-26.

#### **Esdaile, Dr. John M**

- Tan M, Regier DA, Esdaile JM, Lynd LD, Marra CA. Health economic evaluation: A primer for the practicing rheumatologist. *Arthritis Rheum* 2006;55:648-656.
- Marra CA, Lynd LD, Anis AH, Esdaile JM. Approval process and access to prescription drugs in Canada. *Arthritis Rheum* 2006;55:9-11.
- Al-Harthy F, Esdaile J, Berean KW, Chalmers A. Multifocal idiopathic fibrosclerosis: Treatment of two cases with cyclosporine. *J Rheumatol* 2006;33:358-61.
- Kopec JA, Sayre EC, Davis AM, Badley EM, Abrahamowicz M, Sherlock L, Williams JI, Anis AH, Esdaile JM. Assessment of health-related quality of life in arthritis: conceptualization and development of five item banks using item response theory. *Health Qual Life Outcomes* 2006;4:33.
- Kur J, Esdaile JM. Posterior reversible encephalopathy syndrome- an under recognized manifestation of systemic lupus erythematosus. *J Rheumatol* 2006;33:2178-83.

#### **Lacaille, Dr. Diane**



- 
- Li X, Guh D, Lacaille D, Esdaile J, Anis AH. The impact of cost sharing of prescription drug expenditures on health care utilization by the elderly: Own- and cross-price elasticities. *Health Policy* 2006 Nov 27; [Epub ahead of print].

**Shojania, Dr. Kamran**

- Dunne J, Dutz J, Shojania K, Ng B, van Eeden S. Treatment of severe Raynaud's phenomenon with bosentan in a patient with systemic sclerosis. *Rheumatology*. 2006;45(7):911-2.

