# Contents

## Overview of the Department of Medicine

<table>
<thead>
<tr>
<th>Heads &amp; Directors</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committees</td>
<td>2</td>
</tr>
<tr>
<td>Administration</td>
<td>9</td>
</tr>
</tbody>
</table>

## Research

<table>
<thead>
<tr>
<th>Research Office</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Highlights</td>
<td>12</td>
</tr>
<tr>
<td>Researchers in Focus</td>
<td>13</td>
</tr>
</tbody>
</table>

## Division Reports

| AIDS                                  | 20 |
| Allergy and Immunology                | 26 |
| Cardiology                            | 30 |
| Critical Care Medicine                | 36 |
| Endocrinology                         | 38 |
| Gastroenterology                      | 40 |
| Geriatric Medicine                    | 46 |
| Hematology                            | 50 |
| Infectious Disease                    | 55 |
| Medical Oncology                      | 58 |
| Nephrology                            | 60 |
| Palliative Care                       | 63 |
| Physical Medicine & Rehabilitation    | 68 |
| Respiratory Medicine                  | 71 |
| Rheumatology                          | 76 |

## Education

| Office of Education                   | 81 |
| Clinical Investigator Program         | 83 |
| Experimental Medicine Graduate Program | 84 |
| Postgraduate Medical Education        | 86 |
| Global Health Project                 | 88 |
| Undergraduate Education Program       | 90 |

| Discipline Site Specific Leaders (DSSL) | 92 |
| Canada Research Chairs                | 96 |
| Endowed Chairs                        | 106 |
| Professorships                        | 113 |
| Awards & Honours                      | 120 |
Heads & Directors

Department Heads
Graydon S. Meneilly, MD, FRCPC, FACP
Professor and Eric W. Hamber Chair
Head, Department of Medicine, University of British Columbia
Head, Department of Medicine, Vancouver Hospital

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. Teresa Tsang, Associate Head, Research
Dr. Adam Peets, Associate Head, Education

UBC Division Heads
AIDS
Dr. Julio Montaner
Allergy & Immunology
Dr. Robert Schellenberg
Cardiology
Dr. Andrew Krahn (as of August 1, 2012)
Community Internal Medicine
Dr. Barry Kassen
Critical Care Medicine
Dr. Najib Ayas
Endocrinology
Dr. Ehud Ur
Gastroenterology
Dr. Eric Yoshida
General Internal Medicine
Dr. Barry Kassen
Geriatric Medicine
Dr. Maria Chung (Interim UBC/VGH Head)
Dr. Amanda Hill (Interim UBC/SPH Head)
Hematology/Bone Marrow Transplantation
Dr. Michael Barnett
Infectious Diseases
Dr. Peter Phillips
Medical Oncology
Dr. Joseph Connors (Interim)
Nephrology
Dr. Adeera Levin (UBC Head)
Dr. Jacek Jastrzebski (VGH Head)
Neurology
Dr. Jon Stoessl
Physical Medicine & Rehabilitation
Dr. Andrea Townson
Respiratory Medicine
Dr. J. Mark FitzGerald
Rheumatology
Dr. Kamran Shojania

Educational Program Directors
Clinical Investigator Program
Dr. Anita Palepu
Graduate Studies Program in Experimental Medicine
Dr. Vince Duronio
Postgraduate Education Program
Dr. J. Mark Roberts
Undergraduate Education Program
Dr. Janet Kushner-Kow
Director, Educational Research & Scholarship
Dr. Kevin Eva
Clinical Faculty Representatives Committee Chair
Dr. Charles Li
Undergraduate Education Committee (UEC)

The Internal Medicine Undergraduate Education Committee (hereafter: “UEC”) is a standing committee reporting to the Associate Head, Education, UBC Department of Medicine; the MD Undergraduate Year 3 Committee; the MD Undergraduate Year 4 Committee, and the Years 3 and 4 Student Promotions Committee. It is responsible for planning, implementing, and evaluating the Year 3 Internal Medicine clerkship rotation and Year 4 electives across all four sites: Island Medical Program (IMP), Northern Medical Program (NMP), Southern Medical Program (SMP) and the Vancouver Fraser Medical Program (VFMP). The Committee is chaired by the Undergraduate Program Director and membership is comprised of associate directors, faculty representatives from each distributed site, students from each year at each distributed site, and several non-voting members including the Head of Medicine and several representatives from each of the distributed sites. The committee meets every 4 to 6 weeks or as required.

Residency Training Committee (RTC)

The internal Medicine Residency Training Committee is responsible for all aspects of the Postgraduate Training Program in internal medicine in the Department of Medicine. This responsibility is delegated from the UBC Faculty of Medicine through the office of the Postgraduate Dean. Specific responsibilities include selection, evaluation, and promotion of residents, as well as provision of an educational program that meets the standards of the RCPSC or CFPC. The Committee strives to supervise and provide leadership in all aspects of Postgraduate Clinical Education in the specialty of internal medicine within the UBC Faculty of Medicine and its affiliated teaching hospitals. The Committee meets monthly or as required. The RTC is chaired by the Program Director and membership is comprised of faculty members from the divisions, residents from each year of the program, and administrative staff.

The Academic Appointments, Reappointments, Promotions and Tenure Committee (AARPT)

Mentoring Advisory Committee

Chair:
Dr. John Cairns, Chair, UBC Division of Cardiology

Members:
Dr. S. F. Paul Man, UBC Division of Respiratory Medicine
Dr. John Mancini, UBC Division of Cardiology
Dr. Anita Palepu, UBC Division of General Internal Medicine
Dr. Neil Reiner, UBC Division of Infectious Diseases

Administrative Support
Ms. Jane Zhang, Faculty Hires and Promotions Manager
Ms. Sabina Fitzsimmons, Administrative Assistant, HR & Administration

Reports to:
Department Head

Functions: The Mentoring Advisory Committee has overall responsibility for the Department of Medicine Mentoring Program, which operates within and is complementary to the Faculty of Medicine Mentoring Program. The Committee liaises with the Department Executive Committee and the Promotion and Tenure Committee as needed. The Committee members serve as an advisory group to the Committee chair and assist the chair as requested, in Program development and management. The Chair of the Mentoring Committee works closely with the Department Head to ensure that effective mentoring relationships are established and maintained for every new tenure track and grant tenure track department member from the time of their appointment through to their achievement of tenure and promotion to associate professor. The Committee ensures that every mentor-mentee relationship is documented and is functioning satisfactorily, and if not, that a new mentor is appointed.

The Department Mentoring Program was established by Norman Wong in January 2005. John Cairns assumed the role of Director in July 2010. The mentoring Committee has worked hard to interpret the findings of the Department Research Task Force, and to implement changes to sustain and strengthen the Mentoring Program. The website has been much improved and made readily accessible. All materials needed to support the mentors and mentees are
available on the Department website, and documentation is now possible without the creation, storage or transmission of paper documents. At the beginning of academic year 2014-15, there were 25 mentor-mentee pairs in the program, 1 of whom dropped out and 1 resigned the appointment leaving 23 at June 30, 2015. As of the beginning of academic year 2015-16, 2 individuals had achieved promotion and tenure, and 3 more mentor-mentee pairs were established for a net of 24 pairs in the program. Every Mentor-Mentee relationship has been reviewed and where necessary, rejuvenated, sometimes with the appointment of a new mentor. We endeavor to ensure that a mentor is agreed upon by the date of completion of the recruitment process so that the relationship can begin soon after the commencement of the appointment. Ongoing, regular review and assessment of the Program occurs with the intent to implement change as needed.

**Department of Medicine Mentor List**

The Department of Medicine would like to acknowledge the following faculty members for their invaluable contributions to this important program between 2013-2014:

- Aslim Anis, School of Population & Public Health
- Najib Ayas, Medicine (Critical Care Medicine)
- Marcel Bally, Pathology and Laboratory Medicine
- Michael Barnett, Medicine (Hematology)
- Lynn Beattie, Psychiatry
- Michael Brauer, Medicine (Respiratory Medicine)/School of Environmental Health
- Stirling Bryan, Medicine (Respiratory Medicine)
- Adele Diamond, Psychiatry
- Sharlene Gill, Medicine (Medical Oncology)
- Karin Humphries, Medicine (Cardiology)
- Nadia Khan, Medicine (Internal Medicine)
- Jacek Kopec, School of Population & Public Health
- Brian MacIvar, Psychiatry
- Robert McMaster, Medical Genetics
- Deborah Money, Obstetrics & Gynecology
- Anita Palepu, Medicine (Internal Medicine)
- Peter Pare, Medicine (Respiratory Medicine)/School of Environmental Health
- David Patrick, School of Population & Public Health
- Lynn Raymond, Psychiatry
- Neil Reiner, Medicine (Infectious Diseases)
- Frank Ryan, Medicine (Respiratory)
- Don Sin, Medicine (Respiratory Medicine)
- Jean Shoveller, School of Population & Public Health

**Recruitment & Resources Committee**

**Chair**
Dr. Graydon Meneilly

**Members:**
Dr. Mark Fitzgerald, Dr. Adeera Levin, Dr. Paul Man, Dr. on Stoessl, Dr. Teresa Tsang, Mr. Nicholas Sidorenko and Ms. Amy Stanley

**Administrative Support:** Ms. Jane Zhang

**Reports to:** Department Head

The Department of Medicine created a Recruitment and Resources Committee to oversee future academic faculty recruitments within the Department and to ensure that the recruitments follow the Department’s strategic recruitment direction, that appropriate resources are available, and that recruitments comply with the University’s equity policies. The Committee also reviews the progress of new recruits at 6 months, 1 year, and 2 years after they have begun their appointments to ensure that the recruits are on track for future success. This has resulted in a more efficient academic faculty recruitment process, and allows better strategic planning for recruitments within the Department. A representative from the Department’s Equity Committee also attends each meeting.
The Academic Appointments, Reappointments, Promotions and Tenure Committee (AARPT)

2013

Chair: Dr. G. S. Meneilly, Professor
Vice-Chair: Dr. S. F. Paul Man, Professor
Administrative Assistance: Jeannie Brown/Jane Zhang

Dr. Najib Ayas, Associate Professor, Critical Care Medicine January to August 2013
Dr. Michael Barnett, Clinical Professor, Hematology January to December 2013
Dr. Jeff Beckman, Clinical Associate Professor, Neurology January to August 2013
Dr. William Bowie, Professor, Infectious Diseases January to December 2013
Dr. John Cairns, Professor, Cardiology January to December 2013
Dr. Neil Cashman, Professor, Neurology September to December 2013
Dr. Edward Conway, Professor, Hematology January to December 2013
Dr. Marshall Dahl, Clinical Associate Professor, Endocrinology January to December 2013
Dr. Sharlene Gill, Associate Professor, Medical Oncology January to August 2013
Dr. Richard Harrigan, Associate Professor, AIDS January to August 2013
Dr. Rose Hatala, Associate Professor, General Internal Medicine September to December 2013
Dr. Donna Hogge, Clinical Professor, Hematology January to December 2013
Dr. Karin Humphries, Associate Professor, Cardiology January to December 2013
Dr. David Kendler, Clinical Associate Professor, Endocrinology January to December 2013
Dr. Paul Keown, Professor, Nephrology January to December 2013
Dr. Charles Kerr, Professor, Cardiology September to December 2013
Dr. Robert Levy, Professor, Respiratory Medicine January to December 2013
Dr. Adam Peets, Associate Head Education & Clinical Associate Professor, Critical Care * non-voting member July to December 2013
Dr. Robert Schellenberg, Professor, Allergy & Immunology January to December 2013
Dr. Jean Shapiro, Clinical Professor, Nephrology January to December 2013
Dr. Kamran Shojania, Clinical Professor, Rheumatology January to December 2013
Dr. Sandra Sirrs, Clinical Associate Professor, Endocrinology January to December 2013
Dr. Andrea Townson, Clinical Associate Professor, Physical Medicine January to December 2013
Dr. John Wade, Clinical Associate Professor, Rheumatology January to December 2013
Dr. Eric Yoshida, Professor, Gastroenterology January to December 2013

2014

Chair: Dr. G. S. Meneilly, Professor
Vice-Chair: Dr. S. F. Paul Man, Professor
Administrative Assistance: Jane Zhang

Dr. Michael Barnett, Clinical Professor, Hematology January to December 2014
Dr. William Bowie, Professor, Infectious Diseases January to December 2014
Dr. John Cairns, Professor, Cardiology January to December 2014
Dr. Neil Cashman, Professor, Neurology January to December 2014
Dr. Edward Conway, Professor, Hematology January to December 2014
Dr. Marshall Dahl, Clinical Associate Professor, Endocrinology January to December 2014
Dr. Dawn DeWitt, Professor, General Internal Medicine September to December 2014
Dr. Richard Harrigan, Associate Professor, AIDS January to December 2014
Dr. Rose Hatala, Associate Professor, General Internal Medicine January to December 2014
Dr. Amanda Hill, Clinical Associate Professor, Geriatrics September to December 2014
Dr. Donna Hogge, Clinical Professor, Hematology January to December 2014
Dr. Karin Humphries, Associate Professor, Cardiology January to December 2014
Dr. David Kendler, Clinical Associate Professor, Endocrinology January to August 2014
Dr. Paul Keown, Professor, Nephrology  January to December 2014
Dr. Charles Kerr, Professor, Cardiology  January to December 2014
Dr. Philip Lee, Clinical Associate Professor, Geriatrics  September to December 2014
Dr. Robert Levy, Professor, Respiratory Medicine  January to August 2014
Dr. Caroline Lohrisch, Clinical Associate Professor, Medical Oncology  September to December 2014
Dr. Adam Peets, Associate Head Education & Clinical Associate Professor, Critical Care * non-voting member  January to December 2014
Dr. Robert Schellenberg, Professor, Allergy & Immunology  January to August 2014
Dr. Jean Shapiro, Clinical Professor, Nephrology  January to August 2014
Dr. Kamran Shojania, Clinical Professor, Rheumatology  January to December 2014
Dr. Sandra Sirrs, Clinical Associate Professor, Endocrinology  September to December 2014
Dr. S. van Eeden, Professor, Respiratory Medicine  September to December 2014
Dr. John Wade, Clinical Associate Professor, Rheumatology  January to August 2014
Dr. Eric Yoshida, Professor, Gastroenterology  January to December 2014

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 FACULTY APPOINTMENTS**

**Start Dates Between January 1, 2013 and December 31, 2013**

**Clinical Instructor**
- Appleton, Brent - Rheumatology
- Bhugra, Hardeep - Cardiology
- Chapman, Paul - Physical Medicine & Rehab
- Curran, Terry - Neurology
- George, Deepu - Community Internal Medicine
- Gharbi, Sam - General Internal Medicine
- Hadi, Haidar - Cardiology
- Ho, Jeremy - Medical Oncology
- Inkpen, Peter - Physical Medicine & Rehab
- Janda, Surinder - Respiratory Medicine
- Lee, Mitchell - General Internal Medicine
- Mansour, Firas - General Internal Medicine
- Mian, Mamta - Geriatrics
- Northcott, Kimberely - Rheumatology
- Parekh, Ritesh - Geriatrics
- Uh, Mitchell - Rheumatology
- Zavareh, Sareed - Community Internal Medicine

**Clinical Assistant Professor**
- Brunner, Nathan - Cardiology
- Chang, Peter - General Internal Medicine
- Din, Fareen - Nephrology
- Donnellan, Fergal - Gastroenterology
- Elekiaby, Amr - Community Internal Medicine
- Elmayergi, Nader - Cardiology
- Gerrie, Alina - Hematology
- Hinnell, Claire - Neurology
- Hiralaal, Rajesh - Cardiology

**Clinical Associate Professor**
- Bested, Alison - Hematology
- Eigl, Bernhard - Medical Oncology
- Kotb, Rami - Medical Oncology
- Montgomery, Patrick - Geriatrics
- Nador, Roland - Respiratory Medicine
- Ramanathan, Krishnan - Cardiology
- Tan Hogg, Wan - Respiratory Medicine
- Veerapen, Kiran - No Division, Assistant Professor
- Barbour, Sean - Nephrology

Kanji, Hussein - Critical Care Medicine
Kestler, Mary - Infectious Diseases
Lane, Chris - Cardiology
Mann, Manjeet - Cardiology
Narayanan, Sujaatha - Hematology
O’connor, Russell - Physical Medicine & Rehab
Oja, Conrad - Medical Oncology
Orenstein-Lyall, Teddi - Cardiology
Ovakim, Daniel - Critical Care
Pewarchuk, Jesse - General Internal Medicine
Rudnik James - General Internal Medicine
Shanks, David - General Internal Medicine
Sindhar, Tanbir - Community Internal Medicine
Strijack, Bradford - Nephrology
Syed, Husnain - Geriatric Medicine
Tan, Jing Ee - Neurology
Topic, Delilah - Medical Oncology
Yu, Jen Zhen - General Internal Medicine
Henderson, William - Critical Care Medicine

**Associate Member**
- Barrios, Rolando - AIDS
- Guenette, Jordan - Respiratory Medicine
- Guillemin, Silvia - AIDS
- Guzman, Jaime - Physical Medicine & Rehab
- Harris, Marianne - AIDS
- Kirk, Peter - Medicine
- Takaro, Tim - Medicine

**Associate Member, External**
- Brockman, Mark - AIDS
- Brumme, Zabrina - AIDS
- Hogg, Robert - AIDS

**Start Dates Between January 1, 2014 and December 31, 2014**

**Clinical Instructor**
- Au, Stephanie - Cardiology
- Avanesian, Ardash - Medical Oncology
- Bourque, Sylvie - Medical Oncology
- Chan, Angela - Medical Oncology
- Chin, Paul - Geriatrics
- Choi, Heywood - Endocrinology
- Ennis, Jesse - Physical Medicine & Rehab
- Fok, Mark - Geriatrics
- Grant, Chris - Physical Medicine & Rehab
- Harris, David - Endocrinology
- Humphreys, Karen - Medicine
- Jain, Leena - Geriatrics
- Kwong, Evan - Physical Medicine & Rehab
- Lim, Jean-Paul - General Internal Medicine
- Lyle, Scott - Nephrology
- Mackenzie-Feder, Jessica - Endocrinology
- Nolan, Seonaid - Aids
- Parmar, Naaz - Geriatrics
- Pearce, Jonathan - Palliative Care
- Petrovic, Vanja - Community Internal Medicine
- See, Ingrid - Palliative Care
- Smushkin, Galina - Endocrinology
- Sohi, Davedeep - General Internal Medicine
- Teo, Michelle - Rheumatology
- Trutsov, Zdravko - General Internal Medicine
- Tuvel, Brandon - Community Internal Medicine
- Van Tongeren, Lindsay - Respiratory Medicine
- Varshney, Nishi - Geriatrics
- Vortel, Jerry - Infectious Diseases
- Walzak, Alison - Community Internal Medicine
- Widmer, Nadia - Community Internal Medicine
- You, Yong Dong - Community Internal Medicine

**Clinical Assistant Professor**
- Almehthel, Mohammed - Endocrinology
- Arishenkov, Shane - General Internal Medicine
- Beaudoin, Eve-Lea - Respiratory Medicine
- Carruthers, Robert - Neurology
- Chirayath, Haiju - Endocrinology
- Chow, Rudy - Cardiology
- Davis, Margot - Cardiology
- Deans, Gregory - Infectious Diseases
- Dinh, Queenie - Infectious Diseases
- Edmunds, Peter - Palliative Care
- Firoz, Tabassum - General Internal Medicine
- Gorji, P. Anna Rahmani - General Internal Medicine
- Hughes, Barbara - General Internal Medicine
- Jack, Kristin - Neurology
- Kuyper, Laura - General Internal Medicine
- Lakhani, Amin - Community Internal Medicine
- Lang, Michael Peter - Community Internal Medicine
- Lee, Ching Sang (Peter) - Allergy & Immunology
- Marquez-Azalgara, Vladimir - Gastroenterology
- Moldoveanu, Andrei - Endocrinology
- Nayar, Shalini - General Internal Medicine
- Negash, Daniel - Community Internal Medicine
- Ong, Kevin - Cardiology
- Phillips, Richard - Endocrinology
- Pimstone, Simon - Medicine
- Potts, Jayson - General Internal Medicine
- Raghavan, Prathap - Physical Medicine & Rehab
- Reeves, Hien Nguyen - Allergy & Immunology
- Rosenfeld, Gregory - Gastroenterology
- Simpson, Christine - Community Internal Medicine
- Singh, Anurag - Community Internal Medicine
- Sudol, Malgorzata - Physical Medicine & Rehab
- Tsang, Michael - Cardiology
- Walker, Jennifer - Palliative Care
- Wright, Alissa - Infectious Diseases

**Clinical Associate Professor**
- Atkins, Ted - Neurology
- Fibich, Christian - Medical Oncology
- Mitchell, Gillian - Medical Oncology
- Simmons, Christine - Medical Oncology

**Clinical Professor**
- Laupland, Kevin - Infectious Diseases

**Assistant Professor**
- Deering, Kathleen, AIDS
- Field, Thalia - Neurology
- Lester, Richard - Infectious Diseases
- Milloy, M-J - AIDS
- Nygaard, Haakon - Neurology
- Quon, Bradley - Respiratory Medicine
- Robillard, Julie - Neurology
- Scott, David - Medical Oncology
**FACULTY PROMOTIONS**

**Effective July 1, 2013**

**Clinical Assistant Professor**
- Alimoradi, Ima - Geriatric Medicine
- Ezzat, Hatoon - Hematology
- Farrell, Laura - Community Internal Medicine
- Kimel, Gilad - General Internal Medicine
- Klinke, Jennifer - Endocrinology
- Lai, Emily - Community Internal Medicine
- Mahmoudi, Nasim - Community Internal Medicine

**Clinical Associate Professor**
- Aminbakhsh, Amin - Cardiology
- Beaulieu, Monica - Nephrology
- Briemberg, Hannah - Neurology
- Fung, Michelle - Endocrinology
- Jamal, Shahin - Rheumatology
- Ramji, Alnoor - Gastroenterology
- Swiston, John - Respiratory Medicine
- Wood, David - Cardiology

**Clinical Professor**
- Forrest, Donna - Hematology
- Kollmannsberger, Christian - Medical Oncology
- Leitch, Heather - Hematology
- Toze, Cindy - Hematology
- Travlos, Andrew - Physical Medicine & Rehabilitation

**Professor**
- Chi, Kim - Medical Oncology
- Lacaille, Diane - Rheumatology
- Sandford, Andrew - Respiratory Medicine

**Effective July 1, 2014**

**Clinical Associate Professor**
- Chung, Maria - Geriatrics
- Falconer, John - Neurology
- Foltz, Lynda - Hematology
- Ho, Cheryl - Medical Oncology
- Jackson, Shannon - Hematology
- Jung, Bev - Nephrology
- Laskin, Janessa - Medical Oncology
- Lim, Howard - Medical Oncology
- Lohrisch, Caroline - Medical Oncology
- Mirzanejad, Yazdan - Infectious Diseases
- Petraszko, Tanya - Hematology
- Reynolds, Steve - Critical Care Medicine
- Swiggum, Elizabeth - Cardiology
- Tinker, Anna - Medical Oncology
- Zalunardo, Nadia - Nephrology
- Zypchen, Leslie - Hematology

**Clinical Professor**
- Fera – Tharwat – Respiratory
- Kendler, David - Endocrinology

**Professor**
- Gill, John - Nephrology
- Lee, Agnes - Hematology
- Tremlett, Helen - Neurology

**ACADEMIC FACULTY REAPPOINTMENTS**

**Effective July 1, 2013**

**Assistant Professor**
- Avina-Zubieta, Antonio - Rheumatology
- Cresswell, Silke - Neurology
- Jacova, Claudia - Neurology
- Pettersen, Jacqueline – Neurology

**Effective July 1, 2014**

**Assistant Professor**
- Boyd, John - Critical Care
- Gill, Jagbir - Nephrology
- Ryerson, Chris - Respiratory

**Assistant Professor, Partner**
- Cheung, Winson - Medical Oncology
- Lima, Vivianne – AIDS
Murray, Melanie - Infectious Diseases

**FACULTY EMERITUS**

**Effective in 2013**

Professor Emeritus
Chalmers, Andrew - Rheumatology

Clinical Professor Emeritus
Nakiela, Barbara - Respiratory

**Effective in 2014**

Professor Emeritus
Brunham, Robert – Infectious Diseases
Pare, Peter – Respiratory Medicine

Clinical Professor Emeritus
Shepherd, John - Hematology
Administration

New Division
Creation of the 18th division of Integrated Division of Palliative Care in the Department of Medicine including governance, budget, recruitment, space, furniture, computer infrastructure and leases.

Division Reviews
There were no division reviews in 2013. Division of Critical Care Medicine – February 2014

Women in Medicine workshops
May 2014- Conflict Resolution
October 2013 – Negotiation Skills
May 2013 – Communication Skills

May 2014 annual departmental awards night held at Medical Student Alumni Centre.

New Leadership Position Created
The position of Associate Head Academic Affairs was drafted and approved by the Dean and Department Head. It is currently in the process of being filled.

Space
Expanded the number of workstations in the Office of Education to meet the growing needs of the Undergraduate, Postgraduate and Experimental Medicine Programs.

Information Technology
Summer of 2013 hired Tekworks on an hourly bases to support the Administration office IT needs.

Project started late summer 2014 to move Department of Medicine Administration office computer files to UBC servers from hospital servers and purchase new computers. February 16, 2015 Faculty of Medicine and UBC IT stopped project – due to budget constraints.

The Department of Medicine web content was successfully moved over to the Faculty of Medicine web platform, using Word Press. Information was update and problems were sorted out. The new website went live June 1, 2014.

Printer project started to reduce number of printers in the administration office, therefore reducing the overall cost of toner cartridges.

Finance

Financial re-alignment changed the structure/governance of the departments finance team, moved it to the Faculty of Medicine under a new cluster model.

Budget model developed and approved to support the operational costs of running the Experimental Medicine Program.

Hyperion budgets developed for all “G”, “S” and “E” pg’s in the Department.

Human Resources

New Division Heads
Division Heads were recruited into the Divisions of Palliative Care, Hematology,

Wellness and Work Program
The Department of Medicine Health and Wellness Program was re-branded to “Wellness and Work Program.”
RESEARCH
The Research Office in conjunction with the department Research Advisory Committee (RAC) continues to support and advance research, scholarship and innovation in the Department of Medicine. The Research Office team is made up of Dr. Teresa Tsang, (Professor and Associate Head Research), Dr. Jody Swift (Departmental Research Coordinator), and Kiely Landrigan (Student Project Assistant). The Research Advisory Committee is composed of at least one member from each of our divisions, and meets quarterly and as necessary, to discuss issues central to research activities across all of our sites, centres and divisions.

Over the past two years, the Research Office has expanded our support to a wider range of research activities for the department fostering the primary mandate of creating a stronger culture. Our second mandate has been to continue to developing strong partnerships with our affiliated organizations and research partners including Vancouver Coastal Health Research Institute, Providence Health Care Research Institute, Centre for Health Evaluation and Outcome Sciences, Centre for Clinical Epidemiology and Evaluation (C2E2), Fraser Department of Evaluation & Research, Michael Smith Foundation for Health Research, and a wide variety of UBC based Research Centres and support units. Through these partnerships, we have been able to promote new support resources (ethics facilitation, statistics consultation), develop new and enhancing ongoing workshop series to promote research methodology and capacity building in our department.

Research Office Activities 2013 – 2014:

- Hosting the 2nd and 3rd Annual Department of Medicine Research Expo
- Support for strategic grants including CRC, CFI and BCKDF competitions
- Coordination of grant development resources for members
- Research orientations for new faculty & staff
- Facilitation of statistics consultation resources
- Working with researchers to identify and support the development of new collaborative opportunities
- Pilot project with C2E2 to develop a Research Methodology & Project Development Workshop Series
Research Narrative

By Teresa S.M. Tsang and Jody Swift

In 2013 and 2014, members of the Department of Medicine worked hard to continue to grow research capacity across all areas of our department. Despite the current funding challenges felt across many of the large funding organizations, our members have contributed to an overall growth in research funding, and have demonstrated incredible resourcefulness in developing beneficial partnerships and collaborations. In a recent survey, our members identified over 30 different hospitals, research centres and institutions in British Columbia where their research activities occur. While only 15% of our total faculty members are in the academic track, over 60% of our members are actively publishing their research on a yearly basis, demonstrating the prolific contributions of our clinical faculty members towards the research landscape in the department.

Our department members remain recognized leaders in the fields of AIDS, Pulmonary disease, COPD, heart & lung health, spinal cord injury, multiple sclerosis, asthma, aortic valve implantation, arthritis and nephrology. Department of Medicine members attract about 20% of the total research funding in the Faculty of Medicine, and 10% of the total research funding at UBC.

Research Metrics and Highlights

- Research Funding:
  FY 2013 $51,000,000
  FY 2014 $53,000,000

- 1200+ annual peer reviewed publications

- 12 Canada Research Chairs
  6 named Chairs
  7 Professorships

- Over 800 open Human Ethics Applications

- 50 animal case studies

- Members obtained 8 Michael Smith Scholar Awards in 2014
Stephen Lam
Professor, Respiratory Medicine | MD, FRCPC

“My long term goal is to translate scientific research in lung cancer screening to implementation at the population level and to improve lung cancer outcome.”

Dr. Stephen Lam is a Professor in the Department of Medicine and a Distinguished Scientist in the Department of Integrative Oncology at the BC Cancer Research Centre. He chairs the Provincial Lung Tumor Group at the British Columbia Cancer Agency and directs the MDS-Rix Early Lung Cancer Detection and Translational Research Program at BCCA.

He graduated from the University of Toronto Medical School in 1974 and completed his residency and fellowship training in Internal Medicine and Respiratory Medicine at the University of British Columbia associated hospitals. After a post-doctoral fellowship at the Massachusetts General Hospital and the National Cancer Center Hospital in Tokyo, Japan, he joined the UBC Faculty of Medicine in 1979.

His research is centered around early detection and chemoprevention of lung cancer. In the early 1990s, with colleagues at BCCA he invented the Light Induced Fluorescence Bronchoscopic (LIFE) device for localization of pre-invasive and early invasive lung cancer. He pioneered clinical application of other endoscopic optical imaging methods such as optical coherence tomography and Raman Spectroscopy. He was among the first in the world to use photodynamic therapy to treat lung cancer. Currently, he is the lead investigator of the Pan-Canadian Early Detection of Lung Cancer Study that has developed a web-based lung cancer risk prediction tool to identify smokers at sufficient risk for screening with low dose CT and for calculating the malignancy risk of lung nodules discovered by CT screening.

Dr. Lam has published over 200 peer reviewed scientific papers, 32 book chapters and 20 patents. He has been a frequently invited speaker in many provincial, national and international conferences. He was the recipient of the Friesen-Rygeli Award for Outstanding Canadian Academic Discovery, the Gustav Killian Medal by the World Association of Bronchology for his pioneering contributions to the field of early lung cancer diagnosis, the Distinguished Achievement Award from the University of British Columbia, the Joseph Cullen Award for life-time scientific achievements in lung cancer prevention research by the International Association for the Study of Lung Cancer and the UBC Killam Faculty Research Prize. He is a Honorary Professor at Tonji Medical University in China. He chairs the Canadian Partnership Against Cancer Expert Panel on Lung Cancer Screening. He is also a member of the International Association for the Study of Lung Cancer Strategic Screening Advisory Committee steering group and chairs he clinical work-up group of the Canadian Lung Cancer Screening Network.

What attracted Dr. Lam to UBC are the people. “We work like a family”, said Dr. Lam. He attributes his success to his mentors Professor Stefan Grzybowski and
Professor Moira Yeung as well as his many multi-disciplinary colleagues and international collaborators who generously contribute their intellect and time towards a common goal to reduce the morbidity and mortality of lung cancer and to improve the quality of life of lung cancer patients. He greatly enjoys the intellectual challenge of his undergraduate and graduate students and post-doctoral fellows whom he believes keep him green and productive.

Keith Walley
Professor, Critical Care Medicine | MD, FRCP, ABIM

After graduating with a BSc Honors in Physics from the University of Manitoba in 1978, he continued on to receive his MD in 1981. He went on to complete an Internal Medicine Residency (McGill University), a Fellowship in Pulmonary and Critical Care Medicine (University of Chicago), and a Sabbatical in basic mechanisms of sepsis (University of Michigan). Dr. Walley’s impressive career has centered on examining the pathophysiology of cardiovascular dysfunction in critical illness, and oxygen transport in peripheral tissues.

A Scientist and physician, Dr. Walley’s research focuses on gaining an understanding of the basic mechanisms underlying impaired myocardial function and other organ dysfunction during inflammatory disease states, including sepsis. This work extends far beyond the bedside to encompass the Genomics of Critical Care, and aims to develop a greater understanding of the genetic determinants of outcome from critical illness. Specifically, how key inflammatory and innate immunity genes are related to critical illnesses including SIRS, sepsis and septic shock, and in patients who have undergone cardiovascular surgery. To date this work has yielded 181 manuscripts, and over 90 peer reviewed grants and research awards. A recent example illustrating the clinical importance of combining genetic analysis and mechanistic basic science research was published in Science Translational Medicine. In this article Dr. Walley and collaborators have identified a potential new therapeutic target and pathways which may lead to improvements in the treatment of sepsis.

Among his many roles Dr. Walley is currently the Associate Director for the ICU at St. Paul’s Hospital, principle investigator for the IMPACT multicenter CIHR STIHR post-doctoral training program, and the Director of the Centre for Heart and Lung Innovation at St. Paul’s Hospital.

“My long term goal is to enable growth and success of all of the scientists and collaborators at the Centre for Heart Lung Innovation (HLI), previously known as iCAPTURE and the JHRC. The HLI was established as the Pulmonary Research Laboratory in 1977 by Drs. James Hogg (2013 Gairdner Wightman Award Winner) and Peter Pare. Here basic and clinician scientists work together in an exciting multidisciplinary environment to address vital issues in heart, lung, and critical care disease. Situated within Providence Health Care’s St. Paul’s Hospital, a University of British Columbia teaching hospital, the HLI is a T1 translational research centre using our basic molecular and cellular research discoveries to develop innovative approaches to prevent and treat human disease through our complementary and connected clinical research”

Through his commitment to education Dr. Walley has been actively involved in teaching and supervision of 45 graduate students and post-doctoral fellows. When asked to comment on the advantages of working within a large multidisciplinary research arena offered by UBC Department of Medicine Dr. Walley had this to say;

“The Centre for Heart Lung Innovation is the best T1 translational laboratory for critical care research in Canada and, arguably, the world. Senior investigators...
in the lab have provided outstanding mentorship and junior investigators and trainees have generated tremendous enthusiasm for basic research and its translation into clinical application. The ICU at St. Paul’s Hospital has been a world leader in clinical care, teaching, and research for decades. The patients in this ICU have the highest average severity of illness of any ICU in Canada and therefore St. Paul’s Hospital ICU is the perfect exposure to generate the important questions and inspire research.”

Dr. Shannon’s research expertise focuses on sexual health and HIV/AIDS among marginalized and key affected populations in Canada and globally. Her program consists of a range of CIHR and US NIH-funded research on the social and structural determinants of sexual health and HIV/AIDS prevention, treatment and care among those affected by and living with HIV, including sex workers, youth, and women living with HIV.

She plans to continue to build her research program on gender, sexual health and HIV/AIDS at UBC and BC-CfE, spanning infectious disease and social epidemiological, qualitative and mixed methods research, and population health intervention and policy evaluation research. This includes training opportunities for graduate students and postdoctoral fellows in GSHI’s work in Canada and global health efforts.

Dr. Shannon’s research continues to be published in high impact journals, including Lancet, AIDS, and JAMA. Her work has contributed substantially to policy development, including expert evidence in BC, Ontario and the Supreme Court of Canada related to the public health impacts of Canada’s criminalized prostitution framework. She has also consulted with the departments of reproductive health and HIV at World Health Organization, including the 2012 WHO/UN guidelines on HIV prevention, treatment and care among sex workers in low and middle income countries.

In addition to her enthusiasm for research, Dr. Shannon has been actively involved in teaching at UBC and has supervised over 20 graduate students and post-doctoral fellows. She continues to provide many dynamic services to the community through her work on a number of Community Advisory Boards, task-forces and public speaking engagements. She was recently awarded an AccolAIDS from Positive Living BC in “Community, Political and Social Action” for her work affecting policy and program change for marginalized communities. At present Dr. Shannon is an Associate Editor for the International Journal of Drug Policy. She sits on the International AIDS Society Advisory Committee for Key

Kate Shannon
Associate Professor, AIDS | PhD, MPH, BSc, BA

Dr. Shannon’s research training includes a Masters degree in Global Public Health which focused on maternal and reproductive health in rural Bangladesh, followed by a PhD in Public Health and Epidemiology at UBC which explored the social and structural factors shaping HIV acquisition risk for street-based sex workers.

Currently, she has an Associate Faculty appointment with the School of Population and Public Health and is the appointed Director of the Gender and Sexual Health Initiative, a core program of the BC Centre for Excellence in HIV/AIDS. She is one of the recent FoM recipients of a Canada Research Chair in Global Sexual Health and HIV/AIDS.

“I chose UBC due to its cutting edge research on HIV/AIDS, and impact both locally and internationally, and critical work in ensuring translation of health research to policy and practice to affect change, promote access, and reduce inequities.”
Populations, as well as CIHR HIV/AIDS and Institutes of Gender and Health advisory boards. Importantly, the significance and quality of her work continues to draw the attention of the media, including over 300 interviews to date, and has a measureable impact on public health policy.

“...her work has recently been featured in the Vancouver Sun, OMNI television, and Editor’s choice for BMJ Heart in 2012. She is currently leading in a multinational ethnicity acute coronary syndrome study recruiting almost 2000 patients in Canada, China and India.

“My research area is in understanding how ethnicity and sex impact cardiovascular disease, cardiac risk factors and cardiovascular disease management. I received a MSFHR Career Scientist award to investigate ethnicity and chronic cardiovascular disease management barriers and solutions.”

Over the past 7 years she has systematically investigated cardiovascular disease burden, acute care delivery for ACS, stroke and chronic cardiovascular disease management using multi-provincial population based datasets. This work was supported by four CIHR/HSFC operating grants and a CIHR New Investigator award. Her overall findings have demonstrated that South Asian and Chinese are disproportionately affected by cardiovascular disease and the lifetime health burden will be greater for these populations as they have longer to live with the disease. Working with the ETHOS team, she is now systematically investigating how ethnicity impacts chronic cardiovascular disease using a multicenter cohort study of South Asian, Chinese and White patients with acute coronary syndrome. This research aims to identify specific gaps in chronic cardiovascular care and patient level barriers in these ethnic groups that are not currently known. She was recently awarded a CIHR grant for a randomized controlled trial determining the efficacy of a culturally adapted diabetes management intervention compared with usual care on diabetes and blood pressure outcomes. The long-term goal is to use this new information to inform culturally sensitive interventions to close these care gaps and improve risk factor and cardiovascular disease management of Canada’s largest ethnic populations.

When asked how being a member of the Department of Medicine and UBC have helped her achieve her research goals Dr. Khan stressed the importance of the research environment, with access to a large and diverse ethnic population, diversity of the department, and association with a strong outcomes research group (CHEOS), have all been integral to her success.
“Within the Department of Medicine, we are able to foster unique collaborations across disciplines given that the DoM is large and diverse as well. The DoM has provided me continued support since I joined UBC that has given me the opportunity to pursue these important research questions. As a physician, this has been critical to allow me to protect my time as there are few clinician researchers in Canada.”

When asked why he chose to research at UBC Department of Medicine Dr. Hirota replied with:

“I chose UBC because the Faculty of Medicine and Department of Medicine have recognized that Lung and Heart research is an area of institutional strength. This is based on the historical track record of international leaders in the field including to name a few, Drs. James Hogg, Peter Pare, Mark Fitzgerald, Chris Carlsten, and Don Sin. Drs. Carlsten and Sin, both Canada Research Chairs, represent a structured mentorship environment for my early career development.”

As the Co-Director of COERD Dr. Hirota now works side-by-side with his primary mentor Dr. Chris Carlsten and plans to bring international recognition to the group by developing a translation research suite for complimentary clinical, and bench science studies through a Canadian Foundation for Innovation infrastructure grant supported by UBC.

Dr. Hirota also has pursued efforts to increase science communication by taking the Banff Centre’s Science Communications workshop in the summer of 2014. This training experience has prompted Dr. Hirota to better engage in knowledge translation and dissemination activities through social media. He is currently involved with Infoshots, an animation studio that visualizes research findings, and thinkable.org, a social media tool for scientists designed for direct public-to-researcher communication.

Dr. Hirota has secured a faculty position, starting funds, and operating grants at UBC and hopes to leverage this funding towards career investigator and nationally competitive operating grants. He acknowl-
edges that “funding is becoming harder and harder to come by and that the public demands a return on their investment. I have seen this writing on the wall for several years and have been positioning myself to be an innovative leader that challenges the status quo to find creative funding solutions by more openly and clearly communicating with the public about the value of medical research.”

During her PhD, Dr. Robillard became interested in how findings from neuroscience laboratories impact the lives of individuals and societies. To investigate this further, she joined the National Core for Neuroethics at UBC for postdoctoral training where she built on her thesis work in a way that emphasizes the human translational side of neuroscience.

Now an Assistant Professor at UBC, Dr. Robillard’s goals are to ensure that older adults have access to high quality online information to support their health decision-making, and to ensure that new technological innovations for the screening, diagnosis, and treatment of dementia are aligned with social values and meet the highest ethical standards to maximize the benefit and minimize the harms to our older demographic.

Dr. Robillard’s position in the UBC Division of Neurology at the UBC Department of Medicine has provided her with the opportunity to engage with various stakeholders in health care, including physicians, other researchers, residents, students, and members of the public. She feels that the UBC Department of Medicine, the National Core for Neuroethics, and Djavad Mowafaghian Centre for Brain Health, all together, provide a rich and productive research environment, ideal for her research.

She has co-chaired the 2014 Brain Matters! Vancouver International conference, organized outreach programs showcasing the research done by students in the UBC Neuroscience graduate program, and has been invited to present her work at prestigious conferences around the world. This summer, she will present her work on online self-assessments for dementia at the 2015 Alzheimer Congress in London, UK and at the Alzheimer Association International Conference in Washington, DC.

Aside from research, she enjoys mountain biking and sailing.
DIVISION REPORTS
OVERVIEW ADMINISTRATION AND LEADERSHIP

From its inception in 2007, the Division of AIDS has worked in close collaboration with the AIDS Research Program at St. Paul’s Hospital/UBC (est. 1987) and the BC-Centre for Excellence in HIV/AIDS (BC-CfE) (est. 1992).

Dr. Montaner is the founding Head of the UBC Division of AIDS. He holds the endowed SPHF/UBC Chair in AIDS Research and is Director of the BC-CfE, as well as the founding Director of the AIDS Research Program & the John Ruedy Immunodeficiency Clinic at St. Paul’s Hospital, Providence Healthcare. He is the UNAIDS Special Advisor on HIV Therapeutics responsible for the development of the UN 90-90-90 Target. His research focus is the development and implementation of Treatment as Prevention® (TasP®) supported in part by the Provincial Government and grant from the National Institute for Drug Abuse (NIDA) at the National Institutes of Health (NIH). He continues to formally support research efforts regarding the implementation and evaluation of TasP in BC, Saskatchewan, China in collaboration with the China Center for Disease Control, as well as Panama, France, Argentina, Brazil, Queensland, among others. Dr. Montaner is also the architect of the United Nations 90-90-90 Target, which was formally endorsed by UN Secretary General, Ban Ki-Moon at UNGASS on September 24, 2014. The new target proposes that by 2020, 90% of all people living with HIV globally know their HIV status; 90% of them accessing high quality antiretroviral therapy; and 90% of them achieving sustained viral suppression. Independent models suggest that achieving the 90-90-90 Target by 2020 will lead to a 90% decrease in each of AIDS incidence, AIDS related deaths and HIV new infections by 2030.
(compared to 2010 global levels). In addition, Dr. Montaner is spearheading the discussion regarding the potential expansion of the TasP® strategy to viral hepatitis (HCV and HBV) in BC, as well as to other contagious (non-infectious) conditions, including addictions. It is anticipated that TasP® will offer an opportunity to develop tailored disease elimination strategies that could significantly contribute to health care sustainability.

Dr. Harrigan is Director of Research Laboratories at the BC-CfE since 1997. For almost two decades our Laboratory, under his direction, has been a local, national, and international leader in the development of cutting-edge translational research with important implications for the clinical management of HIV. We have contributed extensively to our understanding of HIV drug efficacy and resistance, as well as the human and viral parameters that influence HIV disease progression.

Drs. Wood and Kerr are Co-Directors of the Urban Health Research Initiative. The mission of the Urban Health Research Initiative is to improve the health of individuals and communities through research to inform policy. UHRI currently employs 61 staff. Dr. Wood is the Medical Director for Addiction Services at Providence Health Care and Vancouver Coastal Health (2014). In addition to his role as Co-Director of the Urban Health Initiative at the BC-CfE, Dr. Wood is the Director of the US NIH-funded Canada Addiction Medicine Research Fellowship.

Dr. Moore continues to co-lead the research program in HIV and men who have sex with men (MSM) at the BC-CfE, along with Dr. Robert Hogg of Simon Fraser University. In 2014, Dr. Nathan Lachowsky joined as a postdoctoral fellow for this program. Dr. Moore also continues to lead an active research collaboration in Uganda involving a local non-governmental organization, The AIDS Support Organization, the Uganda Virus Research Institute/ Medical Research Council (UK) Joint Research Unit on AIDS. Also in 2014, he undertook a new responsibility as the Physician Lead for the STOP HIV Program for the Provincial Health Services Agency at the BC Centre for Disease Control.

Dr. Shannon is Director of the Gender and Sexual Health Initiative (GSHI), a core program of the BC-CfE that supports more than 30 research and field staff. She is an Associate Faculty in SPHP at UBC. GSHI’s research aims to reduce sexual health and HIV/AIDS inequities among women and gender and sexual minority populations affected by and living with HIV. She currently serves on both CIHR HIV Research Advisory Committee and CIHR Institute of Gender and Health Advisory Board, as well as the International AIDS Society Advisory on Key Populations. She has acted as an expert consultant to WHO, UNAIDS, UNDP, and the Global Commission on HIV and the Law.

Dr. Lima supervises a research staff of seven members including five statisticians, an epidemiologist and a mathematical modeller. She is also an Associate Member at the School of Population and Public Health and holds membership at the Department of Experimental Medicine.

Dr. Poon is Associate Research Scientist in Bioinformatics at the BC-CfE. His research focus is the development and application of new methods in bioinformatics, phylogenetics and machine learning to the study of virus evolution, with an emphasis on human RNA viruses like HIV and hepatitis C virus. He supervises a group of six programmers and modellers in support of the Research Laboratory at the BC-CfE.

Dr. Deering is an infectious disease epidemiologist with expertise in women’s sexual health, HIV. She is the co-principal investigator of a CIHR operating grant that focuses on the health and well-being of women living with HIV in Metro Vancouver. She is the recipient of a CIHR New Investigator Award (2014-19) and a Michael Smith Foundation for Health Research Scholar Award (2014-19).

Dr. Milloy was recruited in 2014 following successful and productive graduate-level training with Drs. Wood and Kerr and postdoctoral fellowships with Dr. Evan Adams in the School of Population and Public Health and Dr. David Bangsberg at Harvard. An infectious disease epidemiologist, he is a research scientist at the BC-CfE where he is the PI of the ACCESS study, an NIH-funded observational prospective cohort of people living with HIV/AIDS who use illicit drugs.

Dr. Nolan is a member of the St Paul’s Goldcorp Addiction Medicine Fellowship Academic and Selection Committees since 2014.
TEACHING

Dr. Montaner continues to provide on-site training for the management of HIV patients to physicians, fellows, residents and nurse practitioners through the Intensive HIV Preceptorship Training Program, based at St. Paul’s Hospital (11 preceptors), as well as supervising five postdoctoral fellows through the AIDS Research Program and co-supervising six postdoctoral fellows through the Division.

Dr. Harrigan is dedicated to ensuring that his students develop individually and independently while studying intensively in an applied laboratory atmosphere. The best and most efficient learning experiences occur when young minds are enabled to function, and develop through practical experience and trial & error reasoning with the best resources available in a ‘real world’ setting. At the end of their time, under his supervision, students mature and develop as academics more through the experience provided than through any other form of theoretical based learning. He attempts to foster and develop the academic and professional skills not taught or experienced in a traditional lecture hall setting. Some of these skills include (but are not limited to) professional interaction with research leaders, workplace and laboratory communication, motivation through contribution to important and revolutionary data and sense of considerable responsibility and personal accomplishment only achieved through work-intensive learning. Since 2009, he has supervised four PhD students, two having received their degrees in 2013 and 2014, respectively. Currently, he supervises two PhD students and three undergraduate students.

Dr. Wood taught four students (two each in 2013 and 2014) in the Research Elective in Urban Health-Medicine. He also taught the following courses: Doctor, Patient and Society (DPAS) 420 (2013/14); HIV Prevention and Care (IHHS) 402 (2013); Introduction to Epidemiology, School of Population and Public Health (SPPH) 502 (2013); Health Advocacy Session, Academic Half Day for Internal Medicine (2013); Addiction Medicine, Academic Half Day for Internal Medicine (2014); Addiction Medicine/Motivational Interviewing Technique, GIM Scholarly Sessions (2014); Introduction to Addiction Medicine, UBC Addiction Medicine Elective (2014). He also supervised four Fellows of the St. Paul’s Hospital Goldcorp Fellowship in Addiction Medicine; two Enhanced Skills Trainees in Addiction Medicine; and four Canadian Addiction Research Fellows. He co-supervised one undergraduate and four MD undergraduate students. He supervised one Masters student in Interdisciplinary Studies and two PhD students (Interdisciplinary Studies and School of Population and Public Health) (non-committee based), one MD/PhD student (Medicine) (committee based), as well as seven postdoctoral fellows (two current and five complete).

Dr. Harrigan is dedicated to ensuring that his students develop individually and independently while studying intensively in an applied laboratory atmosphere. The best and most efficient learning experiences occur when young minds are enabled to function, and develop through practical experience and trial & error reasoning with the best resources available in a ‘real world’ setting. At the end of their time, under his supervision, students mature and develop as academics more through the experience provided than through any other form of theoretical based learning. He attempts to foster and develop the academic and professional skills not taught or experienced in a traditional lecture hall setting. Some of these skills include (but are not limited to) professional interaction with research leaders, workplace and laboratory communication, motivation through contribution to important and revolutionary data and sense of considerable responsibility and personal accomplishment only achieved through work-intensive learning. Since 2009, he has supervised four PhD students, two having received their degrees in 2013 and 2014, respectively. Currently, he supervises two PhD students and three undergraduate students.

Dr. Kerr has taught two students enrolled in the Research Elective in Urban Health, a 4th year medical elective. As well, he was a lecturer for four courses offered through UBC. Dr. Kerr was supervisor or co-supervisor (non-committee based) for three undergraduate students, seven Masters students and four PhD students. He acted as supervisor or co-supervisor (committee based) for four Masters students, seven PhD students, four postdoctoral students and was on the supervisory committees for one Masters student and three PhD students.

Dr. Moore taught the following courses: SPPH 570/710 Public Health and Preventive Medicine Seminar; SPPH 523 Global Health and Human Security; SPPH 581K Practical Knowledge and Skills for Working in Global Health. He had nine 3rd and 4th year medical students, and one postgraduate within elective rotations in Public Health HIV. He was the primary supervisor of one MPH student; co-supervisor of one MSc student, both at the School of Population and Public Health; and a committee member of one PhD student.

Dr. Shannon taught three students in the 4th year undergraduate Research Elective in Sexual Health and HIV Research (Medicine). She was also a guest lecturer in four UBC courses in SPPH and gave two grand round presentations in 2013 (Medicine and BCCDC). She supervised (non-committee based) four undergraduate students in medicine and law. She was supervisor or co-supervisor (committee based) of five Masters students, seven PhD students and six postdoctoral fellows.

Dr. Lima taught 10 medical students through the 3rd/4th year medical elective, Clinical and Population Health Research. She also supervises two MSc students from the Department of Statistics, one
successfully graduated, and the other to graduate in the summer of 2015. Dr. Lima is on the supervisory committee of two PhD students and one MSc student.

Dr. Poon is a guest lecturer of MICB407/PATH437, instructor of BIOL448, and preceptor of 3 medical students of the UBC Internal Medicine Translational Bioinformatics elective.

Dr. Milloy has been engaged in a range of undergraduate and graduate teaching activities. He has successfully mentored a number of students through the undergraduate medical elective course in Urban Health Research, which involves a combination of clinical and research exposures for 4th year medical students, as well as the Addiction Medicine program. In 2014, he presented Grand Rounds on recent developments in HIV prevention and treatment among drug users in Vancouver. In addition, he was invited to join the supervisory committees for three graduate students at UBC and SFU.

**RESEARCH**

- STOP HIV/AIDS Initiative
- UNAIDS 90-90-90 Target (Treatment as Prevention)
- HIV drug efficacy
- Drug resistance
- Human and viral parameters influencing HIV disease progression
- ReCall-automated analysis of HIV drug resistance
- VANGUARD
- VLAS
- VIDUS
- ACCESS
- ARYS
- SEOSI
- CBR
- Thai Project
- Ethno-Epi
- AESHA
- SHAWNA
- Gulu Project
- Violence and HIV Team
- STVBC&ICSDP
- CHOICES
- Addiction Medicine Fellowship
- GWAS
- RCT participation
- VDUS
- Prescription opioid misuse among at-risk youth
- Community and research partnerships to strengthen labour market access for persons living with or at risk of acquiring HIV/AIDS who use illicit drugs
- Mixed-method evaluation of a supportive housing intervention for people living with HIV and at risk of homelessness
- Genome-wide association study of HIV-1 host genetics among injection drug users
- Enhancing discovery of HIV host genetics using drug abuse and other interactions
- British Columbia Centre for Addiction Clinical Trials
- HIV researchers mentoring the next generation of addiction clinician scientists
- Impact of alternative social assistance disbursement on drug-related harm: A randomized controlled trial
- STI/HIV prevention and young men
- ART Program Design and Effects on Clinical Outcomes and HIV Risk Behaviour: Secondary Analyses from the Home-Based AIDS Care Project
- Long Term Outcomes on ART in Uganda
- The Momentum Health Study
- Real-time phylogenetic monitoring system of HIV transmission outbreaks in British Columbia
- New machine learning technique to study virus phylogenies
- Accuracy of phylogenetic methods for reconstructing the genotypes of transmitted/founder HIV variants

**CLINICAL SERVICE**

Drs. Montaner and Wood continue to provide clinical leadership, service and teaching at St. Paul’s Hospital through the HIV Specialty Clinic and Addictions Medicine service.

Dr. Harrigan’s research laboratory not only develops, validates and publishes new clinical assays for HIV care, it also implements these across Canada. For example, our lab provides clinical testing services for all of BC and most of Canada for a variety of different HIV therapies: a) HIV protease/RT drug resistance; b) HIV integrase drug resistance; c) HIV entry inhibitor resistance testing; and d) HIV co-receptor testing. Each of these tests was developed in house. The laboratory is one of fewer than 10 accredited WHO specialized resistance testing labs worldwide. We also provide pharmacogenetic screening tests for side-effects to the drug abacavir, as well as methods for measuring antiviral drug levels.
Drs. Kerr and Wood’s leadership at UHRI offers all participants blood work to test for HIV and HCV every 6 months. Aside from generating data to inform the delivery of HIV treatment services, a central objective of the UHRI research team is to connect study participants with HIV care and other services when needed.

Dr. Moore continues to work approximately one half-day per week at the St. Paul’s Hospital Immunodeficiency Clinic. His work at BCCDC also supports the implementation of HIV-related health services at PHSA and in regional health authorities.

Dr. Shannon’s leadership at GSHI provides participants access to 6-monthly confidential HIV, HCV and STI testing as part of their involvement in the AESHA and SHAWNA cohorts, as well educational counselling, support and referral to support HIV continuum of care.

Dr. Poon developed bioinformatic pipeline for processing and analyzing next-generation sequence data from the Illumina MiSeq platform, which is being validated for clinical HIV resistance genotyping.

**FUTURE DIRECTIONS**

Dr. Montaner will continue to lead the development, implementation, monitoring and evaluation of TasP® in BC and in several jurisdictions around the world. We will also continue to lead the discussion globally around the adoption of the United Nations 90-90-90 Target as a UN Sustainable Development Goal, which will be decided at UNGASS in September 2015. In addition, we will continue to spearhead the discussion regarding the potential expansion of the TasP® strategy to viral hepatitis (HCV and HBV) in BC, as well as to other contagious (non-infectious) conditions, including addictions. It is anticipated that TasP® will offer an opportunity to develop tailored disease elimination strategies that could significantly contribute to health care sustainability.

Dr. Harrigan will work on expanding to HCV susceptibility testing, having developed a screening assay for the HCV protease inhibitor simpeprevir since February of 2014. We will expand the list of HCV tests as required.

Dr. Wood’s future directions include specialized training of physicians in addiction medicine; providing physicians the tools to prevent and treat addiction; provide opportunities for addiction medicine physicians to develop the skills required for a career in addiction research by developing and implementing evidence-based prevention and treatment modalities for substance use disorder.

Dr. Kerr will continue to lead the NIH-funded V-DUS study and ethno-epidemiology program through the UHRI. As well, Dr. Kerr will continue to lead various community-based research projects involving Aboriginal people who use illicit drugs and alcohol. Dr. Kerr will also continue to lead various training and education initiatives focused on fostering the development of new researchers focused on HIV/AIDS and illicit drug use.

Dr. Moore continues to co-lead the Momentum Study as it matures into a longitudinal cohort study and now as one site in a multi-site study of HIV and MSM in Canada. The information gathered from Momentum has already proven important in helping to shape the provincial response to HIV and AIDS. In Uganda, Dr. Moore continues to work with The AIDS Support Organisation to increase local capacity for designing, implementing and reporting on research studies which are directly relevant to improving TASO’s clinical services.

Dr. Shannon’s research program seeks to build upon the existing program of research by developing innovative research initiatives to improve prevention, treatment and care for key populations living with and affected by HIV/AIDS, while at the same time serving as a knowledge translation and educational platform to increase applied sexual health and HIV/AIDS research capacity in Canada.

Dr. Poon is developing a new computational method for estimating epidemiological parameters from virus phylogenies.

Dr. Nolan will develop an in-hospital addiction database titled “A prospective cohort of substance users in British Columbia: tracking long-term health outcomes & health care utilization in individuals seen at Providence Health Care (IHOP).”
SPECIAL HONOURS AND AWARDS

Montaner:
• Chair in AIDS Research
• Distinguished Achievement Award, Faculty of Medicine (2013)
• Quarter Century Club, UBC (2013)
• Argentina Senate of the Nation (2013)
• Canadian Medical Association Frederic Newton Gisborne Starr Award (2013)
• HRF Medal of Honour, Rx&D Health Research Foundation (2013)
• Professor Honoris Causa, University of Buenos Aires (2013)
• Exemplary Leadership and Commitment to End AIDS Award, International Association of HIV Providers of Care, IAPAC (2014)
• Museum of Vancouver Legacy Awards- City Shaper Award (2014)
• David Barry DART Achievement Award (2014)
• Vancouver Power 50 [#10] (2014)
• Honorary Fellow, Douglas College (2014)

Harrigan:
• CIHR/GSK Research Chair Award in HIV/AIDS, UBC, and Canadian Institutes for Health Research
• LifeSciences BC Innovation and Achievement Award (2013)
• PHC Research and Mission Award (2014)

Wood:
• CIHR Canada Research Chair Tier 1
• Martin M. Hoffman Award for Excellence in Research (2013)
• Department of Medicine Research Award (2013)
• Queen Elizabeth II Diamond Jubilee Medal (2013)
• Vancouver Power 50 (2013)
• UBC President’s Award for Public Education through Media (2014)
• UBC Faculty of Medicine Distinguished Achievement Award (2014)
• University of Victoria Distinguished Alumni Award (2014)
• Boston Medical Center’s Research in Addiction Medicine Scholars Program (2014)

Kerr:
• Queen Elizabeth II Diamond Jubilee Medal (2013)

Moore:
• CIHR New Investigator Award (2008-2013)
• MSFHR Scholar Award (2013-2018)

Shannon:
• Canada Research Chair (Tier II) in Global Sexual Health and HIV/AIDS
• MSFHR Career Investigator/Scholar Award (2011-2019)
• CIHR Peter Lougheed New Investigator Award (2011-2014)
• CIHR New Investigator Award (2011-2014)
• MSFHR Career Investigator/Scholar Award (2011-2019)
• BC AccolAIDS Award “Social/Political/Community Action”, Positive Living BC (2014)

Lima:
• MSFHR Career Award (2012-2020)
• CIHR New Investigator Award (2013-2018)

Poon:
• MSFHR Career Investigator Scholar Award/St. Paul’s Hospital Foundation-PHCRI (2012-2020)
• CIHR New Investigator Award (2013-2018)

Deering:
• CIHR New Investigator Award (2014-2019)
• MSFHR Scholar Award (2014-2019)
Program Director:
Dr. Donald Stark

Members:
Dr. Donald Stark, Dr. H.C. George Wong, Dr. Amin Kanani, Dr. Mandana Kaviani, Dr. Kingsley Lee, Dr. C.S. Peter Lee, Dr. Amanda Jagdis, Dr. Seung Kim, Dr. Robert Schellenberg

Associate members:
Dr. Joanne Yeung, Dr. James Bergman

DIVISIONAL OVERVIEW

Expansion of the divisional activities has occurred on a number of fronts. We are very pleased that our first fellowship trainee, Dr. Wadiwalla, has completed Royal College exams and is in active practice in Surrey with plans to increase her role at Surrey Memorial Hospital, especially with the recently established outpatient programs involving training of immune deficient and hereditary angioedema patients in self-administration of immunoglobulin and C1 inhibitor respectively. Two current fellows will complete their training in 2015 with two new trainees starting July, 2015. This program is jointly run with the Pediatric Division of Allergy and Immunology and Dr. Donald Stark, our program director, has worked tirelessly in arranging appropriate electives and teaching venues for our trainees. We also wish to acknowledge the superb administrative support by Shelley Berkow, whose assistance has been invaluable.

To provide excellence in outpatient clinical teaching, we have been fortunate to have recruited community allergists/immunologists who have devoted their time and expertise. In addition to those in the greater Vancouver area, the members in Victoria now offer rotations which have received excellent evaluations by our trainees.

These expanded activities should aid in recruitment to our subspecialty in future years as there is a need for additional training positions and greater awareness by students and residents to our subspecialty which has no barriers to practice opportunities upon completion and has a very high rate of satisfaction amongst practitioners. A concern recognized nationally is the difficulty recruiting trainees to academic positions.

The program we initiated in home self-management of Primary Immune Deficiency patients has been expanded to encompass the other health regions. Patients are trained by nurse-educators to administer antibody replacement subcutaneously, thus avoiding the necessity to come into hospital facilities for IVIG treatment. Over 200 patients have now transferred to this subcutaneous immunoglobulin therapy (SCIG) in BC. This involves outlying communities as well as Vancouver with supplies and SCIG product being available to them from their local hospital blood bank.

Unfortunately, a major deficiency in management of primary immune deficiency is the lack of a comprehensive program where these patients could have access to specialized services and be part of a national registry.

A new program initiated by Dr. Kanani is training patients with severe hereditary angioedema to self-administer C1 inhibitor protein intravenously on a
prophylactic basis. This condition is often poorly managed in emergency departments and efforts are being undertaken to enhance physician knowledge but also patient independence.

Together with the Antibiotic Stewardship Committee at St. Paul’s Hospital, we have initiated guidelines for surgical antibiotic use. Planned studies will further evaluate Penicillin allergy in hospitalized individuals with this label with the goal of identifying those who can safely have Penicillins and Cephalosporins and have this label removed from hospital, Pharmanet and GP records.

TEACHING

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

A significant increase in Internal Medicine residents seeking electives in our specialty has been encouraging. In addition, Dermatology residents have routinely done electives in our division. The evaluations of this elective rotation by residents and students have been very good.

Changes to the first year Medicine class program will have more involvement by Clinical Immunologists and should enhance exposure to our subspecialty. Dr. Schellenberg provides introductory lectures on the basic mechanisms of allergic inflammation and factors causing in the Pathology 521 course. Drs. Stark, Kanani and Schellenberg actively participate in case-based subspecialty teaching seminars for Med III / IV students. A number of members teach in the Clinical Skills block for Med I students and conduct bedside teaching sessions with Med II students.

Major initiatives have been undertaken in community medical education to physicians, other health care professionals and to the lay public. CME programs for physicians are organized by Dr. Amin Kanani.

All members have been actively involved in providing teaching seminars in various communities in British Columbia. Drs. Kanani and Schellenberg regularly speak at the highly popular St. Paul’s General Practitioner Update Course and have been involved with the St. Paul’s Internal Medicine Update Course.

RESEARCH AND CLINICAL PRACTICE GUIDELINES

The members at St. Paul’s hospital have a major interest in management of adult 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. Drs. Kanani, Stark, and Schellenberg are undertaking a study evaluating the quality of life and health outcome parameters of patients with primary immunodeficiency, comparing IVIG treatment to SCIG treatment. An earlier study evaluating quality of life parameters in patients receiving IVIG demonstrated significant correlation of IgG serum levels to indices of fatigue.

Drs. Stark and Schellenberg were actively involved in the development of specific guidelines for subcutaneous immunoglobulin use with the Provincial Blood Coordinating Office, whose web site now contains valuable information for nurses, patients and physicians. It has been adapted by other provinces for their use. Dr. Schellenberg was a member of a Canadian Blood Services committee formulating evidence-based guidelines for the use of IVIG and scIG in patients with Primary Immune Deficiency which have been published.

Dr. George Wong has developed specific expertise in evaluation of complementary and alternative medicine practices and has presented on potential adverse effects of these preparations at international meetings. He is a member of the BCMA committee on allied health and alternative therapies and has 2 BC Med. J. articles published in 2014 and presented at the European Academy of Allergy and Clinical Immunology Congress.

Dr. Schellenberg was involved in the formation of guidelines for the management of allergic rhinitis and is a member of a multidisciplinary group that has recently published practice guidelines for management of rhinosinusitis.

Drs. Kanani, Stark and Schellenberg were members of a committee that recently published updated guidelines for management of hereditary angioedema. Further interest in establishing specific provincial guidelines regarding the use of C1 inhibitor
concentrate in management of this disorder is ongoing with Dr. Kanani being a member of the Provincial Blood Coordinating Office C1 Inhibitor Working Group.

Dr. Kanani has ongoing research in assessment of the natural history and quality of life assessments of patients with hereditary angioedema before and after home infusion training. He is also involved in industry-sponsored clinical trials assessing omalizumab therapy optimization and quality of life in patients with chronic spontaneous urticaria. Another clinical trial is evaluating a novel oral prophylaxis therapy for hereditary angioedema.

Dr. Stark is involved with a national study sponsored by the AllerGen NCE evaluating “Anaphylaxis and Treatment Methods within the School System.”

Dr. Wong and Dr. Kim were members of the Provincial Privileging Standards Project Clinical Immunology and Allergy Expert Panel. Dr. Wong is a member of the Credential Committee at Vancouver Acute Hospital and a Council Member of the Vancouver Institute.

CLINICAL SERVICES

All members are actively involved in providing clinical consultative services in Allergy and Immunology to the community. Dr. Stark provides outreach clinics in Prince George and Sechelt. He has been active in initiating subcutaneous immunoglobulin treatment for patients in northern BC communities. Dr. Kanani serves needs in Surrey with a clinic one day each week. Dr. Wong has had a specific interest in complimentary medicine practices and the potential harmful effects of specific treatments.

PROVINCIAL, NATIONAL AND INTERNATIONAL INITIATIVES

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

Dr. Kanani is President of the BC Society of Allergy and Immunology. Dr. Stark is the Economics Chair from the section of Allergy and Clinical Immunology for the Society of Specialist Physicians and Surgeons of BC and is a member of the Doctors of BC Tariff Committee. Dr. Wong is a member of the Allied Health and Alternative Therapies Committee of the Doctors of BC. Dr. Schellenberg is the Chair of the Medical Advisory Board and member of the Board of Directors of the BC Lung Association.

Dr. Schellenberg is the past chair of the Examination Committee for Clinical Immunology subspecialty of the Royal College of Physicians and Surgeons of Canada and a Past-President of the Canadian Society of Allergy and Clinical Immunology.

Dr. Stark is the past Chair of the national Subspecialty Committee for Clinical Immunology and Allergy and remains a member of this committee.

Dr. Kanani is a member of the Board of Directors for the Canadian Hereditary Angioedema Network.

Dr. Schellenberg is a member of the Medical Advisory Committee of the Canadian Immune Deficiency Patient Organization and the Canadian Hereditary Angioedema Network.

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.

FUTURE DIRECTIONS

With the successful launch of a training program, developed by Dr. Stark and Dr. Edmond Chan with the support of all members of both adult and pediatric divisions, we continue to innovate to optimize training modalities. Initially sharing academic half-day activities with the U. of Manitoba pediatric and adult divisions via Skype, we have expanded this video-conferencing interaction to include the allergy programs at Dalhousie U. and Western U. using GoToMeeting. This has been ideal in capturing faculty expertise at the various sites, having invited speakers from different disciplines and having trainees present relevant topics for input by other trainees and faculty. This has also allowed valued input from community allergists / immunologists who attend.

A goal of the division is the development of a Comprehensive Care Program for patients with Primary Immune Deficiency in British Columbia. In conjunction with the Provincial Blood Coordinating
Office, an in-depth document has been developed for the home therapy with subcutaneous immunoglobulin. This is being used for training both nursing educators as well as patients and our program is already being highlighted across the country. We plan to continue to expand our home SCIG program so that all patients in BC with primary immune deficiency will have the option of home treatment.

We are working collaboratively with groups across the country to establish a registry of primary immune deficiency 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 striving to obtain funding to help enrol patients in a data base for optimal management and research initiatives.

Working with the Provincial Blood Coordinating Office, we are establishing protocols and oversight for the appropriate management of Hereditary Angioedema patients within BC which should be of benefit to patients and care-givers.

We continue striving to establish an Adverse Drug Reaction Clinic at St. Paul’s Hospital and are discussing the potential of a Food Allergy Clinic, both clinics being capable of safely performing challenge testing which is not done in conventional outpatient settings. Such resources for the community would be a major advance. By showing the benefits of evaluation of Penicillin allergy assessment together with the Antibiotic Stewardship Committee at St. Paul’s, with the anticipated future cost savings associated with proving individuals are not allergic, we hope to convince the Ministry of Health of the economic as well as health benefits of having such a program.
Dr. Andrew Krahn,  
Professor and Academic Division Head

**Division Heads/Operational Leads:**
Dr. Ken Gin, Head, Vancouver General Hospital  
Dr. Andy Ignaszewski, Head, St. Paul’s Hospital

**DIVISIONAL OVERVIEW/LEADERSHIP**

Since his appointment as the UBC Chief of Cardiology in 2012 Dr. Andrew Krahn has injected new energy into the Division of Cardiology. He has orchestrated significant changes—all part of his commitment to develop and increase the emphasis on the academic mission of the Division. This occurs in the context of several new recruits to the Division, targeting clinical and academic needs of the Division and an opportunity for ongoing strengthening of the goals of the Division within the Department of Medicine. Drs. Ken Gin and Andy Ignaszewski continue to serve as Division Heads and operational leads at the two main teaching hospital sites, Vancouver General and St. Paul’s Hospital respectively, with a strong collaborative relationship with Dr. Krahn as the UBC academic Division Head.

The flagship for the UBC Division of Cardiology in 2013-14 has without doubt been the formation and launch of the Cardiology Academic Practice Plan (CAPP). A special event celebrating the launch of the CAPP and thanking the donors and partners for their generosity and commitment to the advancement of cardiovascular education and research activities was held on October 15, 2014 at the William A. Webber Medical Student & Alumni Centre, hosted by Dr. Graydon Meneilly. This was the culmination of the hard work and many hundreds of hours of meetings and deliberations led by Dr. Krahn over the previous 18 months involving division members and key stakeholders— including the Heart and Stroke Foundation of BC and Yukon; Faculty and Department of Medicine academic leads; St. Paul’s Foundation office; VGH & UBC Hospital Foundation as well as industry stakeholders.

The overarching goal of the CAPP is to create a common system to strengthen the academic mission of the Division and the University by enabling the recruitment and retention of outstanding early career physicians, creating a system that encourages, recognizes and rewards clinical, research, teaching and leadership excellence and fosters the creation of partnerships with other academic groups to maximize and leverage the academic investments made by the Division. The Division has created an organizational structure that will govern and manage the practice plan and developed academic job descriptions, expectations and deliverables for each of the stipends to be awarded (from Clinical Investigator, Clinician Scientist, Clinician Educator to Education Scholar). These stipends will serve to protect and dedicate the time necessary to accelerate innovative research initiatives and seize opportunities to significantly advance the cardiovascular mandate in BC.

In addition, the Division has created Research and Education Committees with Directors, who will oversee the academic enterprise. Pilot funds to stimulate research start up began in 2014 after a planned competition (see below). All funds will be distributed based on a formal submission and competition process, emphasizing opportunity and accountability (see Research section below).
The UBC Division of Cardiology received significant support for the CAPP from both internal and external partners to generate the necessary funds to launch this exciting endeavor. Collectively, the CAPP secured $1.3 million on an annual basis for a three-year period to include support from the cardiologists ($700,000), Heart and Stroke Foundation ($200,000), Industry ($200,000), VGH & UBC Hospital Foundation ($150,000), St. Paul’s Hospital Foundation ($100,000), Department of Medicine ($50,000) and the Faculty of Medicine ($50,000). Funds have oversight from the Division’s Finance Committee, Chaired initially by Dr. Brett Heilbron and recently taken over by Dr. Robert Boone. Going forward all new recruits will be expected to participate in the practice plan (CAPP), as part of the overall academic mission of the Division.

Terms of reference for 2 levels of education scholarship and 3 levels of research scholarship, have been created, together with a ranking competition that includes external reviewers and UBC Faculty from outside of Cardiology (Drs. Rob Beanlands, Todd Anderson and Keith Walley), along with 6 Division members. The first competition held in November 2013 provided support to 1 educator (Dr. Krishnan Ramanathan) and 7 researchers (Drs. Marc Deyell, Jasmine Grewal, Jacqueline Saw, Tara Sedlak, Carolyn Taylor, Sean Virani and David Wood).

A research Director (Dr. G. B. John Mancini) and Education Director have been appointed (Dr. Victor Huckell). An exciting incremental development was the time protection support of 3 clinical recruits in July/August 2014, each of whom received $50,000-$100,000 in salary support from the CAPP to protect time and forge a research career (Drs. Margot Davis, Kevin Ong and Michael Tsang). Dr. John Cairns is carefully mentoring these and other early career academic members through a structured program.

Awards and Funding

Although key academic awards and research funding granted (including a number of operating grants held by our members) will be listed separately in the Department of Medicine’s Annual Report, there are some especially noteworthy achievements during 2013 and 2014 worth highlighting here. Several of these successes representing a shift towards more clinical faculty gaining protected research time and dovetailing nicely with the Division’s increased academic focus:

- Dr. Victor Huckell: Lifetime Teaching Award (2013), UBC Faculty of Medicine
- Dr. Victor Huckell: Master Teaching Award (2013), UBC Department of Medicine
- Dr. Victor Huckell: Queen’s Diamond Jubilee Award (2013)
- Dr. Victor Huckell: Clinical Faculty Award for Career Excellence in Clinical Teaching (2013), UBC Faculty of Medicine
- Dr. Charles Kerr - Annual Achievement Award (2013), Canadian Cardiovascular Society
- Dr. Jason Andrade: Michael Smith Foundation Scholar Award (2014)
- Dr. Vicki Bernstein – Woman of Distinction in Health and Wellness (YWCA), 2014
- Dr. John Cairns - Order of BC (2014)
- Dr. Margot Davis - Mentored Clinician Scientist Career Development Award (2014), VCHRI
- Dr. Marc Deyell: Michael Smith Foundation Scholar Award (2014)
- Dr. Ian Macdonald – UBC Clinical Faculty Award for Career Excellence in Clinical Teaching (2014)
- Dr. John Webb – Outstanding Achievement Award (2014), Canadian Association of
Interventional Cardiology.
• Dr. John Webb – UBC Killam Prize in Science (2014)
Dr. Graham Wong – UBC Killam Prize in Teaching (2014)

Membership and Appointments

During 2013 and 2014 the Division increased in membership:

In 2013 the division was pleased to appoint one full Division Member:
• Dr. Nathan Brunner (UBCH/VGH), Clinical Assistant Professor.

As well as five Associate members:
• Dr. Nader Elmayergi (Abbotsford), Clinical Assistant Professor
• Dr. Haidar Hadi (Prince George), Clinical Assistant Professor
• Dr. Hiralal Rajesh (Surrey Memorial Hospital), Clinical Assistant Professor
• Dr. Christopher Lane (Royal Columbian Hospital), Clinical Assistant Professor
• Dr. Teddi Orenstein-Lyall (Richmond Cardiology), Clinical Assistant Professor

At the end of 2013 the UBC Division comprised 48 Full Members, 9 Emeritus, 1 Adjunct and 24 Associate Members.

In 2014 the Division of Cardiology was pleased to welcome the joint appointment of Dr. Jonathon Leipsic to the rank of Associate Professor with tenure, in the Departments of Radiology and Medicine and the Division of Cardiology, effective October 1, 2014. He had been an Associate Member of the UBC Division of Cardiology up until this time. The Division was pleased to provide a full membership as a Faculty first for an imaging and clinical academic appointee, and support his Tier 2 Canada Research Chair.

During 2014 Cardiology welcomed four new full members:
• Dr. Rudy Chow (SPH/MSJ), Clinical Assistant Professor
• Dr. Margot Davis (VGH/SPH), Clinical Assistant Professor
• Dr. Kevin Ong (SPH/VGH), Clinical Assistant Professor
• Dr. Michael Tsang (VGH/SPH), Clinical Assistant Professor

As well as three new Associate Members:
• Dr. Stephanie Au (Surrey Memorial Hospital), Clinical Instructor
• Dr. Hardeep Bhugra (Abbotsford), Clinical Instructor
• Dr. Lynn Straatman (BC Children’s Hospital), Clinical Assistant Professor

2014 unfortunately saw the departure of two of the St. Paul’s Hospital based members, Dr. Jim Nasmith who joined the division at St. Paul’s in 2007 and retired after 8 years, and Dr. Ian Macdonald, who retired after 35 years, having joined the St. Paul’s Division in 1980. Dr. MacDonald maintains his Emeritus status with UBC Division of Cardiology. The SPH division will be hiring two cardiologists next year to make up for these losses.

At the end of 2014 the UBC Division had grown to 53 Full Members, 9 Emeritus, 1 Adjunct and 27 Associate Members.

The website for the UBC Division of Cardiology was upgraded and moved to a new platform in September 2013 – and can now be found at www.ubc.cardio.com; further development work continues.

TEACHING

In 2013/14 the UBC Division of Cardiology created a more formal leadership structure for the Education portfolio, resulting in the appointment of a Director of Education Director (Dr. Victor Huckell) whose primary responsibility is to oversee the education activities of the Division. This position involves supervision of all educational activities, including undergraduate, postgraduate, Cardiology Residency Training Committee and continual medical education. This new organizational structure has created specific roles including Undergraduate Medical Education Director (Dr. Jonathan Tang) and Classroom based Director (Dr. David Wood); Director of (internal) Continuing Professional Development and Rounds Director (Dr. Sean Virani); Co-Directors for external CPD events (Drs. Matthew Bennett and Krishnan Ramanathan); the role of the Postgraduate Education Director
continues under the leadership of Dr. Parvathy Nair who has been running the program since 2009 and Dr. Rob Moss as Associate Postgraduate Education Director (since 2010). The new structure also provides two further roles including a dedicated Royal College Fellowship Liaison (Dr. Graham Wong) and a General Medicine Liaison (Dr. Mustafa Toma). Monthly meetings take place with feedback to the Division at large.

One of the key highlights for the Division was the November 2013 Accreditation review when the UBC postgraduate training program in cardiology received full approval from the Royal College of Physicians and Surgeons of Canada, after the review and site visit on November 18. The accreditor met with the division heads and Department of Medicine head, some members of the teaching faculty, the Postgraduate Education in Cardiology Committee (PECC), and the residents; the program received a glowing recommendation. The Program continues to flourish under the leadership of Dr. Nair and in 2013 and 2014 there were 16 residents in the program. Resident Research Days were held in June 2013 and May 2014 at the Sheraton Vancouver Wall Centre Hotel, an annual and very well attended event where the residents present their research and are judged by a panel of three judges (two internal and one external).

RESEARCH

As mentioned in the introductory paragraphs, there has been a new energy in the research focus of the Division over the past two years for a variety of reasons, not least of which has been the creation of a UBC Cardiology Research office, directed by Dr. John Mancini effective July 2014. A Research Committee has been struck and quarterly meetings commenced in October 2014. The purpose of the Research Committee is to promote and advance research, scholarship and innovation in the Division of Cardiology, and to enhance the Division’s status as a preeminent research Division. The Committee comprises a pool of highly qualified individuals with both experience and an interest in supporting research.

The creation of the Research office and a budget for research provided through the CAPP, has enabled the research office to create a CAPP Pilot Project competition, with two competitions a year – May for July funding and November for January funding. The goal of the competition is to support good ideas that have a chance to flourish into peer-reviewed grants and publications. Five applications for funding were received in November 2014. Through a rigorous process and careful review by primary and secondary reviewers, including reviews performed by external reviewers from across the Province and across Canada and external review, three of the five applications were successful in securing funding (Drs. Margot Davis, Jasmine Grewal and Mustafa Toma).

Towards the end of 2014 the Research office began work on creating a UBC CAPP Statistical Support Package which will provide a list of available resources, as well as a process for applying for financial support. Another initiative was the development of a quarterly UBC Cardiology Research Newsletter first issued in November 2014 which reported on the preceding 3 months research highlights. The focus is on publications, grants awarded, invited lectures and awards and distinctions. Feedback has been encouraging thus far. UBC Cardiology Research News is posted on our website: http://www.ubccardio.com/research/research-news

CLINICAL SERVICES

The Division has its primary clinical and academic activities at Vancouver General Hospital (VGH) and St. Paul’s Hospital (SPH), with a goal to create a broader Provincial perspective in partnership with leading sites in all health regions. The VGH and SPH sites have continued to strengthen relationships with regional models of care gaining traction, particularly in the area of Cardiac Rehabilitation, Catheter based intervention and Electrophysiology. Previous plans to expand expert services in transcatheter valve therapeutics and electrophysiology to the VGH site have been resounding successes, under the direction of Drs. David Wood and Matthew Bennett.

Sports Cardiology BC is based at UBC Hospital under the directorship of Dr. Saul Isserow. Since inception in 2012, Sports Cardiology BC (SCBC) has made continued progress in its foundational four pillars of research, education, advocacy and clinical assessment. SCBC is conducting large-scale screening projects in athletes. The educational mission is to impart
evidence-based knowledge on risk factors, signs and symptoms and management of cardiovascular disease in this population. A two-part special sports cardiology themed issue will soon be published in the BCMJ. Advocacy efforts within provincial, national and sporting organizations are ongoing. SCBC is on the web at www.sportscardiologybc.org; Facebook page is at ‘Sports Cardiology BC’ or on Twitter at ‘@sportscardiobc’. Regional specialty clinics including Heart Failure and Atrial Fibrillation have steadily grown. They have welcomed the Inherited Arrhythmia Clinic at St. Paul’s Hospital, the larger of the 2 sites in the new BC Inherited Arrhythmia Program that partners with Pediatrics and Medical Genetics. A focus on Women’s health and cardiovascular disease has emerged with the recruitment of Dr. Tara Sedlak, who has opened a Women’s Heart disease clinic at VGH. She is part of a team with a focus on this area including Women’s Heart Disease Chair Dr. Karin Humphries, pregnancy and heart disease expert Dr. Marla Kiess and women’s coronary disease lead Dr. Jackie Saw. St. Paul’s Cardiology has championed RACE (Rapid Access to Cardiology Expertise). This is a telephone support service, which provides rapid access to an on call cardiologist to provide advice. The service has met incredible success and now has been rolled out across multiple subspecialties. It has received widespread critical acclaim and has received multiple national awards. In parallel with the emergence of these new ambulatory initiatives, the Heart Centre at St. Paul’s is actively engaged in the complex planning process for the new ambulatory tower under its new director Andy Ignaszewski. Under the direction of Dr. John Webb and lead clinically by Dr. Robert Boone, the Vancouver Centre for Heart Valve Innovation has established a new program for catheter based therapy for mitral regurgitation (MitraClip), and the group anticipates further first in human trials of novel devices within the next 12 months. The Providence Health cardiac site at Mount St. Joseph’s Hospital continues to grow and receive positive reviews with the recruitment of Dr. Jonathan Tang, with exceptional teaching reviews and a junior teaching award. With on-site inpatient and outpatient specialist cardiology consultation services, echocardiography, and an expanded ECG laboratory, there has been demonstrated improvement in patient outcomes and decreased lengths of stay. Dr. Tang is cultivating an outstanding community education experience that has been very well received by several postgraduate residency programs. It is anticipated that with future growth the Division can continue to provide and diversify cardiac care to the East Vancouver and Mount St. Joseph’s community. Inter site collaboration continues to grow with the successful launch of a regional STEMI protocol by Drs. Graham Wong and Krish Ramanathan.

2013 saw BC’s 400th heart transplant and in 2014 the transplant team at St. Paul’s Hospital performed their 300th heart transplant, and their 125th VAD (ventricular assist device) implantation. These impressive statistics make St. Paul’s one of the largest acute heart failure/open heart transplant centres in Canada. Additionally, 2014 saw the 1000th transcatheter aortic valve implantation performed by the St. Paul’s/Vancouver team, led by Drs. John Webb and David Wood. This innovative procedure was developed by Dr. Webb over a decade ago and now makes the SPH/Vancouver program the largest centre in Canada and one of the largest worldwide.

VGH started its transcatheter valve program as part of an Integrated UBC program. David Wood has championed the 3M approach (Multidisciplinary Multi modality Minimalist approach), which allows next day discharge. He now leads a global clinical trial to evaluate the feasibility of this procedure. The interventional group also continues research on the accuracy of coronary flow measurements in acute coronary patients and has succeeded in securing both a partnership with McMaster University and large scale peer reviewed and industry funding to conduct a multi-centre study in this realm. Dr. Jackie Saw has done important work in demonstrating that up to 25% of myocardial infarctions in women under age 50 years are due to spontaneous coronary dissection. She succeeded in securing CIHR funding to implement a Canadian registry. VGH has cultivated a heart rhythm service (electrophysiology), and Dr. Jason Andrade performed the first AF cryoablation in western Canada, and has successfully obtained a Heart and Stroke Foundation operating grant. VGH has established linkages with Children’s hospital as well as the Cancer Control Agency of BC in launching a Cardiology Oncology program, with peer reviewed clinical trial funding obtained by Dr. Sean Virani. The VGH Division is the first specialty group to partner with the Divisions of Family Practice to develop a shared care model to
improve patient care. The UBC Division of Cardiology continues to have strong and fruitful collaborations with radiology, and this has strengthened the clinical, residency training, and research aspects of the Cardiology program. The UBC Division of Cardiology has committed substantial funds to assist cardiology residents and fellows in achieving academic careers.

**FUTURE DIRECTIONS**

The vision of the UBC Division of Cardiology is to become a catalyst for change; a national leader in advancing best practices in cardiac sciences – and achieving this vision requires among other things, a commitment to building research capacity in the field as well as a dedicated team. In 2015 the Division will focus on creating a more formal strategic plan to work towards this goal. The process is just beginning at the time of this report, targeting completing by mid 2016.
CRITICAL CARE MEDICINE

Dr. Najib T. Ayas,
Associate Professor and Academic Division Head

ADMINISTRATIVE OVERVIEW

The UBC Division of Critical Care Medicine is multi-disciplinary in nature. Our members are qualified critical care specialists with Medicine, Surgery, and Anaesthesia and Emergency Medicine backgrounds. They participate in patient care at St. Paul’s Hospital, Mount Saint Joseph’s Hospital, Royal Columbian Hospital, Richmond General Hospital, Kelowna General Hospital, Vancouver General Hospital, Victoria General Hospital, Lions Gate Hospital, and Surrey Memorial Hospital.

The Critical Care Medicine Members continue to make contributions in education, knowledge, research, and clinical care. Our goal is to improve our clinical care, increase research output, and improve our educational efforts (including undergraduate, postgraduate, and CME). Clinical, research, educational, and administrative collaborations among the hospital sites have increased over the past few years and are expected to continue. We will continue to examine and adopt innovative clinical approaches and technologies to improve the care of critically ill patients (e.g., echocardiography, ultrasound, computer support/monitoring, checklists, novel methods of cardiac/pulmonary support). We will explore ways to obtain and support excellent clinical and basic science researchers to expand our research capacity and collaborations.

Division members gave numerous presentations as invited speakers and were involved with many local, national and international conferences and meetings.

EDUCATION

The University of British Columbia Adult Critical Care Medicine Training Program continued under the direction of Dr. Gordon Finlayson who was appointed Director in 2012.

The two-year Critical Care Medicine subspecialty-training program accepts up to 4 new trainees per year and is fully accredited by the Royal College of Physicians and Surgeons of Canada. It is structured to provide trainees with both an outstanding clinical and research environment in which to learn.

During their Fellowship, trainees primarily rotate through three tertiary care hospitals (St. Paul’s Hospital, Vancouver General Hospital, and Royal Columbian Hospital), and are exposed to a broad range of patients with critical illnesses. This includes exposure to: patients with HIV, patients who are post-organ transplantation, patients with multiple traumas (including head injury), patients requiring extracorporeal membrane oxygenation (ECMO), and post-cardiac surgery patients.

The ICU residency training program includes residents from Medicine, Anaesthesia, Surgery, Emergency Medicine, Family Practice, and Neurology. It is a comprehensive program with weekly simulator sessions and video-on-demand lectures.

RESEARCH

The Research Program in Critical Care Medicine is comprehensive, spanning from genetic and molecular biology studies, to education, clinical trials, and quality improvement. The basic science research
program is based primarily in the UBC James Hogg
iCAPTURE Centre for Cardiovascular and Pulmonary
Research at St. Paul’s Hospital. The critical care
medicine clinical research program is focused primarily
in the intensive care units of St. Paul’s Hospital,
Royal Columbian Hospital, and Vancouver General
Hospital. Active research is ongoing in the fields of
sepsis genetics, biomarkers of infection, inflammatory
markers and cytokines, ARDS, alternative ventilation
technologies, immune signaling and sepsis induced
cardiac dysfunction, and diaphragm weakness/pacing.
The areas of ongoing active clinical and
education research include assessment of simulation in
teaching, epidemiology and outcomes in traumatic
illness (including TBI), patient safety, and quality
improvement.

CLINICAL ACTIVITIES

The ICUs at St. Paul’s, Vancouver General, and
Royal Columbian Hospitals continue to experience
an increase in occupancy and workload. Division
members from St. Paul’s, Vancouver General and
Richmond Hospitals participate, under the direction
of Dr. Dean Chittock, as members of the VCH Regional
Critical Care Council and continue to develop and
implement strategies to improve the delivery of
critical care services within the region. The goal of
the Regional Critical Care Council is to improve access,
patient flow and sustainability through appropriate
design and efficiencies and to implement best
practices to improve health outcomes.

Dr. George Isac continued as Medical Director of the
ICU at Vancouver General Hospital and Dr. Sirounis
continues to oversee the clinical operations at
Providence Health Care (both at St. Paul’s Hospital
and Mt. St. Joseph’s Hospital). Dr. Steve Reynolds
was appointed as the Program Medical Director for
the Program of Critical Care in Fraser Health and as
Regional Department Head for the Department of
Critical Care (taking over from Sean Keenan). Dr.
Robert Sharpe is the Local Department Head of the
ICU at Royal Columbian Hospital, and Dr. Robert
McDermid was recently appointed as the Head of the
ICU at Surrey Memorial Hospital. Dr. Greg Martinka
continued as the Head of the ICU at Richmond
Hospital, and Dr. Ryan Foster continued as the Medical
Director of Critical Care for Kelowna General Hospital
and the Interior Health Authority.
ADMINISTRATIVE OVERVIEW

The Division of Endocrinology has expanded to include two newly recruited endocrinologists, one at St. Paul’s Hospital (Dr. Jessica MacKenzie-Feder, with a focus on pituitary diseases) and another at Vancouver General Hospital (Dr. Mohammed Almehthel, with a focus on diabetes). Dr. Tricia Tang was appointed as Research Director, providing mentorship to trainees during their research rotation and has organized an annual Research Fest for the Division and invited guests which is held in the Fall of each year. Division members and Endocrinology Fellows have been active in research throughout 2013, presenting at numerous national and international endocrine and diabetes meetings. The research nurse hired for the neuropituitary clinic is in her third year, providing educational support for patients, and has continued to compile a pituitary registry for patients with pituitary disorders in B.C. The Division is active in recruiting for a (non-clinical) faculty position, focusing on women’s health.

EDUCATION

The Program director and Postgraduate committee worked hard to achieve successful accreditation for the Fellowship Program in 2013. The Division actively participates in undergraduate teaching, including the 2nd year undergrad curriculum (FMED), 3rd and 4th year undergraduate electives and formal teaching sessions to senior students throughout the year. The Division’s academic half day has been improved to include regular resident, fellow, and staff presentations. The program director has worked with the residents to improve the content of presentations and incorporate outside speakers. The Division Head continues to present weekly Professor Rounds for staff, residents and medical students, covering the latest endocrinology topics.
Research activity in the Division of Endocrinology spans a wide range of areas in basic as well as clinical research. Most division members are involved in research activity at some level, from members whose job description is primarily as researchers (Francis, Prior, Tang), to others involved in some way in investigator- or industry-initiated basic and clinical research. The areas of research expertise in the division are broad and include: 1) lipid and lipoprotein metabolism at the basic and clinical level; 2) diabetes mainly at the clinical level in multiple areas including type 1 and type 2 diabetics, specific ethnic populations, drug therapy, cardiovascular risk reduction, and islet transplantation, complementing the broad basic science expertise in diabetes among other UBC researchers; 3) hormonal control of ovulation and postmenopausal symptom treatment plus reduction of fracture risk; 4) osteoporosis assessment, treatment and prevention, 5) telehealth and diabetes management. Several division members are also co-authors on national assessment and treatment guidelines for diabetes, lipid disorders and cardiovascular risk, obesity, and osteoporosis.

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 Centres: Vancouver General, St Paul’s, Hospital BC Women’s
- Prevention Clinic (formerly “Lipid Clinic”): St Paul’s Hospital
- Metabolic Bone Disease (Osteoporosis): B.C. Women’s Hospital
- Adult Metabolic Diseases Program: Vancouver General Hospital
- Thyroid Clinic: St. Paul’s Hospital
- Pituitary Clinic: St. Paul’s and Vancouver General Hospital
- Gestational Diabetes Clinic: B.C. Women’s Hospital
FACULTY MEMBERS

- Dr. Hugh Freeman, Professor, Vancouver General Hospital (VGH)
- Dr. Urs Steinbrecher, Professor, VGH
- Dr. Eric Yoshida, Professor and Head, VGH and the University of British Columbia
- Dr. Lawrence Halparin, Clinical Professor & Head, St. Paul’s Hospital (SPH)
- Dr. Michael Byrne, Clinical Professor, VGH
- Dr. Robert Enns, Clinical Professor & Head, SPH
- Dr. James Gray, Clinical Professor, VGH
- Dr. Alan Weiss, Clinical Professor, VGH
- Dr. Hugh Chaun, Clinical Professor Emeritus, SPH
- Dr. Stan Stordy, Clinical Professor Emeritus, SPH
- Dr. Baljinder Salh, Associate Professor, VGH
- Dr. Isabella Tai, Associate Professor, VGH
- Dr. W.C. Peter Kwan, Clinical Associate Professor, VGH
- Dr. David Pearson, Clinical Associate Professor, Victoria
- Dr. Nazira Chatur, Clinical Associate Professor, VGH
- Dr. Martin Fishman, Clinical Associate Professor, Richmond General Hospital
- Dr. Jin Kee Ho, Clinical Assistant Professor, Lion’s Gate Hospital
- Dr. Eric Lam, Clinical Associate Professor, SPH
- Dr. Alnoor Ramji, Clinical Associate Professor, SPH
- Dr. Jennifer Telford, Clinical Associate Professor, SPH
- Dr. Paul Winwood, Clinical Associate Professor & Head of Medicine, University Hospital of the North, Prince George
- Dr. Frank H. Anderson, Associate Professor Emeritus, VGH
- Dr. Walter McDonald, Associate Professor Emeritus, BC Cancer Agency
- Dr. Jack Amar, Clinical Assistant Professor, SPH
- Dr. Shane Agenew, Clinical Assistant Professor, Kelowna General Hospital (KGH)
- Dr. Kenneth Atkinson, Clinical Assistant Professor, Royal Columbian Hospital (RCH)
- Dr. Adrian Bak, Clinical Assistant Professor, KGH
- Dr. Brian Bressler, Clinical Assistant Professor, SPH
- Dr. Justin Cheung, Clinical Assistant Professor & Head, RCH
- Dr. Fergal Donnellan, Clinical Assistant Professor, VGH
- Dr. Siegfried Erb, Clinical Assistant Professor, VGH
- Dr. Pina Micheletti, Clinical Assistant Professor, KGH
- Dr. Hin Hin Ko, Clinical Assistant Professor, SPH
- Dr. Vladimir Marquez Azalgara, Clinical Assistant Professor, VGH
- Dr. Robert Penner, Clinical Assistant Professor, KGH
- Dr. K. Craig Render, Clinical Assistant Professor, KGH
- Dr. Greg Rosenfeld, Clinical Assistant Professor, SPH
- Dr. R. Andrew Singh, Clinical Assistant Professor, Victoria
- Dr. J. Scott Whittaker, Clinical Assistant Professor, SPH
- Dr. David Yik, Clinical Assistant Professor, RCH
- Dr. Henry Chung, Clinical Instructor, RCH
• Dr. Cassie Lin, Clinical Instructor, RCH
• Dr. Janakie Singham, Clinical Instructor, Surrey Memorial Hospital (SMH)
• Dr. Albert Wong, Clinical Instructor, SMH
• Dr. Victor Wong, Clinical Instructor, RCH
• Dr. Iman Zandieh, Clinical Instructor, Victoria
• Dr. Zamil Karim, Clinical Instructor, SMH
• Dr. Sharlene Gill, Associate Member (Assistant Professor), BC Cancer Agency
• Dr. Rafael Perini, Associate Member (Clinical Assistant Professor), KGH
• Dr. Alan Buckley, Associate Member (Clinical Associate Professor), Victoria
• Dr. Stephen Holland, Associate Member (Clinical Associate Professor), Victoria
• Dr. Kathy Kozial, Associate Member (Clinical Associate Professor), Vancouver Island
• Dr. Kwok Yik, Associate Member (Clinical Associate Professor), RCH
• Dr. Tarilyn Picton, Associate Member (Clinical Instructor), Royal Inland Hospital, Kamloops

DIVISIONAL OVERVIEW

The UBC Division of Gastroenterology consists of the faculty of the two main teaching hospitals, Vancouver Acute (Vancouver General Hospital and UBC Hospital), and St. Paul’s Hospital (Providence Healthcare). The Division also has faculty members at the distributed sites including Richmond General Hospital, Royal Columbian Hospital and Lion’s Gate Hospital in the Lower Mainland, the Victoria and Vancouver Island Hospitals, Royal Inland Hospital (Kamloops), Kelowna General Hospital and the University Hospital of the North in Prince George. The faculty consists of both GFT and Clinical Faculty Association members. There are also associate members who are located in the distributed sites as well as associate members who share areas of academic interest in common with the Division of Gastroenterology and are members of other Divisions. The Division has four emeritus faculty members.

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 Patient Transfer Network 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 sites in the lower mainland and at the Victoria Hospital Corporation institutions. The specialized modalities of endoscopic ultrasound and capsule endoscopy are available at St. Paul’s Hospital and Vancouver General Hospital. Endoscopic ultrasound is also 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 activity with British Columbia Transplant 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 services related to viral hepatitis, liver disease and hepatocellular cancer. 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 luminal gastroenterology, with a special interest in inflammatory bowel disease, and viral hepatitis. In terms of long-term nutritional support and care, the province’s Home Enteral and Parenteral Program is based at St. Paul’s Hospital under the leadership of Dr. J. Scott Whittaker who is the Medical Director of the Program.

TEACHING

Undergraduate

The Division of Gastroenterology is an active participant in the GI Block of the 2nd year undergraduate curriculum (FMED 424). Division members, including members in Victoria, 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. Jin Kee Ho and Iman Zandiah are the Block Co-Chairs and Drs. Peter Kwan, Bill Salh, Fergal Donnellan are Week/Co-Week Chairs for FMED 424. Dr. Paul
Winwood co-ordinates UBC’s Northern Program’s involvement in FMED 424.

The division members at both the St. Paul’s Hospital and Vancouver General Hospital sites have been actively involved in the 2nd year bedside examining skills course as well as 3rd and 4th year undergraduate selectives. Ambulatory clinical instruction out-patient, office setting, clinics are offered to the undergraduate class yearly during their gastroenterology selectives. Dr. Nazira Chatur is currently the Undergraduate Program Director for Gastroenterology for these clinical years.

**Postgraduate**

The Division of Gastroenterology has a strong Gastroenterology fellowship training program. The training program has many applicants both internally and externally each year and competition for GI fellowship positions has become increasingly fierce. Dr. Nazira Chatur is the Program Director and Dr. Peter Kwan is the Associate Program Director. The program is also supervised by a Fellowship Training Committee that includes representation from both teaching hospitals, the community group and a trainee representative. The training committee members, aside from Drs. Chatur and Kwan, include, Drs. Jin Kee Ho, Alnoor Ramji, Eric Lam, Bill Salh, Marty Fishman, Justin Cheung, Fergal Donnellan and Eric Yoshida. The GI fellowship training program has full accreditation from the Royal College.

The Division of Gastroenterology offers specialized training programs beyond the core Royal College Gastroenterology Fellowship Program. For many years we have had a hepatology training program based at the Vancouver General Hospital in association with the liver transplant program and the multidisciplinary hepatocellular carcinoma group. 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. The therapeutic endoscopy training program involves diagnostic and therapeutic ERCP and endoscopic ultrasound. Dr. Brian Bressler has created a UBC Fellowship in Inflammatory Bowel Disease based at St. Paul’s Hospital.

**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**

The UBC Division of Gastroenterology has organized several CME conferences and both the Vancouver General Hospital and St. Paul’s Hospital Divisions organize a weekly Gastroenterology/General Surgery/Radiology/Pathology multi-disciplinary rounds that are accredited for the Royal College of Physicians and Surgeon Maintenance of Competence Program. The Division has organized several Journal Clubs: Dr. Alnoor Ramji organizes a Hepatology journal club and both Dr. Bressler and Dr. Salh organize inflammatory bowel disease journal clubs. These journal clubs are with the sponsorship of industry partners. The Division also has a semi-regular UBC Journal Club that is led by the GI Fellows. Drs. Jim Gray and Alan Weiss organize a UBC spring conference in Whistler, that has replaced the previous Annual Digestive Diseases Week Review, for sub-specialists including gastroenterologists and general surgeons from throughout BC. The St. Paul’s Hospital Division organizes the annual fall GI Forum that features live endoscopy and speakers from across Canada and the United States. The Kelowna Hospital group and the Victoria Hospital group organize popular CME conferences to serve their medical communities.

Many of our division members have participated in national and international CME events including the telerounds of the Canadian Association of Gastroenterology, Canadian Digestive Diseases Week (the annual meetings of both the Canadian Association of Gastroenterology and the Canadian Association for the Study of Liver) and conferences organized by out of province universities. Numerous CME lectures were provided by the Division members for local organizations including the BC Centre for Disease Control, Canadian Society of Intestinal Research, Gut Club, as well as local hospital rounds and pharma sponsored events.
Clinical Academic Special Programs

The UBC Division of Gastroenterology members are involved in several specific and specialized clinical academic programs. Dr. Alan Weiss is a member of the BC Cancer Agency Hepatoma Program. Both Dr. Weiss, Dr. Siegfried Erb and Dr. Eric Yoshida are involved in multi-disciplinary hepatoma rounds that include 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 hepatocellular carcinoma cases referred from communities throughout the province. It is also involved in clinical research in the area of liver cancer.

Drs. Erb, Steinbrecher, Yoshida (Associate Director) and, in 2014, Dr. Marquez (replacing Dr. Steinbrecher) are members of the Liver Transplant Program of the Vancouver General Hospital. This provincial program provides clinical care to post-liver transplant recipients, assessment of end-stage liver disease patients referred to the program, 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, Marquez, Steinbrecher, Kwan, Weiss, and Yoshida (Head of the BC Hepatitis Program). The BC Hepatitis Program staff includes Ms. Jo-Ann Ford (Associate Director) and research staff. The program is involved in clinical care and patient teaching in the area of viral hepatitis, clinical research with industry sponsored clinical trials and non-industry sponsored clinical studies. There are close collaborative research partnerships with BCCDC and the St. Paul’s Hospital Virology Laboratory. 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. At the national level, the program’s members have occupied leadership roles within the Canadian Association for the Study of Liver, the Canadian Association of Hepatology Nurses and the national Canadian Liver Foundation. In terms of advocacy, the BC Hepatitis Program has been involved with the BC-Yukon Chapter of the Canadian Liver Foundation and are members of the Hepatitis B Advisory Committee of SUCCESS which serves the interests of BC’s Asian Community.

The St. Paul’s Hospital Gastroenterology group has created the Gastrointestinal Research Institute that is a private organization that is involved in inflammatory bowel disease and hepatology. Dr. Brian Bressler and Dr. Greg Rosenfeld have established a specialized clinical care/research program in Inflammatory Bowel Disease as well, Drs. Alnoor Ramji and Hin Hin Ko have established clinical care/research programs in viral hepatitis. The GI Research Institute is involved in industry sponsored clinical trials and non-industry sponsored clinical research.

Therapeutic endoscopy programs are established at the Royal Columbian Hospital (Drs. Ken Atkinson, Kwok Yik, Justin Cheung), St. Paul’s Hospital (Drs. Jack Amar, Robert Enns, Eric Lam, Jennifer Telford) and the Vancouver General Hospital (Drs. Michael Byrne, Fergal Donnellan, Urs Steinbrecher, Alan Weiss). ERCP, endoscopic ultrasound and capsule endoscopy are offered by all three programs.

The BC Cancer Agency has created a provincial colon cancer screening program, headed by Dr. Jennifer Telford. The program allows primary care physicians to refer patients with a positive fecal immunohistochemical test, for expedited colonoscopy. The program employs nurse coordinators and accesses colonoscopy clinics at hospitals throughout the province. A comprehensive clinical database is being created as part of the program and it is anticipated that many epidemiological studies will be generated from this enterprise.

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 strong within the Division of Gastroenterology and
is expanding. The specific areas of clinical research include: inflammatory bowel disease, therapeutic endoscopy, liver disease, viral hepatitis, hepatocellular cancer, liver transplantation as well as solid organ transplantation and donation. Dr. Rob Enns is the Director of the Gastrointestinal Research Institute 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. Eric Lam is also actively engaged in clinical research in the field of endoscopic ultrasound. Dr. Brian Bressler has established a clinical research program in inflammatory bowel disease. The Division of Gastroenterology at Vancouver General Hospital has also created a separate Luminal Gastroenterology Clinical Trials Unit under the leadership of Drs. Michael Byrne, James Gray and Bill Salh with Ms. Cindy Cheong-Lee as the Research Manager of the unit. 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

Notable Service to the University and the Community

Many Division members serve on UBC, Doctors of BC, and other provincial committees and many Division members have served as reviewers of numerous Canadian and international peer-review journals as well as grant funding agencies. Dr. Robert Enns is the Editor of Endoscopedia, an official on-line publication of the American Society of Gastrointestinal Endoscopy. Dr. Eric Yoshida is the Deputy Editor of the Canadian Journal of Gastroenterology and Hepatology (official journal of the Canadian Association of Gastroenterology and the Canadian Association for the Study of Liver) and in late 2014, was appointed the Co-Editor-in-Chief of the journal for 2015. He is also an Associate Editor of the Annals of Hepatology (official journal of the Mexican Association for the Study of Liver, the Latin American Association for the Study of Liver and now an official journal of the Canadian Association for the Study of Liver). Dr. Bill Salh is an Associate Editor of the Canadian Journal of Gastroenterology and Drs. Hugh Freeman and Urs Steinbrecher are on the Editorial Board of the journal. Drs. Michael Byrne, Hugh Freeman and Eric Yoshida are on the Editorial Board of the World Journal of Gastroenterology and Dr. Freeman is the Associate Editor-in-Chief of the “Observations” section of the World Journal.

Dr. Hugh Chaun is the President of the Bockus Internal Society of Gastroenterology and continues to serve as the Society’s Secretary General. Dr. Chaun is also the Secretary Treasurer of the Canadian Digestive Health Foundation. Dr. Michael Byrne and Dr. Eric Lam are members of the National Endoscopy Committee of the Canadian Association of Gastroenterology which has Dr. Rob Enns as the Committee Head. Dr. Enns has served as the Vice President of the Canadian Association of Gastroenterology, Clinical Affairs and is the Head of the Capsule Endoscopy Special Interest Group of the American Society of Gastrointestinal Endoscopy. He is also on the Board of Directors of the Canadian Digestive Health Foundation. Dr. Jennifer Telford is the Medical Director of Colon Screening Program of the BC Cancer Agency and notably, is the current Governor of Western Canada for the American College of Gastroenterology. Dr. Alnoor Ramji serves on the Gastroenterology Specialty Committee of the Royal College of Physicians and Surgeons of Canada. Dr. James Gray is a Co-Founder and Honourary Vice Chair, as well as Chair of the Medical Advisory Committee, of the Canadian Society for Intestinal Research (CSIR). Drs. Nazira Chatur is an examiners for the Western Canadian Trainee Examinations in Gastroenterology (annual preparatory examination for the Royal College of Physicians and Surgeons specialist examination in gastroenterology). Dr. Eric Yoshida is the Chair of the Medical Advisory Committee of the national Canadian Liver Foundation and is the Chair of the Royal College of Physician and Surgeons of Canada’s Diploma in Hepatology Subcommittee. At Royal Columbian Hospital, Dr. Justin Cheung is the Head of Gastroenterology for the Fraser Health Authority. In Prince George, Dr. Paul Winwood is Head of Medicine of the University Hospital of the North and is on many committees including the Endoscopy Steering Committee of UHNBC. Dr. Winwood is the academically highest ranking gastroenterologist in this Division as he is the Regional Associate Dean, Northern BC and the Vice Provost, Medicine.

In terms of community service, many Division
members have given lectures at public forums on aspects of luminal gastroenterology and liver disease. Drs. Enns, Jennifer Telford, Peter Kwan and Yoshida have also worked with the print media, radio and television with regards to health-care issues that affect the residents of BC. Dr. Martin Fishman is on the Board of Governors of King David High School in Vancouver and is the President of the BC Society of Gastroenterology. Dr. Hugh Freeman is on two committees for a public parks board on Bowen Island.

**Special Honours and Awards**

A number of honours and awards were bestowed upon members of the Division in 2013 and 2014. Dr. Jennifer Telford, who is the Governor of Western Canada of the American College of Gastroenterology was also inducted as a Fellow of the American College. In 2014, the Division’s members of the Liver Transplant Program were honoured by the Happy Liver Society, a registered charity serving the needs of liver transplant patients, with its Gift of Life Award (Drs. Erb, Marquez and Yoshida). Posters of Distinction Awards were given for works presented at Digestive Diseases Week (2014, Drs. Hin Hin Ko and Dr. Alnoor Ramji), the American Transplant Congress (2013, Dr. Eric Yoshida) and the American Association for the Study of Liver’s Annual Liver Meeting (2013, Dr. Eric Yoshida twice). A paper co-authored by Drs. Alan Weiss (senior author), Fergal Donnellan and Eric Yoshida was the recognized by the Canadian Journal of Gastroenterology and Hepatology as the most outstanding paper of 2013 as the paper was awarded the Dr. C.N. Williams & A.B.R. Thomson Award at Canadian Digestive Diseases Week in 2014. In 2013, Dr. Eric Yoshida also received the Department of Medicine’s Martin M. Hoffman Award for Excellence in Research. In 2014, Dr. Yoshida was also amongst the inaugural group of hepatologists to be elected Fellow of the American Association for the Study of Liver Diseases. He was one of only 12 Canadians to be elected FAAASLD. Dr. Hugh Chaun received an award from the Bockus Society and in 2014, it was announced that Dr. Chaun was inducted as a Fellow of the Canadian Association of Gastroenterology, the organization’s highest honour.

**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 UBC Faculty Teacher” as selected by the GI fellows, medical residents and medical students rotating through gastroenterology. The 2013 recipient was Dr. J. Scott Whittaker and the 2014 recipient was Dr. Fergal Donnellan.

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. Dr. Alnoor Ramji was the 2013 recipient and Dr. Nazira Chatur was the 2014 recipient.

The Hoffman Laroche Award for best lecture at the UBC GI Training Program’s Academic Quarter Day was given to Dr. Eric Lam in 2013 and Dr. Jennifer Telford in 2014.

**Trainee Awards**

Drs. Nancy Fu and John Wong were the Chief Gastroenterology Fellows 2012-13 and Dr. Rohit Pai was the Chief Gastroenterology Fellow in 2013-14. The Chief Gastroenterology Fellows receive a plaque from the Division for their outstanding work. Similarly, the Division recognizes the Trainee Representative on the Training Committee for their service. Dr. Greg Rosenfeld was recognized in 2013 and Dr. Majid Al Sahafi was recognized in 2014.

**FUTURE DIRECTIONS**

2015 will be a year of transition for the Division of Gastroenterology. In undergraduate teaching, it was announced that 2015 will be the last year of FMED 424 which constituted the major block of formal undergraduate teaching in Gastroenterology. The undergraduate Medical Education Office is currently going through its Curriculum Renewal process and Dr. Jin Kee Ho is the Division’s representative in this process. In terms of direction of the Division, in early 2015, the Department of Medicine announced that Dr. Robert Enns would be appointed the UBC Head of Gastroenterology. The Division congratulates Dr. Enns and looks forward to working with him.
DIVISIONAL AND ADMINISTRATION OVERVIEW

The Division of Geriatric Medicine has grown significantly since its inception in the 1980s under the leadership of Dr. B. Lynn Beattie.

The Division currently provides a wide range of clinical services as well as teaching across all sites, including Vancouver/Richmond, Providence, the Fraser region, Vancouver Island, and the Interior. These include very active multi-disciplinary as well as physician only in-patient acute care for elders, geriatric ambulatory care and multiple outpatient clinics. A number of Geriatricians attend on CTUs in Vancouver, Providence, and the Fraser, bringing their knowledge of care of the elderly to trainees during their Internal Medicine rotations, and enhancing recruitment opportunities for future Geriatric Medicine fellows. Geriatricians also provide outreach to communities in the interior and northern regions of the province, and provision of Tele Health is being actively explored through VIHA.

The Division’s major areas of research emphasis are in health services research, diabetes, dementia, osteoporosis, falls prevention and cardiovascular disease.

Dr. Janet Kusher-Kow is the UBC Division Head and the Program Director for Elder Care for Providence Health Care administering Geriatric Medicine, Psychiatry and Rehab Medicine. She served as the Interim Physician Program director in 2015 for Palliative Care.

At Vancouver Acute, Dr. Graydon Meneilly is the Eric W. Hamber Professor and Head, UBC Department of Medicine, and the Physician Lead at Vancouver Acute. He is Co-Chair of the Regional Medical Council.

Dr. Amanda Hill is the Physician Operations Leader at St. Paul’s Hospital. She also continues to work on Global Health and has taken the lead on the Postgraduate Global Health Network.

Dr. Maria Chung is Medical Director, UBC Hospital, and Medical Manager for Sub-acute Medicine at Vancouver General Hospital.

Dr. Ken Madden is the VGH Division Head.

Dr. Marilyn Malone is Associate Division Head of the Division of Geriatric Medicine.

Becky Nagra continues as the Division Administrative Manager for the UBC, Vancouver General Hospital and St. Paul’s Hospital sites. Becky has taken on major responsibility for the educational program, human resources, financial and divisional issues for the division. She also oversees the Gerontology Research Lab activities and its staff. In addition, Becky provides support to the division heads and the division’s academic staff and activities.

Abril Castillo-Fernandez has recently joined the division on a part-time basis as an Administrative Assistant and provides support to the administrative manager.
Undergraduate

Dr. Janet Kushner-Kow is a member of the Undergraduate Education Committee overseeing the Third Year Internal Medicine Clerkship and its distribution to Victoria, Northern BC and the Fraser Valley. She is also the Assessment Director for the Third Year Committee; Week Chair for the Brain and Behaviour Block in Year Two and organizer for the geriatrics component of the clinical skills course in Year Two. She is the Geriatrics Theme Lead for Curriculum Renewal.

The Divisions of Geriatric Medicine and the Division of Community Geriatrics in the Department of Family practice are collaborating to enhance Geriatrics Teaching in the undergraduate Curriculum.

All of the Division members teach in various components of problem-based learning and clinical skills, as well as on the clinical teaching services in geriatrics and internal medicine. A number of popular Fourth Year electives are offered at numerous sites in the Vancouver Fraser program. Lectures on aging are provided for medical students, as well as students in their Fourth Year of Dentistry.

Postgraduate

The UBC Geriatric Medicine Fellowship under the leadership of Program Director, Dr. Lawrence Lo, continues to be one of the largest and most successful Geriatric Medicine training programs in the country. The resident numbers have tripled over the last 5 years.

Dr. Janet Kushner-Kow is Chair of the Royal College Geriatric Medicine Examination Committee, and has been involved in the transition to Standardized Clinical Examinations (StaCERs): a context-specific real-life evaluation method to ensure geriatric medicine trainees demonstrate clinical competencies.

Dr. Roger Wong was confirmed Dean, Postgraduate Medical Education, UBC Faculty of Medicine and is very active on the national stage with Postgraduate Education with the Royal College of Physicians and Surgeons. He is spearheading the introduction of Competency by Design.

Dr. Wendy Cook as Associate Program Director - Curriculum for the UBC Postgraduate Internal Medicine Program was instrumental in instituting the 1st year Boot Camp Course.

Dr. Richard Sztramko received the St. Paul’s Excellence in Teaching Residency Award.

Geriatric Medicine Preceptors are a consistent year-round part of the CTU teaching rotations at SPH, VGH and RCH.

Dr. Amanda Hill, in collaboration with Dr. Graydon Meneilly and other physicians, continues to develop the Internal Medicine Residency International Health Project. This partnership allows residents and attending staff to experience a very different practice of medicine by working at hospitals in developing countries.

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 in Vancouver, Richmond, Fraser Health, and Vancouver Island. Residents have rated teaching in Geriatric Medicine among the highest of the divisions in the Department of Medicine.

The Division also provides rotations for Family Practice Care of the Elderly physicians, and is in the process of developing opportunities for Dental and Geriatric Psychiatry Fellows.

Continuing Medical Education

The Division delivered a highly successful CPD program in 2015 “Geriatrics Intensive Course”, a 4-day course on Geriatrics for Family Physicians. This will be delivered annually in Vancouver and is being expanded around BC. A one-day version will be offered at the 2016 Canadian Geriatrics Society Annual Meeting.

Dr. Janet Kushner-Kow is the on the CPD committee for the Canadian Geriatrics Society.

Dr. Janice Menezes coordinates the UBC Geriatric Medicine Grand Rounds, which are telecast weekly.
throughout the Province and are now popularly watched asynchronously online, the first UBC division to do so.

Drs. Kushner-Kow and Martha Spencer delivered a Geriatrics Review one day course to over 100 allied health professionals in Kelowna in September 2015.

Several members of the division continue to be active in CME including national and provincial initiatives in the areas of dementia, osteoporosis, and cardiovascular fitness as well as care of the hospitalized elderly.

**RESEARCH**

Dr. Graydon Meneilly continues his research program in diabetes and carbohydrate metabolism in older adults. He is a member of the Canadian Academy of Health Sciences and the Canadian Association of Professors of Medicine. He has served on numerous panels, including the Institute Advisory Board of the CIHR Institute of Aging.

Dr. Ken Madden is currently principal investigator for 6 years of continuous funding from the CIHR (valued at approximately half a million dollars), and is co-investigator on 2 other CIHR operating grants (value of $450,000) and 1 CIHR team grant (value of $2 million dollars). He has demonstrated an increasing international profile. He is the Editor-in-chief of the Canadian Journal of Geriatrics (the only Canadian geriatric medicine/geriatric psychiatry journal), and since taking over the journal he was successful in having it indexed in PubMed and switched it to an open access mode. He is the chair of the North American Regional Council of the International Association of Gerontology, and has been invited to speak by several international organizations (Oslo University Hospital, Yale Program on Aging). He has presented his research at a number of gerontological and diabetes meetings, and was asked to judge abstracts and chair a session at the Canadian Cardiovascular Congress. He has published 8 peer reviewed articles and 7 peer-reviewed abstracts in 2014/2015 including three at the European Union Geriatrics Society Meeting in Oslo, Norway. He is a reviewer for numerous scientific journals, including the Journal of Applied Physiology, and was a member of the CIHR peer review committee, and the CIHR Age-Plus Prize committee this year. He provides mentorship in research to fellows, residents and postgraduate MSc and PhD candidates. He is the Head Organizer of the 2016 Canadian Geriatrics Society Annual Scientific Meeting.

Dr. Roger Wong researches acute care service delivery for older adults, and medical education to enhance competency in quality improvement, health advocacy, and communication among IM residents.

Dr. Amanda Hill, in collaboration with the UBC Division of Cardiology at St. Paul’s Hospital, is studying how to improve Geriatric Assessment of elderly pre-operative patients.

Dr. Larry Dian is co-investigator at the ProHealth Clinical Research Center and is interested in osteoporosis and falls in the frail elderly. He is a member of the Scientific Advisory Council for Osteoporosis Canada.

Dr. Diane Villanyi continues to pursue her interest in drug use and adverse events in the elderly.

Dr. Phillip Lee participates in dementia research with the Alzheimer’s and Related Disorders clinic.

Dr. Janet Kushner-Kow is collaborator and principal investigator on research with a number of medical students and internal medicine residents on medical education and laxative use.

**CLINICAL ACTIVITIES**

The ACE units at Vancouver General Hospital continue to serve the elderly admitted to Acute Care. The consult service, rapid access clinics and home visit service are busy and are popular electives for IM residents. St. Paul’s Hospital has an interdisciplinary Geriatric Consult and Outreach Team for inpatient consultation and rapid access ambulatory services. Providence Health Care also has an Integrated Care for Elders Unit, a consultation service, and an enhanced outpatient service at Mount St. Joseph’s Hospital. The three Vancouver teaching sites have over 2 dozen beds where Geriatric Specialists serve as most responsible physician serving complex elderly inpatients. Geriatricians have also collaborated with nursing to provide improved transitions for patients
discharged from Acute Care. They liaise with the
Emergency Nurses, and provide Rapid Access Clinic
for patients discharged from Emergency. In the
rapidly expanding Fraser Health Region, Geriatric
Medicine services continue to grow; there is an
enhanced multi-disciplinary Specialized Geriatric
Clinic, as well as geriatric consultation services, which
provides teaching for UBC students and residents.
Geriatrics on Vancouver Island provide a wide range
of inpatient consultation and outpatient and home
visit services, and aims to expand availability up
island. Geriatricians on the North Shore also provide
inpatient consultation, outpatient services, outreach,
and leadership in complex residential care, as well as
rotation opportunities for Fellows.

Collaboration between Vancouver General Hospital
and Providence Health Care has extended the geriatric
outreach network to most of the Community Health
Centers within Vancouver Community Health and
is working to strengthen the collaboration between
primary, community and acute care. Dr. Joy Liao
continues the work on the Frail Elderly Collaborative
project and as a “clinical quality improvement
advisor” working throughout BC with the Ministry of
Health and Vancouver Coastal Health, including the
Transforming Seniors Care Initiative.

Drs. Larry Dian, Janet Kushner-Kow, Marilyn Malone
and Naaz Parmar are part of the Geriatrics Outreach
Teams to Northern BC, providing Geriatric Medicine
and Geriatric Psychiatry consultation services to
northern, rural and remote communities including
Queen Charlotte, Masset, Prince Rupert, Terrace,
Kitimat, Smithers, Burns Lake, Vanderhoof, Fraser Lake,
McBride, Dawson Creek, Fort St John and Fort Nelson.
This unique model of care sees the specialists visiting
communities on a regular basis and working in tandem
with local community service providers.

Dr. Phillip Lee continues to provide consultation in
memory disorder clinics at St. Paul’s Hospital and
the Alzheimer’s and Related Disorders Clinic at UBC
Hospital.

Dr. Graydon Meneilly continues to run the only
specialized Geriatric Diabetic Clinic in Canada.
Dr. Martha Spencer is one of only 5 Geriatric
Specialists in Canada specializing in Incontinence.

FUTURE DIRECTIONS

Further Geriatric Medicine growth into the North and
Interior will expand in the coming years. The Training
program continues to add new positions.
We are also working to strengthen ties with Geriatric
Medicine physicians throughout the province to
increase opportunities for collaboration, recruitment
and teaching.

Dr. Jocelyn Chase will be establishing a Clinical Ethics
practice at PHC.

Dr. Martha Spencer will be establishing a
Multidisciplinary Geriatric Incontinence Clinic at PHC,
the first of its kind in British Columbia.
In 2014, the UBC Division of Hematology included 38 staff and 5 associate staff members based at the Vancouver General Hospital (VGH), St. Paul’s Hospital (SPH), Royal Columbian Hospital (RCH), the Terry Fox Laboratory (TFL) at the British Columbia Cancer Research Centre (BCCRC) of the BC Cancer Agency (BCCA) and the University of British Columbia (UBC). The two year span (2013-2014) since the last annual report was marked by both sadness and change in various leadership portfolios within the Division.

In April 2014, Dr. Linda Vickars (appointed Clinical Emeritus Professor in September 2013) passed away after a lengthy illness. Her distinguished career as an outstanding clinician/teacher spanned nearly three decades (1985 to 2012). Her many accomplishments included the establishment and development of the Division of Hematology at SPH (Head from 1998 to 2006), having previously been Head of the section of Hematology/Medical Oncology (1994 to 1998), as well as the Adult Hemophilia and Hemosiderosis Programs of BC based at SPH (Director from 2004 to 2011) and the Adult Hemoglobinopathy Program of BC based at SPH (Director from 2009 to 2011). This was a very significant loss for the B.C Hematologic community.

In November 2013, Dr. Michael Barnett completed a very successful 10 year tenure as Head of the UBC and VGH Divisions. He also had served as SPH Division Head for the previous 7 years. He was succeeded by Dr. Stephen Nantel as UBC and VGH Division Head. Dr. Lynda Foltz assumed the Headship of the SPH Division.

Dr. John Shepherd, Director of L/BMT Program (2010-2013) retired from clinical practice at the end of 2013 and has subsequently been appointed Clinical Emeritus Professor at UBC. Dr. Shepherd’s many contributions (Clinical–Leukemia/BMT Program; Administrative – VGH/VCH, HAMAC and BCCA) were recognized at a series of events held in his honour. Dr. Raewyn Broady took over as Interim Director of the
Leukemia/BMT Program of BC in December 2013.

Dr. Peter Tsang stepped down as UBC Division of Hematology Program Director and was replaced by Dr. Luke Chen who was appointed to this role in March 2014 after a selection process. Dr Tsang was thanked for his 12 years of excellent leadership in this important role.

Dr. Alina Gerrie joined the Division as a member of the Leukemia/BMT Program (Jan 2013) and Dr. Erica Peterson was welcomed as a member of the VGH General Hematology group in September 2013 after completing a Thrombosis fellowship under the guidance of Drs. Agnes Lee and Ed Conway (CBR).

The Leukemia/BMT Program received full accreditation by FACT (Foundation for the Accreditation of Cellular Therapy) in August 2013.

In July 2013, Dr. Paul Yenson was appointed Co-Chair of the Section of Hematology/Oncology, BCMA.

In August 2013, Dr. Luke Chen was appointed Program Lead for the Clinical Education Fellowship Alumni Program (CEFAP) within the Centre for Health Education Scholarshp (CHES). This initial appointment is for a three year term.

Laboratory research programs at TFL, UBC and Vancouver Coastal Health Research Institute (VCHRI) achieved peer-reviewed operating support of $ 10.6 million and clinical research at VGH and SPH brought in $ 0.6 million. There were a total of 100 peer-reviewed publications. Patient care and training remained at the forefront of clinical activities. Trainees in the Division as a whole included 12 Hematology residents, 20 Leukemia/BMT fellows and 33 laboratory post-doctoral fellows.

TEACHING

Undergraduate

Dr. Sreenivasan served as Week Chair of the Blood & Lymphatics Problem Based Learning (PBL) block (two weeks) for undergraduates. A number of members of the Division participated in the PBL teaching course.

Postgraduate

A total of 133 residents in the Internal Medicine Program took hematology-based electives during the past two years. These were one or two month blocks spent on the Hematology Consultation Service at VGH or SPH.

Subspecialty Training: Dr. Tsang served as Director of the Hematology Training Program through 2013 and was replaced by Dr. Luke Chen in March 2014. 12 Hematology residents (in overlapping academic years) were based at VGH in 2013-2014. Rotations included the General Hematology Consultation Service, Leukemia/BMT Service, Blood Transfusion Service, Apheresis Unit, Out-patient Clinics and Hematopathology. Rotations were also taken at SPH, Vancouver Cancer Centre, BC Women’s and Children’s Hospital. There were elective rotations available in Victoria and Kelowna in Consultative Hematology. These positions were taken by Drs. Mohammed Abuhaleeqa, Musa Al Zahrani, Linda Sun, Gagan Kaila (Jul 1, 2012 to Jun 30, 2014); Kai Luecke (Jul 1, 2012 to Jul 29, 2014); Erica Peterson, Thrombosis Fellow (Sep 1, 2012 to Aug 31, 2014); Jennifer Goy, Mikhyla Richards (Jul 1, 2013 to Jun 30, 2015); Mohammed Aljama, Cameron Griffiths, Kevin Hay, Hayley Merkeley (Jul 1, 2014).

Postdoctoral Training: Division Members conducting bench research at the TFL and UBC trained 33 postdoctoral fellows, 24 of whom were PhDs.

Doctoral Training: The TFL accommodated 30 graduate students as well as 18 research and 30 co-op students.

Continuing Medical Education

Members of the Division organized the following series of meetings in 2013 and 2014: Canadian Hemoglobinopathy (CanHaem) Meeting (Dr. Ezzat) May 2103; Update on Myeloid Malignancies (Drs. Forrest and Foltz) September 2013; Bone Marrow Failure: State of the Art (Drs. Nantel and Nevill) in April 2014; 2nd and 3rd Norman Bethune Symposia on Transfusion Medicine (Dr. Conway) in March 2013 and 2014; Earl Davie Symposia on Hemostasis and Thrombosis (Dr. Conway) in November 2013 and 2014; CBR Research Day (Dr. Conway) in August 2013 and 2014. The Hematology Lecture Series (Dr. Nantel) continues to attract high quality local and international speakers presenting important updates in the field. The Semi-Annual Hematology Update Series (Dr. Nantel) in Jan and June has been a well received educational initiative for the BC Hematology community.

RESEARCH

Clinical research involved hematological malignancies, hematopoietic stem cell transplantation, apheresis, blood product support, thrombosis, bleeding disorders, iron overload and HIV/AIDS. As well as in-house studies, significant contributions were made to national and international trials. In addition, a number of important observational studies were conducted and reported on.

A Thrombosis Research Program, including collaboration with Dr. Conway and other investigators at the Centre for Blood Research at UBC, has been developed by Dr. Lee. A similar undertaking by Dr. Jackson, Dr. John Wu (BC Children’s Hospital) and Dr. Conway for the development of an Inherited Bleeding Disorder Research Program has resulted in the establishment of the UBC Bleeding Disorders Collaboratory. In an ongoing collaboration between the Leukemia/BMT group and the Blood Transfusion Services at VGH, Dr. Chipperfield completed a trial to evaluate the outcome of platelet transfusion in patients treated for acute leukemia.

From early 2005, a major initiative has been the development of the Hematology Research and Clinical Trials Unit (HRCTU) at VGH, which has been made possible by substantial initial and ongoing support from donors as well as a grant from the Ministry of Health Services, BC in 2008. The goals of the HRCTU are: to produce and evaluate new treatments (more effective and less toxic) for blood diseases; to provide British Columbians with access to new treatments much earlier that would otherwise be possible; to improve quality of life for patients with blood diseases. The HRCTU was the study centre for two major Canadian based (CBMTG) international transplant studies. The results from the most recent of these were presented at the 2014 ASH Annual meeting in San Francisco. In parallel with the HRCTU, the Hematology Cell Bank (HCB), developed in 2005, continues to collect and store specimens of blood and marrow (for research) from patients and donors.

Important research related to the value of iron chelation therapy in patients with myelodysplasia and myelofibrosis is being conducted by Dr. Leitch (SPH) and has gained international recognition.

Laboratory research based at the TFL (Drs. Eaves, Hogge, Humphries, Jiang, and Karsan) involved the cellular and molecular characterization of normal and malignant hematopoietic cell growth and differentiation with special emphasis on the myeloid leukemias, myelodysplasia, microRNAs, Hox genes, etc. Cytokines (GM-CSF), antibodies (human monoclonal) and vaccines (influenza) were at the forefront of research at the Biomedical Research Centre, UBC (Dr. Schrader). The interplay between the coagulation and the complement systems was the focus at the Centre for Blood Research, UBC (Dr. Conway). Research related to graft versus host disease and graft tolerance was conducted at the Children & Family Research Institute (Dr. Broady).

CLINICAL SERVICES

The Leukemia/BMT group at VGH/BCCA had 13 members: Drs. Shepherd (Director until Dec 2013 – now retired), Broady (Interim Director from Dec.
2013), Barnett, Hogge, Sutherland, Nantel, Toze, Nevill, Forrest, Song, Abou Mourad, Power, Narayanan and Gerrie (cross appointment with Medical Oncology). The group provided comprehensive inpatient (T15 Ward) and outpatient (Krack Centre, Centennial Pavilion 6th floor) care to patients with hematological malignancies and those undergoing hematopoietic stem cell transplantation. Marrow Failure (Drs. Nevill, Hogge, Power and Narayanan) and Graft Versus Host Disease (Drs. Nevill and Broady) clinics were held weekly. Outreach clinics in Abbotsford, Kelowna, Prince George and Victoria were held monthly.

The General Hematology group at VGH had 9 members: Drs. Tsang (Head), Li, Sreenivasan, Zypchen, Lee, Yenson, Chen, Ambler and Peterson. The group was responsible for the Hematology Consultation Service at VGH. The number of consultations has continued to increase. The patient population includes those with highly complex medical and surgical problems. Each member also had outpatient clinics. Thrombosis service activity makes up a substantial proportion of Hematology referrals. Thrombosis clinics were held daily, 5 days per week. Three of the group, Drs. Tsang, Li and Zypchen also provided a Hematology consultation service and call coverage for the B.C. Women’s Hospital (BCWH). They held a weekly outpatient Hematology clinic at BCWH which included teaching of trainees from Medicine, Hematology and Obstetrics. Four of the group, Drs. Sreenivasan (Director), Zypchen, Yenson and Ambler have a cross appointment with the Apheresis Unit (under a Clinical Services Contract). A significant challenge for the General Hematology group at VGH relates to remuneration and resources. Payment for clinical work is on a fee for service basis. From a number of perspectives, an alternate payment plan (APP) for the inpatient activity would be welcome. In this regard, in November 2011, the Division, led by Drs. Tsang and Barnett, entered discussions with Physician Relations and Compensation regarding the possibility of an FTE structure for General Hematology at VGH and corresponding APP application to the Ministry of Health. Unfortunately, there has been no progress from this initial set of discussions.

The Division of Hematology at SPH had 7 clinicians: Drs. Foltz (SPH Division Head), Leger, Leitch, Ramadan, Jackson, Ezzat and Ross. The group was responsible for the care of patients with a wide spectrum of hematological disease both benign and malignant, including aggressive lymphoma (some HIV-associated). Acute leukemia care has been transferred to VGH (Leukemia/BMT Program). Nonetheless, the workload remains demanding. Primary and consultative care for inpatients at SPH was provided on a rotational (weekly) basis. Daycare activity was carried out on the Medical Short Stay Unit (MSSU) at SPH. Outpatient clinics were conducted in a facility across from SPH on Burrard Street. Weekly Hemophilia clinics were run by Dr. Jackson and Yenson (VGH) and Dr. Ezzat ran the Hemoglobinopathy Clinical Program. Drs. Jackson and Yenson held Hemophilia Outreach clinics in Kelowna, Prince George, Victoria and Nanaimo (the latter as of 2013). Drs. Leger and Leitch saw patients with HIV/AIDS related hematological disorders in their clinics. The group received remuneration from a Clinical Services Contract as well as sessional funds for Hemophilia, Hemoglobinopathy and Hemosiderosis activities. By far the major problem for the group at SPH is limited infrastructure support. Drs. Jackson and Ezzat are members of an Inherited Bleeding & Red Cell Disorders Strategic Advisory Group (SAG) within the Provincial Blood Coordinating Office (PBCO; Medical Director Dr. Petraszko).

**ADMINISTRATION**

Drs. Shepherd to Dec 2013 and Dr. Broady from Dec 2013 (Director of the Leukemia/BMT Program at VGH and BCCA), Dr. Nantel (Medical Director of the Clinical Practice Unit (CPU) for Hematology/BMT at VGH), Dr. Tsang (Head of General Hematology at VGH and Director of the Hematology Training Program through 2013), Dr. Chen Director of Residency Program (March 2014) Dr. Sreenivasan (Director of the Apheresis Program at VGH), Dr. Lee (Director of the Thrombosis Program at VGH and UBC), Dr. Jackson (Medical Director of the Adult Hemophilia Program at SPH), Dr. Ezzat (Medical Director of the Adult Hemoglobinopathy and Adult Hemosiderosis Programs at SPH) continued in leadership positions. Dr. Nantel (Head of UBC and VGH Divisions) Dr. Foltz (Head at SPH) assumed new leadership positions in November 2013.

At VGH, the activities of the Division were overseen by a Hematology Executive made up of Drs. Barnett, Shepherd and Nantel (2013) and subsequently Drs. Broady and Nantel (2014). Dr. Nantel was
chairman of the Hematology/BMT CPU committee whose membership was as follows: Dr. Barnett, Dr. Shepherd, Dr. Tsang, Dr. Sreenivasan, Dr. Lee, Ms. K. Hermkens (Administrative Manager, Hematology), Ms. N. Edge (Patient Services Manager, Hematology/BMT), Ms. A. Bisailon (Operations Director) (2013) and subsequently Drs. Broady, Yenson, Sreenivasan, Lee, Ms. K. Hermkens and Ms. Leighanne MacKenzie (Operations Director) (2014). The committee met monthly to review issues arising and to propose new initiatives.

At SPH, Dr. Foltz (Head SPH Division) works closely with the SPH Administration: Dr. P. Man (Head of Medicine), Dr. R. Carere (Vice President, Medical Affairs) and Dr. B. Sindelar (Vice President, Research and Academic Affairs) gave important support to the group. Mr. K. Harman (Leader, Medical Affairs) and Ms. A. Levelt (Operations Leader, Ambulatory Care Medical Clinics) and Ms. S. Chutskoff (Operations Leader, 7ABCD, 8A) were highly supportive on issues related to hematological activity on the MSSU and the inpatient wards, respectively. There were multiple awards won by the bleeding disorders team for the multidisciplinary initiatives in their clinic and the new prophylaxis clinic. Dr. Leitch is working on a sabbatical project titled “Parameters influenced by iron overload in an MDS preclinical model” supported by Providence Hematology.

In November of 2014, Dr. Linda Sun began a 2 year clinical hemostasis fellowship, awarded by the Association of Hemophilia Clinic Directors of Canada under the mentorship of Dr. Shannon Jackson (UBC Clinician Investigator Program). Her research involves the risk factors for hypertension in the hemophilia population.

FUTURE DIRECTIONS

The Division continues to attempt to create a broad and strong platform from which to pursue future directions. It is intended that the major initiatives over the next 5 years will be to:

- Enhance translational research in hematological malignancy and stem cell transplantation
- Strengthen the Thrombosis Program
- Develop a comprehensive Inherited Bleeding Disorder Program
- Develop a comprehensive Hemoglobinopathy Program
- Sustain the Hematology Research and Clinical Trials Unit
- Promote collaborations with the Centre for Blood Research
- Create fellowships in a range of hematological fields
- Determine the provincial need for Hematology Services

SPECIAL HONOURS AND AWARDS

Dr. Agnes Lee
UBC Dept of Medicine Martin M Hoffman Award for Excellence in Research (2013)

Dr. Luke Chen
UBC Dept of Medicine Fay R. Dirks Award for Excellence in Teaching (2013)
M Ed (University of Dundee) (2013)

Dr. John Shepherd
UBC Dept of Medicine Award for Outstanding Medical Grand Rounds (VGH) (2013)
VGH/VA Medical Staff Special Service Award (2013)

Dr. Alina Gerrie
VCHRI Team Grant Award (2014) – “Physician prescribed exercise Program post AlloSCT”.

The Adult Hemophilia Team at St. Paul’s Hospital (Dr. Shannon Jackson, Dr. Pat Camp, Sandra Squire [physiotherapist], and Kam McIntosh [nurse educator]). received the “Best Award” at the PHC AGM in June 2014.
ADMINISTRATION OVERVIEW

Infectious Diseases active faculty in 2014 consisted of 16 full members, including clinicians, clinical scientists, and full time research faculty. There were another 22 associate members, and 3 emeritus faculty. Activities have been focused at the three teaching hospitals; Vancouver General (VGH), St. Paul’s (SPH), and BC Children’s & Women’s Hospitals, (BCCWH) and at the BC Centre for Disease Control (BCCDC). Dr Rich Lester and Dr Alissa Wright are the newest faculty members joining the Division at VGH.

EDUCATION

Undergraduate

Dr Bill Bowie, as the Undergraduate Education Supervisor for the Division of Infectious Diseases has been involved with ongoing curriculum changes. Basic science training in the Immunity and Infection Research laboratories at VGH also continues to attract outstanding students. A number of faculty teach undergraduate microbiology to science students as well as supervise co-op and directed studies students in their labs.

Postgraduate

Residency Training Program Director, Dr Natasha Press, along with Medical Education Coordinator, Kirstie Lang, coordinated inpatient and outpatient training for 86 residents from a range of UBC medical and surgical programs at St. Paul’s (SPH) and Vancouver General Hospitals (VGH). There were 16 trainees (students and residents) from other Canadian medical schools visiting UBC for elective training in ID this year. Training opportunities include both inpatient and outpatient core rotations, and electives in general Infectious Diseases as well as HIV/AIDS (Immunodeficiency Clinic and the St. Paul’s Hospital Urban Health Acute Care Unit [formerly HIV/AIDS ward]). A structured series of eleven 1 hour didactic sessions for each 4 week training block, Combined Structured Teaching (CST) Rounds, is provided for residents and students on ID rotation at SPH and VGH using teleconferencing. This curriculum provides an overview of common infectious diseases syndromes, medical microbiology, infection control, and antimicrobial stewardship. The Subspecialty Training Program continues to attract exceptionally qualified and talented applicants who go on to successfully complete the two year training program. This year the trainees included 5 Fellows in Infectious Diseases. Dr. Freda Omaswa and Dr LeeAnne Luft completed their ID fellowship training in 2013. Dr Omaswa received a UBC Faculty of Medicine Clinical Investigator Program Award and is studying malaria vaccines and host immune response with Dr. Michael Walther, Chief of the Human Immune Regulation Section at the NIH’s Laboratory of Malaria Immunology and Vaccinology in Washington, DC. Dr Luft has entered clinical practice in Kelowna. Dr Tom Havey completed his ID fellowship training in 2014 and is currently completing a research year focusing on antimicrobial stewardship at SPH.

Graduate Students

Division members at various locations supervised Masters and PhD science students affiliated with Health Care and Epidemiology, Laboratory Medicine,
Microbiology and Immunology, and Medical Genetics.

Courses

A number of Division members have been organizers or speakers for the well attended annual Tropical and Geographic Medicine Intensive Short Course convened by the School of Population and Public Health, UBC (Drs Patrick, Hajek, Kestler, Mirzanejad, Ghesquiere, and Steiner).

RESEARCH

Research programs being conducted at all four principal sites of the Division are diverse and broad-based as detailed below. The Division’s research programs are highly productive and innovative, resulting in ongoing successes in grant award funding.

Host defense and pathogenesis

The Division maintains an active basic research program in molecular microbial pathogenesis and host defense at VGH. Pathogens under study include M. tuberculosis, nontuberculous mycobacteria, Leishmania, E. coli, 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. There is also active collaborative research on the fundamental pathogenesis and novel treatments for inflammatory bowel disease.

From auto-immune disorders that lead to diabetes, to preventing rejection in organ transplantation, the Immunity & Infection Research Centre team, led by Dr. Neil Reiner, works to understand the immune mechanisms that both fight infectious diseases and cause immune disorders. Faculty members involved in these research programs include Drs. Av-Gay, Bach, Brunham, Hmama, Lester, McMaster, Reiner, Stiver, and Steiner.

HIV/AIDS Research

The AIDS Research Program is conducted through the BC Centre for Excellence in HIV/AIDS at the St. Paul’s site, and the Oak Tree Clinic at BCCWH. It is nationally and internationally recognized for work in all facets of HIV, including behavioral studies, epidemiology, clinical trials and basic sciences. A number of ID faculty (Drs. Montessori, Press, Phillips, Hull, Pick and Murray) are involved in clinical research activities related to the AIDS Research Program including endocrinopathy in HIV/AIDS, trends in HIV-related hospitalizations, and HIV co-infections such as hepatitis C and human papillomavirus.

Epidemiological Research

The wide ranging research of ID Faculty at the UBC CDC (Drs Patrick and Brunham) includes sexually transmitted infection (STI) prevention; control and service delivery; control of emerging infectious diseases; assessment of human papillomavirus infection (HPV); reduction of antimicrobial misuse as linked to the emergence of resistant organisms; and early interruption of transmission of diseases from infected food products.

Clinical and Translational Research

Division members are involved in both industry sponsored and investigator-initiated studies that recruit volunteers to study new anti-infective treatment strategies. Recent observational studies have also included immune reconstitution inflammatory syndromes. The CIHR and Public Health Agency of Canada Influenza Research Network (PCIRN) study, directed by Drs. Grant Stiver and Bill Bowie for the UBC centre, follows severe outcomes surveillance and health care workers vaccination side effects at VGH. Dr. Steiner has an active translational research project examining pathological T cell responses in Crohn’s disease in collaboration with members of the Division of GI and the Department of Surgery, as well as several clinical trials on new treatments and prevention of Clostridium difficile infection, including fecal transplantation. Observational studies have also included the clinical spectrum of disease and long-term outcomes in Cryptococcus gattii infection in BC (Dr. Phillips and co-investigators at BCCDC). Clinical research in chronic fatigue syndrome has been led by Dr David Patrick (School of Population and Public Health).

Global Health Research

Dr Lester has been recruited into a full-time academic position in Global Health research within the Division of Infectious Diseases as of July 1st, 2014. He was also nominated and accepted the role of Director of the UBC Neglected Global Diseases Initiative (NGDI) which brings together scientists and experts from multiple faculties for global health initiatives and
partnerships. An example was hosting of a symposium on the Ebola outbreak in West Africa that brought together top scientists and policy makers from BC and Canada wide. Dr. Lester continues a research program to study the use of mobile devices to support medical practice and public health (“mhealth”) both in Canada and other global settings. Specific studies involve the use of a short message service (SMS texting) in order to provide support and improve adherence in the management of HIV/AIDS (The WelTel Retain Trial), pre-exposure HIV prophylaxis (PREP), and latent tuberculosis infection (LTBI) and now supporting projects in chronic diseases such as asthma. This program has provided key evidence for Health Organization guidelines and is an example of “reverse innovation” by which technologies and solutions developed in resource limited global settings are exported back to Canada. Dr. Lester is working with other faculty across UBC for development of a more consolidated global health research and training program. One initiative being worked on is a collaborative centre of excellence for global health innovations in Kenya. Dr. Jan Hajek has taken on the leadership role for the Vancouver site of the international Geosentinel Surveillance Network for travel-related diseases; Drs Mirzanejad and Ghesquiere are co-directors for the satellite sites in Surrey and Victoria, respectively.

CLINICAL SERVICES

The Division maintains two very active inpatient consultation services at SPH and VGH. The trend of increasing complexity, greater numbers of consultations (38% growth in the past 10 years at VGH), and the ongoing effect of antibiotic resistance, make the ID clinical programs dynamic and challenging to administer. In addition to general ID cases, there is increasing demand to treat infections in reconstructive, trauma, and spine orthopedics, neurosurgery, bone marrow and solid organ transplant, and tuberculosis. The ID staff also initiates and supervises treatment of patients in the home IV antibiotic program at both sites, which is critical for the timely discharge of patients from inpatient units. The SPH group has a special interest and competency with the treatment of infections related to cardiovascular disease and interventions, HIV/AIDS, injection drug use, and infections in marginalized populations. The Anal Dysplasia Clinic (human papillomavirus) at SPH is a provincial resource under the direction of Dr. Press. The Urban Health Acute Care Unit [formerly HIV/AIDS ward], based at SPH is a unique Canadian facility (since 1997) which provides care for 24 inpatients, most of whom are HIV-positive with various diseases related mainly to either HIV/AIDS or injection drug use. Dr. David Patrick has led the development of the PHSA supported Chronic Complex Disease Clinic, which addresses both clinical service and research needs of patients with chronic fatigue syndrome/myalgic encephalomyelitis, possible or proven Lyme disease, and systemic lupus erythematosis. This multidisciplinary clinic is based at BC Women’s Hospital. Finally, the ID group, along with Medical Microbiology and Pharmacy manage the antibiotic stewardship programs to guide evidence-based and cost-effective use of antimicrobial drugs for inpatients at VGH and SPH. During the recent West African Ebola outbreak, two Division members (Drs Hajek and Rekart) have served as frontline volunteer medical staff.

FUTURE DIRECTIONS

Although Transplant Infectious Diseases services are now available in the province since the recruitment of Dr Alissa Wright, there is an urgent need for recruitment of additional ID physicians with transplant experience in order to establish an independent Transplant ID clinical service at VGH. This will be necessary for program development, the provision of optimal patient care, and fostering clinical research. Global Health is a growing area of research, innovation, and interest at UBC. The Division of Infectious Diseases will play a key role in development and coordination of a strong global health program by working with other programs such as the School of Population and Public Health, other programs in the Faculty of Medicine, and other faculties with interest in Global Health for a UBC Global Health strategy. There is also a need for increased clinical capacity in tropical and travel medicine, hosted by the Division of ID as a provincial resource for patient care and clinical training opportunities. Another Divisional goal is establishing OPAT (Outpatient Parenteral Antibiotic Therapy) clinics at both SPH and VGH, in order to improve appropriate access to parenteral antibiotic therapy, while reducing the traditional utilization of emergency room or inpatient hospital services. Currently a OPAT pilot project is underway at SPH.
OVERVIEW

The Division of Medical Oncology, within the Department of Medicine, has members from 6 BC Cancer Agency Cancer Centers as well as other teaching hospitals. At this time there are 98 members either with an academic appointment or with an appointment pending. The majority of these are within the cancer centers. The number for 2013 – 2014 was slightly lower as there have been some new positions created but was very similar at approximately 88. With an academic focus medical oncologists within the cancer centers have UBC academic appointments.

FACULTY

A full list of the faculty which includes details of their rank is available upon request. Although most of the members are clinical faculty there are also grant tenure members, Drs George Browman, Kim Chi, Stephen Chia, Sharlene Gill and Kerry Savage, and partner appointments more recently of Drs Winson Cheung, Karen Gelmon, Hagen Kennecke, Daniel Renouf, Gillian Mitchell and David Scott.

Since early 2013 there have been a number of members retire or move including Drs Winston Bishop, Max Coppe, David Fenton, Tina Hsu, Richard Klasa, Grant MacLean, Heidi Martins, Jorg Michels, Kevin Murphy, Susan O’Reilly, David Saltman, Sheila Souliere, Judith Sutherland, Brian Weinerman and Kenneth Wilson. There was also the tragic death in 2015 of Professor Emeritus, Dr Nicholas Bruchovsky.

FUNDING

A list of the grant funding including funding that either began before 2013 and included that year or has occurred in 2013/2014 and continues is available upon request. There are a large number of persons in the department who have been successful in competitive peer reviewed grants either as principal investigators or co investigators, resulting in a significant amount of grant funding. Adding the totals of all the grants that have straddled the years 2013-2014 the total funding from members of the division equals $114,948,597. This however is the total and not the annual funding for the 2013-2014 years. As well, not all of this funding is directed at the Division of Medical Oncology as many of the projects are collaborative and take place in a number of sites and/or departments both in British Columbia and nationally and internationally. The list includes some grants that have been awarded for 2015 that are not included in this total and at this time equal $8,655,000. There are a number of very successful members of our division however who have had multiple grants awarded and are extremely successful in their areas with national and international recognition.

Many of these same investigators and a significant number of other members of our group participate in clinical trials research. This includes investigator initiated studies, cooperative group studies and pharmaceutical trials. The estimate for total revenue from these trials for the 2013 – 2014 year was $7 million. This accounted for 260 trials with over 90 principal investigators. This is an estimate and may not reflect all the studies that were already opened or that were planned to open in that year and were delayed. As well there is unfunded research that in ongoing in the department.

AWARDS AND HONOURS

A number of our members have been recognized with awards and these awards are listed in the appended document. In 2013 Dr David Scott received awards at both the American Society of Hematology meeting and the Canadian Hematology Society meeting for his outstanding abstract. Dr Diego Villa was awarded a Young Investigators prize from the Canadian Conference for Lymphoproliferative Disorders. Dr
Winson Cheung was recognized by UBC with an Excellence in Early Career award for his research. Dr Lee Ann Martin received a Leadership award from the BC Cancer Agency for Patient Safety and Quality Innovation.

Drs Kim Chi and David Scott were also both awarded Clinical Scientist Funding awards from the BC Cancer Foundation to provide support for their careers as clinical researchers for five years beginning in 2014.

**EDUCATION**

In terms of education, our group participates actively in education at all levels of the Medical Faculty. The teaching commitment from the centers is outstanding with a large number of faculty participating and receiving excellent evaluations. Our Medical Oncology Residency program which is run by Dr Howard Lim has a continued excellent rating with a high interest from residents nationally. As well, a major activity of our group is the development of evidence based guidelines for care across the province, nationally and internationally.

We continue to encourage excellence in teaching, translational and clinical research and patient care as activities in our division.
The UBC Division of Nephrology has a total of 48 members, which includes 26 full members, 3 emeritus and 19 associate members located around the province. The two downtown sites are St. Paul’s Hospital and Vancouver General Hospital, while the Royal Columbian Hospital, Surrey Memorial, and Abbotsford in the Fraser Health Authority, as well as Interior Health, Northern Health and Vancouver Island Health authorities all participate in divisional activities. This distributed model of education, clinical care and research within the province is unique and offers ever increasing potential for sustainability and dissemination. Together the faculty provides provincial leadership in research, education, and clinical care within the field of renal medicine.

The 26 members of the downtown campuses of the Division have a strong clinical base and provide integrated and decentralized nephrology care throughout Vancouver Coastal Health, including Richmond, North Vancouver and coastal areas, and as far north as the Yukon Territory, with a strong working collaboration with Fraser Health, VIHA, IHA and NHA. Fraser Health has established strong links with the Internal Medicine program and Division of Nephrology programs so that exposure to clinicians and teachers are available.

The Division has an important role in the UBC undergraduate medical curriculum, has a mature nephrology postgraduate training program, and participates in the Experimental Medicine and Clinical Investigator programs of the Department of Medicine. We have an expanding international and post doctoral fellowship in home based therapies, transplantation, dialysis and health administration since 2011. Research activities encompass both laboratory and clinical sciences, with a strong focus on epidemiology and clinical trials, and population health and outcomes/economic investigations in both kidney 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, the Regional Renal Programs, the Kidney Foundation of Canada, the Canadian Society of Nephrology, the Canadian Society of Transplantation, The Transplantation Society and International Society of Nephrology.

Administrative support for the program is managed by Ms Pam Sewell (Admin and CME) and Ms Tammie Davis (Postgraduate Education). Strong Partnerships with the BC Provincial Renal Agency has permitted leveraging of resources to support province wide education and research activities to various degrees.

The divisional heads in 2013-4 at specific sites include: Dr Jacek Jastrzebski at VGH, Dr David Landsberg at PHC, Dr Gerald Da Roza at RCH, Dr John Antonsen at VIHA. The other health authorities (IHA and NHA) do not have Divisional heads per se, but do have medical directors (Dr Marie Michaud and Dr. Anurag Singh), who fulfill aspects of the role.

TEACHING

The UBC Division of Nephrology is a key component of the tertiary education program for medicine and
related health sciences for the University of British Columbia. Through its active undergraduate, graduate, post-graduate and continuing medical education programs, the Division is responsible for the training of medical students, interns, residents, sub-specialty residents in nephrology (SSRNs), rotating trainees in general medicine, anesthesia and other relevant disciplines, graduate and doctoral students, and clinical and research fellows. These programs attract trainees from across Canada, and from Australia, Europe, Asia and the Middle East. The primary sites for undergraduate and graduate training are at VGH SPH/ Providence Healthcare and Fraser Health Authority, with elective opportunities available in other jurisdictions.

Funding for the educational programs of the Division is provided by UBC, and in collaboration with the BCPRA. Education in pharmacy and allied health disciplines occurs in the same sites under the auspices of UBC and related professional bodies. In 2013-14, Divisional program directors included Dr. Suneet Singh (Undergraduate Programs), Dr. Peter Neufeld (Postgraduate Programs), Dr. Adeera Levin (Continuing Medical Education), and Dr. Olwyn Johnston (Transplant Fellowship Program). Dr Gerald Da Roza has responsibility for educational programs in Internal medicine and Nephrology in FHA. Extended training in Provincial Home Therapies programs has been offered, under the direction of Dr Michael Copland and Dr Paul Taylor (provincial directors of Home Hemodialysis and Peritoneal Dialysis respectively). Trainees from UK and New Zealand were enrolled in the program.

RESEARCH

The Division has a strong and internationally-recognized translational research program in both renal disease and transplantation. Members of the Division were successfully awarded and held over $3.5 million in research support in 2013-14, including grants from Genome Canada, Networks of Centres of Excellence, the CIHR, the Kidney Foundation of Canada, and other peer-review agencies, as well as unrestricted industry supported grants, and conventional industry supported trials.

Members of the Division generated more than 85 scientific articles in 2013-14, notably some in high to very high impact journals. Key areas of focus are: health outcomes research, epidemiology, biomarker prediction of clinical events in CKD and transplant populations; resource utilization, and knowledge translation activities. Dr. S. Barbour and Dr. J. Gill are funded by the Carreressi Foundation and the Michael Smith Foundation.

The UBC Division of Nephrology Research programs integrate members from the VGH and SPH / Providence Health sites as well as our associate sites around the province, to ensure full participation and collaboration. The Division’s clinical research activities also include collaborations with research staff at the BC Provincial Renal agency and the iCapture Centre at St. Paul’s Hospital, as well as research groups outside of BC, including the Alberta Kidney Disease Network, CORR, Canadian Transplant Clinical Trials Group, Australian Clinical Trials Group amongst others. Divisional resources for research leverage existing infrastructures, and situated at different physical locations. Staff includes a Research Manager, Ms. Katy Vela, and a number of highly-qualified Research Coordinators. The statistical support team includes dedicated staff time from BCPRA, under the leadership of Ms. Ogjenena Djurdjev, and includes Lee Er, Alexandra Romann, Gabriella Espina and a group of data analysts. Caren Rose, a biostatistician was awarded a KRESCENT fellowship in 2009, which was completed in 2013 obtaining a PhD in Clinical Epidemiology.

CLINICAL ACTIVITIES

The renal services provided by the Division of Nephrology operate within a broad provincial and regional 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.

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. The 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 other geographical jurisdictions. The home hemodialysis program, headed by Dr. Michael Copland, is now one of the largest of its kind in North America. Novel approaches to education and delivery of newer modalities is a focus for the division province wide. Within the province of BC, 3,500 persons receive dialysis, 2000 persons have received a transplant and over 13,000 persons have chronic kidney disease and are followed by nephrologists.

**FUTURE DIRECTIONS**

The Division of Nephrology will continue to grow its education, research and administrative activities, so that the province has a robust infrastructure to support these activities. Ongoing training of fellows in specific content areas (dialysis, transplant, palliative care) and partnerships with BCPRA and BCT will permit expanded opportunities for advanced training to develop the depth and breadth of the division. Formalized succession planning for major education and administrative roles, as well as formalizing the research structure will enhance the functioning of the division. We are developing sustainable advanced education training positions, investing heavily in ‘human resources’ for the future. Working with all the facilities around the province, the UBC Division of nephrology will continue to provide excellent teaching, care and research, in a collaborative manner. We will continue to advocate for excellent patient care, education for physicians and allied health professionals, and the development of interdisciplinary teams of care providers, well trained, to ensure the best outcomes for patients.
Palliative Care:
- Provides relief from pain and other distressing symptoms
- Affirms life and regards dying as a normal process
- Intends neither to hasten nor postpone death
- Integrates the psychological and spiritual aspects of patient care
- Offers a support system to help patients live as actively as possible until death
- Offers a support system to help the family cope during the patient’s illness and in their own bereavement
- Uses a team approach to address the needs of patients and their families, including bereavement counselling, if indicated
- Will enhance quality of life, and may also positively influence the course of illness
- Is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy, and includes those investigations needed to better understand and manage distressing clinical complications.

The definition of Palliative Care according to the World Health Organization has changed to include patients with life-threatening illnesses, not only those with illnesses which are imminently life-limiting. Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual. [World Health Organization 2013].

The Bowtie Model of 21st Century Palliative Care Approach to Care

- Cure
- Control
- Symptom Management and Supportive Care
- Survivorship
- Hospice
- Palliative Care

Dr. Philippa Hawley
Division Head

PALLIATIVE CARE
ADMINISTRATIVE OVERVIEW

The Division of Palliative Care has undergone significant transformation in 2014. Since the withdrawal of Ministry Special Populations funding was discontinued, the Division had only been running the residency program. The departure of the previous Division Head (Dr. Peter Kirk) was in 2 steps, with the incoming head (Dr. Pippa Hawley) covering for him for a 4 month period initially, and then assuming the role formally a few months later, starting in fall of 2013. A program assistant (Ms. Kathryn Inman) was hired part-time to assist the new Head in re-establishing the Division, and she has now also assumed the role of residency program assistant, making her position full-time. The prior residency program assistant Ms. Garnette McCue retired at the end of December. The new Division Office opened on the ground floor of the new St John Hospice on UBC Campus in October 2014, after extensive damage from a flood closed the building for over 9 months shortly after it opened. Fortunately none of the Division’s equipment that had already been installed was damaged. All the expenses of operating and maintaining the building itself are covered by an agreement with Vancouver Coastal through Providence Health at no cost to the Division. The Division has agreed to allow staff from the BC Centre for Palliative Care (C4PC) to use the office space along with Division staff for mutual benefit, as the two institutions shares common goals and need to collaborate on multiple projects.

LEADERSHIP

Pippa Hawley, B.Med., FRCPC, Division Head [0.4FTEs]

Pippa came to Canada from the UK via New Zealand, and became a Palliative Medicine specialist via a roundabout route, including some clinical HIV research in Vancouver in the early ‘90s, 2 Internal Medicine residencies, and a self-directed 2 year fellowship including 6 months working with Professor Geoff Hanks, the first professor of palliative medicine in Bristol, England. Pippa started the BC Cancer Agency’s Pain & Symptom Management/Palliative Care Program (PSMPC) in 1997. Pippa is medical leader of the Provincial PSMPC Program and of the Vancouver team, doing mainly outpatient clinic consultations. Pippa’s research interests include the assessment and treatment of symptoms such as oral mucositis, delirium and constipation, and she is currently carrying out RCTs on management of opioid-induced constipation and lidocaine infusions for cancer-related pain. She is also leading the drive for early integration of palliative care into oncology in BC, and the creation of an academic palliative care network in BC.

Dr. Hawley designed the visual model shown in the introduction to illustrate the new concept of palliative care, which includes survivorship and supportive care. This “Bow Tie model” emphasizes the importance of referral early in the course of illness, and has been presented at national and international conferences. It is changing the way palliative care is perceived by the public and by our medical colleagues. Palliative care and disease management are no longer alternative options, but integrated together. Palliative care is no longer synonymous with hospice or end of life care. Division members are promoting this model to ensure timely referral and to change the negative perception of palliative care as being only for the dying. Dr. Hawley is also represents UBC as a Royal College representative of the National Conjoint Committee on Palliative Care, and is a member of the Subspecialty Working group.

Alexandros Alexiadis MD, EMBA, Director: Residency Program [0.2 FTEs]

Aleco trained as a Family Physician at Dalhousie University and subsequently completed the Enhanced Skills Program in Palliative Medicine at UBC in 2002. An enthusiastic communicator, educator and patient advocate, he became Program Director for the Year of Added Competency in Palliative Care in 2011. His interests lie in system transformation, patient care integration and the interdisciplinary team. Aleco completed his EMBA in Healthcare at Sauder School
of Business in 2013. He is also currently the Medical Director of the Richmond Integrated Hospice Palliative Care Program.

Kathryn Inman, Administrative Assistant [1.0FTEs: 40% for Residency program and 60% other Division activities]

Kathryn Inman joined the Division of Palliative Care in January of 2014. She is Administrative Assistant to Dr. Philippa Hawley. Originally a teacher from the UK, Kathryn comes from a varied and diverse background with a passion for palliative care in BC.

Gillian Fyles, MD, Research Director [Honorary position]

Gillian is the Medical Leader of the Pain and Symptom Management/ Palliative Care Program (PSMPC) at the BC Cancer Agency’s Centre for the Southern Interior (CSI) in Kelowna and the Research Leader – Oncology Palliative Care for the BC Cancer Agency. She is the Co-Medical Director of the Kelowna Palliative Response Team and a Clinical Associate Professor in the Department of Family Practice at the University of British Columbia. Dr. Fyles is the Faculty Research Director and Supervisor for the UBC Special Program in Palliative Medicine. She is a co-investigator on a number of national and provincial research studies and is an active member of the Sociobehavioural Cancer Research Network Palliative Team, led by Dr. Robin Cohen. She is a member of the Executive of the NCIC Clinical Trials Group Symptom Control Committee and the co-leader, with Dr. Vickie Baracos of the Alberta Cancer Board, of the Research Group of the joint Alberta – BC Hospice Palliative Care Partnership. Gillian’s research interests include pain and symptom management and quality of life, the development of cost-effective models of care for palliative patients and their families, and knowledge translation, especially in rural communities.

CLINICAL FACULTY APPOINTMENTS

Since moving its administrative home from Family Practice to Medicine, the Division has been working with the Department of Medicine staff to ensure that all health care professionals involved in teaching Palliative Care to UBC trainees have clinical faculty appointments. Many members were previously appointed to other departments, especially Family Practice, and were more appropriately appointed to Medicine now that their clinical practice is exclusively in Palliative Care. Some members are more appropriately appointed as associate members of the Division because their primary focus of clinical practice is in their base discipline. Applications for new or associate appointments have been initiated for a total of 30 physicians and 7 other health professionals. The “others” include 2 nurses, 1 pharmacist, 1 art therapist, 1 music therapist and 2 counsellors. This is an ongoing activity, but will slow down once everyone is appointed, with then only professionals new to the Division needing to be appointed.

TEACHING

Undergraduate

The medical school curriculum is undergoing complete rewriting, with students anticipated to start the new curriculum in September 2016. Palliative Care is a “Theme” and part of a theme cluster which also comprises

- Addictions
- Global Health
- Indigenous Health
- Geriatrics
- Health Advocacy
There is no theme for pain management, so Dr. Hawley, (Palliative Care theme leader), has been representing this need.

Currently planning has been started for Year 1, to start August 2015. Other years will follow. The national EFPPEC (Educating Future Physicians in Palliative and End of Life Care) competencies form the basis of the UBC Palliative Care Curricular Milestones and Dr. Hawley is leading the Theme with the aim of covering all the competencies (and more) throughout the 4 years. Teaching will be a mix of lectures and collaborative lectures with other themes, small group teaching sessions, independent learning assignments, clinical palliative care rotations, and potential opportunities for novel learning opportunities such as hospice patient “Dignity Therapy” visits and an essay-writing competition.

**Postgraduate Palliative Care Residency Program**

The Year of Added competence is the current Canadian Palliative Care specialty training program. It is the only program which is conjointly accredited by both the Royal College and the College of Family Physicians. The two colleges have directed that the conjoint program will be discontinued and separate programs for each college are to be set up. This has been a long and painful process, but it is anticipated that the new programs will be ready for recruitment in 2016 (CFPC) and 2017 (RCPSC). The CFPC Certificate of Added competence will be a 1-year program designed to provide family physicians with the added skills to integrate palliative care into their practice at a secondary level. The RCPSC program will be a 2-year program designed to provide the skills necessary to practice as a palliative care specialist. Both programs will have a practice eligible route, and there will be an initial mechanism to ensure that founders of the specialty in established clinical and academic practice can attain the qualification without having to do additional residency training.

**Postgraduate Non-Palliative Care Residents**

A common orientation document has been created, with background information about palliative care, learning objectives, a resource list, and a check list which the residents and supervisors can use to ensure that residents have achieved the required competencies during their rotation. The Division has also been expanding the number of residency training sites to ensure all residents have access to a palliative care rotation. This has included a very productive collaboration with the Lions Gate Hospital Foundation, facilitating a new multi-setting training site on the North Shore, and a plan to start offering a palliative care rotation specifically for Emergency Room trainees starting in July 2015. This will be first of its kind in Canada. The Division has also made contact with all physicians offering palliative care residency training rotations throughout the province to provide support in scheduling, orientations, and setting or monitoring of processes for ensuring appropriate teaching compensation. This central scheduling function for the Division allows for more flexibility in allowing residents to access training in different locations, ensuring that the workload for taking trainees is more evenly shared by each service than has previously been the case.

**Continuing Medical Education**

On December 8th 2014 the division held a half-day CME event at the Paetzold Auditorium entitled “Palliative Care Everywhere”. The event was very well-attended by over 250 people from 13 sites in addition to Vancouver, particularly rural family doctors, who work in settings with the least access to specialist palliative care in the province and was therefore a chief target for the Division for this education. We featured a visiting community oncologist and palliative care physician from Terrace speaking on Palliative Care in Oncology, and 6 of the division’s junior faculty presented on Palliative care in the Emergency Room, in Renal Failure, in Heart Failure (including deactivation of implanted defibrillators), in Liver Failure, in Neurological Failure (including in children) and in Respiratory Failure. Evaluations from attendees were very good, with lots of suggestions for future topics. It is intended that this will be an annual event.

**RESEARCH**

Though a few members of the Division do carry out palliative care research, the Division is unable to offer any support to help with research projects, other than the supervision from the Division head, and assistance with connecting prospective researchers with other
resources. Dr. Hawley is supervising the Master’s Thesis of Dr. Amrish Joshi, on aspects of attitudes toward medicinal cannabis, the Master’s Thesis of Ms. Natasha Wakaruk on the impact of a residential care facility’s Advance Care Plans on location of death, and an independent researcher (Ms. Dana Drope) on the factors most important to quality of life of residents of a new hospice within a women’s shelter on the Downtown East Side. A number of Summer Student projects have also been supervised by members of the Division, at least one of which has led to presentation at an international conference, and a publication in an international high-ranked journal (Supportive Care in Cancer).

**FUTURE DIRECTIONS**

The biggest challenge facing the Division is lack of funding. Assuming sufficient funding is found to allow the division to continue to exist, the priorities for the next 5 years are:

- Ensuring the new undergrad curriculum contains sufficient mandatory palliative care content to ensure all graduating medical students have at least a minimum level of competency in palliative care
- Ensuring every medical student has an opportunity to take a palliative care elective at some point in their undergraduate training
- Increasing the quality and quantity of palliative care rotations for all postgraduate medical trainees, especially those entering Family Practice
- Transitioning the conjoint Year of Added Competence Residency program to two streams, for the Royal College and the college of Family Physicians
- Working with the Centre for Palliative Care, the Victoria Hospice Society, the BCHPCA Learning Centre and the Regional Health Authorities to provide quality CME opportunities to allow physicians already in practice to upgrade their palliative care knowledge and skills
- To educate the public about modern palliative care
Dr. Andrea Townson,
Clinical Associate Professor and Division Head

ADMINISTRATION OVERVIEW

The UBC Division of Physical Medicine & Rehabilitation (PM&R) faculty members are involved with patient care, teaching and research. Our Division continues to grow throughout the province as we welcome Division members from the distributed sites for UBC medical school. Outside the Lower Mainland, our Division has members in Kamloops, Kelowna, Nanaimo and Victoria. Dr. Andrea Townson is the Division Head.

Division members teach residents and medical undergraduate students, as well as undergraduate and graduate students in related rehabilitation disciplines.

Research activities focus on disease specific issues related to our patient population, as well as disability issues for the population at large.

In 2014, the Division lost Dr. Theo van Rijn. Dr. van Rijn, former UBC Division Head and Clinical Associate Professor Emeritus, passed away in August 2014.

EDUCATION

All Division members are actively engaged in teaching residents and medical students. Excellence in education is recognized through annual teaching awards.

The following Division members were recognized for their outstanding teaching in 2013:

- Dr. Rhonda Willms: UBC Division of PM&R D. Duncan Murray Award for Excellence in Teaching
- Dr. Dan DeForge: UBC Division of PM&R Theo van Rijn Award for contribution to the Residency Program
- Dr. Ross Davidson, PGY3: UBC Division of PM&R Best Province Wide Rounds for “The Physiatrists guide to Informed consent: Ethical Ideals, Legal Standards and Clinical Realities”
- Dr. Grace Li, PGY4: Kiran van Rijn Centenary Scholarship Award for Outstanding PM&R Resident
- Dr. Chris Grant, PGY5: UBC Division of PM&R Resident Educator Award for excellence in teaching and education in the UBC PMR residency program

The following Division members were recognized for their outstanding teaching in 2014:

- Dr. Heather Underwood: UBC Division of PM&R D. Duncan Murray Award for Excellence in Teaching
- Dr. Andrew Travlos: UBC Division of PM&R Theo van Rijn Award for contribution to the Residency Program
- Dr. Heather Finlayson: UBC Division of PM&R Best Province Wide Rounds for “Sitting is the new smoking: Health risks of sedentary behavior”
- Dr. Ross Davidson, PGY4: Kiran van Rijn Centenary Scholarship Award for Outstanding PM&R Resident
- Dr. Grace Li, PGY5: UBC Division of PM&R Resident Educator Award for excellence in teaching and education in the UBC PMR residency program
Undergraduate

Dr. Herman Lau is the Undergraduate Coordinator for the Division. Division members continue to provide a strong presence during the musculoskeletal (MSK) skills block in 2nd year. In the Okanagan, Year 3 students attend weekly PM&R clinics and Year 3 and 4 students can take elective rotations in PM&R in Vancouver and Victoria.

Division members have been participating in the curriculum renewal process in the undergraduate program.

Postgraduate

The Postgraduate program continues to be successful in terms of competitive recruitment of new residents and in the success of our new graduates. There are 12 residents in the program. In early 2014, Dr. Jennifer Yao stepped down from her role as residency training program director. Her endless commitment to the program was greatly appreciated throughout her time as program director. Dr. Dan DeForge is the new residency training program director and has brought the same enthusiasm and energy as Dr. Yao.

We are continuing to develop our academic half-days with case based learning and active learning strategies. The program strives to provide balanced education for the residents in all aspects of the CanMEDS roles and is preparing for CanMEDS 2015 and the rollout of Competence by Design. Residents are provided with the tools to use technology to enhance their interactive learning.

The use of musculoskeletal ultrasound has become a hot topic in PM&R education and the Division has several members who are leading this initiative. In Vancouver, Drs. Rajiv Reebye, Heather Finlayson, Russell O’Connor, Evan Kwong and Gosia Sudol are all key educational leaders who have undertaken additional training in this area.

The program is also seeking to increase elective and educational opportunities with Division members practicing outside of metro Vancouver. Drs. Koo, Willms, and Reebye continue to be part of the Royal College specialty examination committee for PM&R and Dr. Yao is the vice-chair of the specialty committee for PM&R.

Continuing Professional Development

Dr. Mark Adrian is the Continuing Professional Development (CPD) Coordinator. The Division is committed to continuing professional development. We run weekly province wide rehabilitation rounds and monthly quality improvement and research rounds. Province wide rounds are broadcast to other centres in British Columbia, outside the Lower Mainland. Dr. Jaime Guzman continues to support the residents in the selection and analysis of articles for the scheduled monthly Division Journal Club.

In 2012, a CPD needs assessment survey showed a high satisfaction level for the quality of our rounds amongst the Division members and residents. Goals of future CPD activities include hosting educational workshops in areas such as musculoskeletal ultrasound.

Research

Dr. Andrei Krassioukov is the Division Research Director and Chair of the Division Research Advisory Committee. Dr. Hugh Anton is the GF Strong Research Coordinator. Division members actively participate in regular research education sessions focused on the relevance of research to the professional development needs of the Division. Since 2009, these regular sessions have been interdisciplinary with members from the Departments of Physical Therapy and Occupational Science and Therapy attending on a regular basis. The Division Research Advisory Committee continues to meet and to work on strategic planning for research.

Notable research achievements in 2013 and 2014 are:

- In 2013, Dr. Andrei Krassioukov organized and hosted the 2nd International Symposium on Autonomic Dysfunctions following Spinal Cord Injury
- Dr. Patricia Mills continued with her VCHRI Mentored Clinician Scientist Award for her work on autonomic dysfunction following spinal cord injury
- Dr. Noah Silverberg was named a VCHRI Mentored Clinician Scientist for his work in traumatic brain injury
- The GF Strong Rehab Research Program was designated a research program by VCHRI
Dr. Hugh Anton, in collaboration with the Vancouver Coastal Health Research Institute, continues to organize the highly successful Annual GF Strong Rehab Centre Research Day. The growth in participation and attendance at research day are indicators of the strength of the research occurring in the Division. Best Resident Research Day Awards were presented to Dr. Ross Davidson, PGY 3, and to Dr. Mike Berger, PGY1, in 2013 and 2014, respectively.

**CLINICAL ACTIVITIES**

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 in the Lower Mainland, including GF Strong Rehab Centre, Holy Family Hospital, Eagle Ridge Hospital and Sunny Hill Health Centre.

Members of our Division continue to provide consultation services to Vancouver Acute, St. Paul’s Hospital/Providence Hospitals, as well as hospitals in the Fraser Health Authority, Vancouver Island Health Authority and Interior Health Authority.

The Division also provides regular outreach clinics in Whitehorse, Yukon. In 2013, Dr. Jennifer Yao started providing outreach clinics to Prince George.

The distributed medical school sites provide an opportunity for our Division to build further on our clinical and academic ties throughout the province.

**OTHER ACCOMPLISHMENTS**

In 2013, Drs. Dan DeForge and David Koo launched the HEADways concussion recovery app—a tool for the self-management of concussion symptoms. The app can be downloaded for free from iTunes and Google Play.

Dr. Russell O’Connor was the Chief Medical Officer for Team Canada at the Sochi 2014 Paralympic Games.

Ms. Maria Canvin was the 2014 recipient of the Department of Medicine staff award for excellence for her outstanding contributions to the residency program and the Division.

In November 2014, the Division launched its Twitter account, @UBC_PMR.
Dr. Mark Fitzgerald  
Professor & Division Head

FACULTY MEMBERS

Professors
Bai, Dr. Tony
Duronio, Dr. Vincent
FitzGerald, Dr. J. Mark
Fleetham, Dr. John
Lam, Dr. Stephen
Levy, Dr. Robert
Man, Dr. S. F. Paul
Ostrow, Dr. David
Road, Dr. Jeremy
Ryan, Dr. Francis (Frank)
Sandford, Dr. Andrew
Sin, Dr. Don
Van eeden, Dr. Stephen
Wilcox, Dr. Pearce

Clinical Professors
Elwood, Dr. Kevin
Fera, Dr. Tharwat
Khail, Dr. Nasreen
Ronco, Dr. Juan

Clinical Associate Professors
Ahmed, Dr. Iqbal
Cohen, Dr. Richard
Nador, Dr. Roland
Swiston, Dr. John
Tan-Hogg, Dr. Wan
Wilson, Dr. Jennifer

Clinical Instructors
Chung, Dr. Randy
Janda, Dr. Surinder
Malhotra, Dr. Samir
Olsen, Dr. Sharla-Rae
Van Tongeren, Dr. Lindsay

Honorary Professor
Lertzman, Dr. Morley

Associate Members
Av-Gay, Dr. Yosef
Ayas, Dr. Najib
Brauer, Dr. Michael
Camp, Dr. Patricia
Coxson, Dr. Harvey
Dorscheid, Dr. Delbert
Eaves, Dr. Neil
English, Dr. John
Ervin, Dr. Frank
Guenette, Dr. Jordan
Keshmiri, Dr. Mehdi
Kwan, Dr. Susan
Lowe, Dr. Susan
McCormack, Dr. Grant
Mayo, Dr. John
Reid, Dr.
Roberts, Dr. Clive
Tsang, Dr. John
Walker, Dr. Shannon

Professors (Emeritus)
Abboud, Dr. Raja
Pare, Dr. Peter
Yeung, Dr. Moira

Clinical Professors (Emeritus)
Allen, Dr. Edward
Champion, Dr. Paul
Nakielna, Dr. Edina
(Barbara)

ADMINISTRATION/LEADERSHIP OVERVIEW

The UBC Respiratory Division is primarily located at the major teaching hospitals affiliated with the UBC Faculty of Medicine. The major activities are focused at Vancouver General Hospital, St. Paul’s Hospital and UBC Hospital. In addition, reflecting the distributed medical school there are a now a significant number of community respriologists distributed through the province, affiliated formally as either full or associate members of the Division. Dr. FitzGerald is the Head of the UBC Respiratory Division as well as the VGH Respiratory Division. Dr. Jeremy Road is the Associate Director of the UBC and VGH Respiratory Divisions. Dr. Don Sin is the Head of Providence Health Care (PHC) Respiratory Division, which includes SPH and Dr. Chris Ryerson is the vice-program director of PHC Lung Program. Throughout 2013-14 there was continued development of The Institute for Heart + Lung Health. The UBC Respiratory Division participated in this multi
site lung and heart health framework focusing on education, clinical care and research across multiple sites. A major celebration of this convergence is now the highly successful Institute for Heart + Lung Health FEST which occurs, annually in the spring. This research focused meeting, is preceded by a one day, high profile scientific meeting focusing on lung and heart health and air quality.

Recognition of the Institute’s activities was further confirmed with recognition of lung and heart being one of three priority areas in the faculty of medicine strategic directions document. This in turn has identified heart and lung related research as a priority related area with UBC’s current major capital campaign. In 2014 Dr. Bradley Quon who had previously completed sub specialty training in cystic fibrosis took up a faculty position at SPH.

Ms Margie Bell continues to provide excellent administrative support for the Division in 2013-14, as well as the routine day to day activities of the Division, she also provides administrative support for the Post Graduate training program. There have also been significant additional administrative duties, related to the evolving Institute for Heart + Lung Health and Ms Ale Sumano based at VGH provides additional support for the Institute as well as administrative support for VGH related clinical and research activities. Mrs. Kamila Kalsi provides administrative support for SPH divisional activities. Given the expanded level of activity within the Division and ongoing delegation of administrative duties from the Department of Medicine to the Divisional level further administrative support will be required.

**TEACHING**

**Under-graduate**

Dr. Jeremy Road (VGH) and Dr. Chris Ryerson (SPH) coordinate undergraduate elective programs for medical students. In this regard, the increased size of the medical school has presented new opportunities and challenges. Dr. Richard Cohen has responsibility for the PBL pulmonary block and brings specialty expertise in education to this role as well as his specialty training in Respiratory Medicine.

**Post-graduate**

Dr. Frank Ryan leads the Post Graduate Fellowship Program; review of the fellowship program. He has been ably assisted in this regard by Ms Margie Bell who in addition to her Fellowship activities also provides administrative support for the UBC Respiratory Division. The Program has 6 clinical fellows currently in the program. Many Divisional members are primary or co supervisors of Master’s, PhD and post doctoral students, in a wide range of trainee programs, across many different disciplines.

**Experimental Medicine**

Dr. Vince Duronio is the Director of the Experimental Program, as well as a Divisional member. In total there are 20 post-doctoral fellows, 14 PhD students,10 Master’s students affiliated with the Respiratory Division.

**Continuing Professional Development**

Divisional members contribute extensively on a Provincial, National and International level to professional development. The scope of these contributions is too abundant to list in this brief report but reflects the major productivity of the Division in terms of research activity as outlined below. It also reflects the major contributions members have continued to make in terms of national and international guideline development in many therapeutic areas. For instance, Divisional Head, Mark FitzGerald is the chair of the Global Initiative for Asthma (GINA) Executive and a former chair and current member of its GINA Science Committee GINA is preeminent in setting international evidence based guidelines for the management of asthma. He also completed his CTS related executive activities as President and immediate past President during this period. Don Sin is a member of the international GOLD (Global initiative for Chronic Obstructive Lung Disease) Scientific Committee, which sets international guidelines for the management of chronic obstructive pulmonary disease (COPD). The major Divisional CPD activity is the UBC Respiratory Medicine Update, which again was a very successful meeting, co-sponsored with the BC Lung Association and held on the day following the FEST. It is now co-presented with the UBC Cardiology Division with a combined heart and lung focus. This meeting has expanded significantly in
parallel with the ongoing evolution of the Institute for Heart and Lung Health.

**RESEARCH**

The UBC Division has an international reputation for excellence in research, which spans the 4 CIHR Pillars, from state of the art basic research through to population health. A conservative estimate of dollars generated for lung related research within the Division for 2013-14 is $7,865,777. In 2012, divisional members were instrumental in securing a major infrastructural award from the Canada Foundation for Innovation (CFI) for $6.25 million to enhance our translational research and obtaining a $7.2 million Genome Canada/CIHR Award to discover and implement “personalized medicine” for patients with COPD. Major peer reviewed publications totaled over 234 papers for 2013-14. This high level of productivity builds upon the recognition of UBC as being number 3 globally and number 1 in Canada in COPD related research over the last ten years. Only Imperial College in London and Harvard University in Boston were ahead of UBC. The UBC James Hogg (iCAPTURE) Research Center (JHRC), recently renamed as the Centre for Heart Lung Innovation at SPH continues to provide strong leadership in basic and translational research with a particular focus on airways biology and COPD in particular. There is also excellent clinical research in cystic fibrosis, and a rapidly developing basic and clinical research program in interstitial lung disease. Divisional members based at HLI include Scott Tebutt, Andrew Sandford and Denise Daley, who are focused on understanding genetic determinants of lung disease; Don Sin, Wan Tan and Stephan van Eeden, who study the burden of chronic airway diseases in Canada and evaluate heart and lung interactions and the effects of cigarette smoke and air pollution on the lungs; and Paul Man and Peter Paré are senior clinician scientists, who provide mentorship and leadership for the entire pulmonary research investigators at HLI and throughout the UBC system. An emerging new area of research focus relates to the interaction of HIV infection and the lung with a particular focus on the development of COPD. Basic research also occurs at The Lung Centre at VGH with strong leadership from Drs. Vince Duronio, Nasreen Khalil and Chris Carlsten but its major emphasis continues to be clinical and epidemiologic research focusing on sleep disordered breathing (Drs. Ayas, Fleetham, Ryan), interstitial lung disease (both clinical and basic-Dr. Nasreen Khalil), airways diseases (Drs. Jeremy Road, and FitzGerald), occupational lung diseases (Dr. Chris Carlsten) and tuberculosis (Drs. FitzGerald, Johnston, Elwood and Cook). There is a major collaborative link between VGH based investigators (Drs. Yee, Mayo, Lam, and Beaudoin) and the BC Cancer Agency focusing on better understanding of the pathogenesis, prevention and management of lung cancer. Health outcomes research continues to develop across both SPH and VGH with Dr. FitzGerald collaborating with a number of health outcomes researchers most notably Dr. Carlo Marra and Larry Lynd. Dr. Mohsen Sadatsafavi, further strengthens this program of research with his recruitment as a PhD scientist to the UBC Respiratory Division and is based at VGH and the Centre for Clinical Epidemiology and Evaluation. He has an interest in respiratory health outcomes with a special emphasis on health economics. In his brief time in the Division Mohsen has been particularly productive. Drs. Jay Johnson and Victoria Cook continue the long tradition of TB related research based at the BCCDC. Dr. Johnson was the recent recipient of MSFHR Scholar Award. Dr Jordan Guenette was recruited to St. Paul’s Hospital with a primary appointment in the Department of Physical Therapy. He is an associate member of the UBC Respiratory Division. In addition Dr. Neil Eaves form the UBC Okanagan campus likewise has an associate membership of the Division. Both Jordan and Neil bring strong expertise in assessing the cardio pulmonary response to exercise as well as the interaction of heart and lung in health and disease.

**CLINICAL SERVICES**

The UBC Division provides tertiary and quaternary services in a distributed model with regional and provincial services. The programs based at Vancouver General Hospital and the Lung Centre include: Lung Transplant (Medical Director Dr. Levy), Pulmonary Hypertension (Director Dr. John Swiston), chronic home ventilation program (Director Dr. Jeremy Road), occupational lung diseases (Director Dr. Chris Carlsten) and Tuberculosis Ward (Director Dr. Mark FitzGerald). Other specialty clinics at VGH include COPD (Dr. Road et al), Severe Asthma (Dr. FitzGerald), Interstitial Lung Disease (Dr. Khalil), lung cancer and interventional bronchoscopy service (Dr. Lam and Eve Lea Beaudoin), and pleural diseases (Dr. Ryan). Dr. Eve Lea Beaudoin was recruited in July
2014 to VGH with a special focus on interventional bronchoscopy and has a cross appointment with the Lung Cancer program at the BC Cancer Agency. The Provincial adult cystic fibrosis program is based at St. Paul’s Hospital with Dr. Pearce Wilcox, as the medical director of the program. SPH has specialty clinics for severe asthma (Dr. Del Dorscheid), Pulmonary scleroderma (Dr. Pearce Wilcox et al.), interstitial lung diseases (Dr. Chris Ryerson), and COPD (Drs. Don Sin and Stephan van Eden) and interventional bronchoscopy program led by Dr. T. Shaipanich. There is also a COPD-HIV clinic at SPH to address the growing burden of lung diseases in this population of patients. UBC Hospital is the site, for the regional program in sleep disordered breathing and Dr. Fleetham is the medical director of this program. Both sites provide comprehensive state of the art management across the continuum of care from ambulatory to acute, managing a broad range of respiratory diseases. In addition there is a respiratory consultation service provided to Mount St. Joseph’s Hospital, GF Strong and Pearson Hospitals. Both primary sites continue to develop ambulatory care related resources and expanded pulmonary rehabilitation capacity as well as innovative extension of care into the community best exemplified by an excellent program based at SPH with links to community rehabilitation. There are continued efforts to create better models of chronic disease management with COPD and asthma clinics continuing to evolve based on multi disciplinary models of care. Under the leadership of Dr. Mark FitzGerald members of the Division in partnership with much community based respirologists continues to build upon the successful $2.1 million dollar Lower Mainland Innovation Fund awarded in 2009. This award has allowed for expanded access to spirometry services as well as the development of common clinical pathways and standardization of COPD related services across both Vancouver Coastal and Fraser Health Authorities. More recently Dr. FitzGerald has led a Vancouver wide initiative to improve care post discharge from all hospitals within Vancouver, North Vancouver and Richmond. This project funded within the Patient Focused Funding initiative to improve the management of COPD with multiple site specific teams of recruited to improve the transition from acute to community care with an over arching aim of reducing length of stay and hospitalizations. This highly successful intervention has now evaluated over 1,000 patients and has been associated with an over 30% reduction in COPD hospitalizations. Both sites have Morbidity and Mortality Rounds and have been proactive in including Fellows and trainees in this process. The latter involvement has facilitated many quality assurance projects.

The Division is fortunate to have many community based respirologists, many of whom are graduates of our training program and not only provide excellent clinical care but are vital to the success of the distributed medical school. In addition they have facilitated projects for quality improvement and also the introduction of newer technologies such as endobronchial ultrasound (EBUS).

**FUTURE DIRECTIONS**

The Division faces a number of major challenges but also great opportunities. Dr. Jeremy Hirota was recruited in Jan, 2015 to accelerate basic and translational research in air pollution-related respiratory diseases and Dr. Janice Leung will be appointed as faculty in September, 2015 to accelerate research program into chronic lung diseases in patients with HIV. There will be continued strategic recruitment and training across both main sites to ensure optimal sub specialty coverage especially in areas such as pulmonary hypertension, lung transplantation and interstitial lung disease. The Division also needs to look more generally at manpower needs especially the impact of the abolition of mandatory retirement at UBC on anticipated practice patterns in the future. In addition with the development of new assessment and treatment modalities such as EBUS and bronchial thermoplasty there will be a need to ensure adequate access to well trained clinicians. Physical space and infrastructure, most notably for research space at SPH, will be a major focus on Divisional related activities. Although The Lung Centre at VGH provides excellent clinical and research space, with recent recruitments and a major increase in general clinical research additional, space will be required on this site also.

The development of a virtual Centre for Lung Health (www.centrefoprlunghealth.ca) and it’s further evolution into the Institute for Heart and Lung Health (http://www.heartandlung.ca/) has provided an opportunity for broader strategic planning looking at new opportunities for education, research and clinical care. The ability to leverage off this Province wide
initiative, presents a unique opportunity to maximize funding sources especially of a philanthropic nature, from hospital based Foundations as well as seeking priority within UBC’s broader fund raising campaigns.

SPECIAL HONORS AND AWARDS

Dr. Kevin Elwood, Union NAR Outstanding Service Award, International Union against Tuberculosis and Lung Disease, North American Region

Dr. Chris Carlsten, Canada Research Chair in Occupational and Environmental Lung Disease

Dr. Chris Ryerson, Clinical Scholar, Michael Smith Foundation for Health Research & CIHR New Investigator

Dr. James Johnston, Scholar, Michael Smith Foundation for Health Research

Dr. David Ostrow, Special Service Award, Medical Advisory Council & Medical Staff of Vancouver-Acute Services

Dr. Peter Paré, 2014 recipient of the Bill and Marilyn Webber Lifetime Achievement Award from the UBC Faculty of Medicine.

Dr. Brad Quon, Cystic Fibrosis Canada – UBC Clinician-Scientist Award

Dr. Mark FitzGerald, Fellow of ERS 2014
DIVISIONAL OVERVIEW

The UBC Division of Rheumatology currently consists of 41 members (including associate and Emeritus faculty). Rheumatology consultation services are offered at Vancouver Hospital & Health Sciences Centre, St. Paul’s Hospital, Richmond Hospital, and G.F. Strong Rehabilitation Centre. Ambulatory care services are available at the Mary Pack Arthritis Centre, the Gordon and Leslie Diamond Centre, St. Paul’s Hospital, and in private practices throughout Metro Vancouver, the Okanagan Valley, and Victoria. The Arthritis Society (BC & Yukon Division) provides patient education and resources available through the Learning Centre based at the Mary Pack Arthritis Centre.

Several divisional faculty are members of Arthritis Research Canada (ARC), a multidisciplinary clinical research and clinical trials facility affiliated with both the University of British Columbia and the Vancouver Coastal Health Research Institute. Arthritis Research Canada’s mission is to transform the lives of people living with arthritis through research and engagement. The eighth and ninth annual BC Rheumatology Invitational Education Series (BRIESE) conferences were once again successfully organized by Drs. John Wade, John Watterson, Maziar Badii and Jason Kur.

Dr. Andrew Chalmers, who retired in late 2013, was appointed to the rank of Clinical Professor Emeritus in January, 2014. Dr. Chalmers was a valued rheumatologist in British Columbia, with his long service to the arthritis community, both in the lower mainland and in Northern BC. Dr. Chalmers has had previous roles as the UBC Division Head, Rheumatology and Associate Dean, Faculty of Medicine.

In April, 2014, Dr. Harold S. Robinson, the father of arthritis care in British Columbia, passed away. Dr. Harold S. Robinson studied rheumatology in London, England, and moved to Vancouver in 1951. In 1953 he was named Research Director of the BC Division of CARS (the Canadian Arthritis and Rheumatism Society, now called TAS – The Arthritis Society), and was later appointed Medical Director (1955-83). During these years he was on active staff at VGH and GF Strong, a Clinical Professor in the UBC Department of Medicine, and a frequent speaker at International Conferences. He received many awards: Order of Canada (1993), Queen’s Silver, Gold & Diamond Jubilee Medals, 125th Anniversary Confederation of Canada Medal and the BC Medical Association Silver Medal for Outstanding Service.

In 2013 and 2014 we welcomed several new members to our Division. Dr. Brent Appleton is a general rheumatologist who moved to Vancouver from Washington State. He has a private practice in New Westminster and also covers the rheumatology service at the Royal Columbian Hospital.

Dr. Anick Godin is a general rheumatologist who moved to Kelowna from Sherbrooke, Quebec. She is in private practice and also covers Kelowna General Hospital. Dr. Mitchell Uh is a general rheumatologist and a graduate from the UBC rheumatology program who has opened his private practice in New Westminster. He also covers the consult service at Royal Columbian Hospital and he works at the GF
Strong inpatient arthritis unit. Dr. Natasha Dehghan is another recent graduate from the UBC program. She has recently done additional training in vasculitis in Philadelphia and has returned to VGH and St. Paul’s Hospital where she does general rheumatology and vasculitis.

**TEACHING**

**Undergraduate**

Dr. Rhonda Shuckett is in charge of the Rheumatology Undergraduate Committee and co-chairs the musculoskeletal undergraduate block. She designed the week-long Rheumatology Problem-Based Learning for UBC’s second year Medical and Dental program, and gives about eight lectures to the full class of students. Her week is one of the highest rated weeks in Medicine Year Two.

A number of our faculty provide clinic and teaching time for medical student rotations. In 2013 & 2014, approximately 31 fourth-year medical students from UBC and other universities spent two to four-week electives with St. Paul’s Hospital and Vancouver General Hospital Rheumatology. In addition, several rheumatologists at both hospitals are now working with third-year medical students in their clinics.

**Postgraduate**

Dr. Kam Shojania has been the Program Director for the Postgraduate Training Program for seven years. The faculty provides elective rotations in Rheumatology to residents in Internal Medicine and other specialties from UBC and from other universities. In 2013 and 2014, approximately 165 residents from Internal Medicine, Family Practice, Neurology, Dermatology, Ophthalmology, Physical Medicine and Rehabilitation, and Maternal Fetal Medicine spent elective rotations in one of our two teaching sites, St. Paul’s or Vancouver General, as well as private practices in Metro Vancouver.

The two-year Postgraduate Training Program in Rheumatology continues to be the second-largest clinical rheumatology training centre in Canada. The program typically receives funding from the Ministry of Health for two to four trainees every year, and one or two internationally-funded trainees are considered.

In 2013 and 2014 we welcomed seven Ministry of Health-funded residents and one internationally-funded resident into our program. Active in-patient, ambulatory care and research training is done at Vancouver Acute, St. Paul’s Hospital, G.F. Strong Rehabilitation Centre, the Arthritis Research Centre, and in community practices throughout the Lower Mainland and elsewhere in the province.

The Division offered the “Basic Skills Course for Rheumatology Fellows” for our twelfth and thirteen consecutive years, and the attendance of rheumatology trainees from programs across Canada broke all previous attendance records. This course is designed by Dr. Kam Shojania and involves the majority of the divisional faculty. It continues to be the only course of its kind in Canada, and provides new rheumatology fellows with a comprehensive background in the basic skills required in the academic and clinical practice of rheumatology.

**RESEARCH**

Members of the Division continue to be active in Arthritis Research Canada (ARC), which 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 faculty from the Centre for Health Evaluation and Outcome Studies at St. Paul’s Hospital, and the Centre for Hip Health and Mobility and the Centre for Clinical Epidemiology and Evaluation at Vancouver Acute.

Current research is funded by the Canadian Institutes of Health Research, the Michael Smith Foundation, the Arthritis Society of Canada, Canadian Initiative for Outcomes in Rheumatology and National Institutes of Health (U.S.). Faculty members hold scholarships from the Arthritis Society of Canada, the Canadian Institutes of Health Research, and Canadian Arthritis Network.

In September 2014, the province of British Columbia showed its support for arthritis research by investing $3 million into ARC. ARC has earned international attention as a leading arthritis research group with a strong multi-disciplinary research team. ARC scientists have had tremendous success in obtaining external grant funding to support the many research projects
that are highly relevant to Canadians with arthritis. In one year (July 1 2013 to June 31 2014) ARC Scientists published 90 peer-reviewed papers.

**CLINICAL SERVICES**

The Mary Pack Arthritis Program is a provincial program administered through the Vancouver Coastal Health Authority. Services and programs include drug and disease monitoring clinics, multidisciplinary rehabilitation in the inpatient and outpatient setting, a young adult transition program, a rapid access clinic for diagnosis and initial treatment of rheumatoid arthritis, infusion services for biologic medications, and an inpatient service in the G.F. Strong Rehabilitation centre. In October 2014, Dr. Koehler became the interim director of the MPAP. Prior to this, Dr. Alice Klinkhoff was Medical Director of the Mary Pack Arthritis Program since 1996.

The Mary Pack program coordinates the travel of twelve Division faculty to 25 remote locations in British Columbia, for the Rheumatology Travelling Consultation Service. This program’s goal is to provide education, consultation and treatment services to communities with populations of 5,000 which do not have a rheumatologist accessible within two hours driving time, as well as to numerous isolated First Nations communities. Telehealth initiatives to small communities have been implement and continue to grow. The Mary Pack program also provides physiotherapy, occupational therapy, and access to social workers and vocational, as well as a full spectrum of educational workshops for patients. Funding of all physician services for the Mary Pack Program is through the Ministry of Health APP program.

The Early Rheumatoid Arthritis clinic in the Mary Pack Arthritis Program has a focus on triaging patients to determine early inflammatory arthritis, so that treatment can be started within the “window period”. Ambulatory care clinics offered at St. Paul’s Hospital include the Limited Scleroderma Clinic with Dr. James Dunne, and the Combined Lung Scleroderma Clinic, with Drs. Dunne and Dr. Wilcox, of the Division of Respiratory Medicine. The unique Dermatology And RheumatoTology (DART) clinic continues into its second year, and incorporates both a dermatologist (Dr. Sheila Au) and a rheumatologist (Dr. Kam Shojania) who see referrals with autoimmune rheumatic diseases who have cutaneous disease.

The G.F. Strong Rehabilitation Centre’s Arthritis Unit, was directed by Dr. John Watterson until 2013 when the directorship was passed on to Dr. Raheem Kherani. New additions to the Arthritis Unit include two rheumatologists, Drs. Mitch Uh and Ann-Marie Colwill, and a hospitalist, Dr. Stacy Bhola-Reebye. The GF Strong Arthritis Unit offers post-operative and rehabilitative services to rheumatology patients along with specialized physiotherapy, occupational therapy and vocational counseling. Inpatient services are offered at Vancouver Acute and St. Paul’s Hospital. Dr. Raheem Kherani has developed an outpatient program at GFS in order to facilitate early discharge and to optimize rehabilitation potential.

**ADMINISTRATION**

Dr. Kam Shojania continues as Head and Postgraduate Program Director for UBC Rheumatology, and as of the start of 2013, began his second of two terms.

Dr. Kam Shojania is Head of both the St Paul’s Division and of the Vancouver General Hospital Division. Dr. Raheem Kherani oversees the hospital training program at G.F. Strong Hospital. Since October 2014, Dr. Barry Koehler operates as interim Director of the Mary Pack Arthritis Program, as the search committee works to find a new Director. Dr. John Esdaile continues as the Scientific Director of the Arthritis Research Centre. Miss Tracey Ernst continues as Division and Postgraduate Program Administrator, as well as Administrator for St. Pauls and VGH Rheumatology.

Dr. John Esdaile is on the Executive Committee of the Western Alliance of Rheumatology, along with faculty members from the Universities of Alberta, Calgary, Saskatchewan, and Manitoba, and in May 2014, they held the twelfth annual Western Alliance of
Rheumatology Meeting, which is a collegial gathering of rheumatologist from the Western provinces and focuses on practical clinical and research topics.

Dr. Barry Koehler is Chair of the Canadian Rheumatology Association (CRA) Human Resources Committee. Dr. Shojania sits on the Royal College Specialty Committee. Dr. Diane Lacaille serves on the Canadian Arthritis Network (CAN) Research Management Committee. Dr Alice Klinkhoff is a Board member of The Arthritis Society, B.C. and Yukon. Dr. Robert Offer is on the CRA Board of Directors and the CRA Access to Care Committee. He is also CRA liaison to the AHPA, and is Chair of the BC PharmaCare Arthritis Biologics Committee.

DISTINCTIONS AND AWARDS

In 2013 and 2014 some of our rheumatology trainees received awards. In 2013, Dr. Iman Hemmati was awarded the Gurmej Kaur Dhanda Scholarship for scleroderma research, by the B.C. Scleroderma Society. In 2014, Dr. Hemmati won Best Presentation by a Fellow at the 2014 UBC Internal Medicine Resident Research Day. In 2014, another trainee, Dr. Jon Chan won the Assessment of SpondyloArthritis (ASA) fellowship award.

In February 2013, two members of our division received teaching awards from the Canadian Rheumatology Association: Dr. Kam Shojania received the Canadian Rheumatology Association’s Teacher/Educator award, and Dr. Shahin Jamal received the Canadian Rheumatology Association’s Clinician Teacher Award.

In 2013, Dr. Antonio Avina received the Pan-American League of Associations for Rheumatology’s abstract presentation award, and in 2014 he received the European League Against Rheumatism Best Clinical Science Research Award.

In February 2014, Dr. Diane Lacaille was awarded the Queen Elizabeth II Diamond Jubilee medal in Ottawa. Diane is an Associate Professor at UBC and holds the Mary Pack/Arthritis Society Chair in Rheumatology. She is a Senior Research Scientist at the Arthritis Research Centre of Canada. Diane has two major research foci: 1) Studying the impact of arthritis on employment and preventing work disability. 2) Evaluating the quality of health care services received by people with RA, using a population-based cohort of RA for the province of BC.

In 2014, Dr. Shojania received the 2014 UBC Master Teacher award and the St. Paul’s Hospital Howard Stein Award.

Dr. John Esdaile was recognized by the Institute of Musculoskeletal Health and Arthritis for his distinguished service from 2008 to 2014 as a member of the CIHR Institute Advisory board. And they gave him a clock.
EDUCATION
OFFICE OF EDUCATION

ACCOMPLISHMENTS AND HIGHLIGHTS

During the first two complete years since the Office’s inception in late 2012, the key accomplishments and highlights are:

Faculty Recognition/ Support / Development

- Created “Honor roll for Clinical Teaching Excellence Award” to recognize the top ten percent of Undergraduate and Postgraduate teachers for outpatient and inpatient learning experiences.
- Created and implemented updated Academic Guidelines and Education Teaching Opportunities documents for DOM Fulltime Faculty. Updated the DOM teaching dossier format to align with SPROT process.
- The first cohort of SPROT Peer Reviewers recruited and trained in 2013. An additional three reviewers were recruited and trained in 2014 with the successful completion of eight SPROT reviews.
- Implemented and standardized teaching evaluation reporting for both Undergraduate and Postgraduate programs to Division Heads, Service Chiefs and individual Medicine Faculty members aligned with performance review timelines.
- Collaboration with the Office of Faculty Development leading to a formal needs assessment of our Department members teaching in the ambulatory setting. Two focused Faculty Development workshops sessions were developed and delivered to provide our faculty with teaching tools/resources as we continue to expand our program within VFMP and across the province.
- Meeting one-on-one with those faculty members identified in trainee evaluations as having opportunities for improvement on an as needed basis.

Scholarship Promotion

- Hired first Education Scholar, Stephane Voyer, in 2013. This career track was created to provide individuals with expertise in medical education the protected time needed to participate in education –related scholarship, administration and teaching within the Department.
- Member of Centre for Health Education Scholarship Advisory Committee.
- Presentations at Academic Half Days (IM Core program and subspecialty training programs)
- One-on one meetings with faculty and trainees to discuss scholarship in medical education and facilitate connections with appropriate individuals to help initiate projects
- Regular meetings with the DOM Education Scholar to plan ways to promote educational scholarship at the individual and Department level
Accreditation

- As a member of the Faculty’s Postgraduate Medical Education Internal Review Committee, contributed to the conduct, evaluation and follow-up on internal and external accreditation reviews for each of the Faculty’s residency program
- IM Core postgraduate program: Facilitated committee formation at both VGH and SPH and the monitoring of change outcomes by the Evaluation Studies Unit. Undergraduate program: Ongoing involvement with the completion of the Undergraduate Data Collection Instrument and process as a member of the Medical School Self-study Steering Committee.
- Created a Statement of Educational Principles for the Postgraduate Core Training program and for the Undergraduate Medicine Program approved by their respective education committees. These policies clearly articulate the educational expectations and service/supervision parameters for trainees’ experiences on CTU and subspecialty rotations.

Exploring Synergies with the Education Administration Structure Internally and Externally

- Administrators responsible for the Undergraduate and Postgraduate education programs met quarterly to better understand the program differences and similarities with the objective of identifying opportunities for efficiencies and the sharing of best practices
- On-site visits to each of the distributed campuses to follow-up on issues/opportunities identified on previous visits.
- Explored, in collaboration with the Dean’s Office, the possibility of incorporating an online teaching dossier/education report card similar to the University of Alberta
- Served as faculty-level resource for a number of other Departments (Psychiatry and Pathology) interested in learning from our SPROT experience
- Meetings with the Associate Head Research and Research Coordinator to investigate the integration of research-related educational experiences into postgraduate training programs
OVERVIEW OF THE PROGRAM

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. Dr. Palepu, in her role as director of this program, has been advocating for young investigator participation and interest in research activities. The CIP program is a resource, which permits divisions within the Department of Medicine 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 6 individuals each year. Currently, we have 7 young investigators enrolled in the Faculty CIP program from the Department of Medicine in 2013-14. The five second-year fellows who completed the program: Madeline Sharp (Neurology), Roseanne Yeung (Endocrinology), and Thalia Field (Neurology), Alim Harji (Respirology) and Queenie Duh (Infectious Diseases) and two first-year fellows were: James Lan (Nephrology) and Freda Owasma (Infectious Diseases).

Given the importance of the CIP program to the growth and sustainability of research programs, the director is integrated into key activities of the Department of Medicine. This includes presentations to the Department of Medicine business meetings at both PHC and VGH sites, and ongoing interaction with Division Heads at the UBC Department of Medicine Division Heads meeting held monthly and at the quarterly Subspecialty Program Directors meetings. She has also presented to the core internal medicine residents early in their academic year to increase awareness of opportunities to pursue a research career through the CIP.

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

CIP GOALS FOR 2013-14

- Prioritizing residents for selection into the core Internal Medicine program who aspire to have research careers and can be accommodated through the Core Internal Medicine and Faculty CIP program.
- Ad hoc meetings with residents and fellows interested in a research career
- Reviewing the applications from trainees in the Department of Medicine to the Faculty of Medicine-wide CIP competition to provide them with early feedback and support.
OVERVIEW OF THE PROGRAM

Experimental Medicine has 176 faculty members registered as potential supervisors in our program, with 120 of them currently supervising our M.Sc. and Ph.D. students.

The program continues to grow and is the largest research-based graduate program at UBC. In 2013, there were 209 students (74 M.Sc. & 145 Ph.D.), 33 of which graduated that year. In 2014, 220 students were registered (71 M.Sc. & 149 Ph.D.), 34 of them graduated that same year. Forty-eight students were newly admitted in 2013 and 57 in 2014.

STUDENT RESEARCH DAYS

Experimental Medicine holds a Student Research Day twice a year in November and June. Each of these events features a keynote speaker and we include a mid-day session aimed at exploring various career options for the students. We have had question and answer sessions featuring panelists with careers in academia, the private sector, research administration and science communication. Each have been well attended and sparked much discussion. At each research day, post-doctoral fellows judge student posters, and the audience members judge the oral presentations, and a number of prizes are awarded for each event.

The following students received awards for best oral presentation and poster presentations during our 2013 & 2014 events: Renee Fougere, Johann Windt, Kathleen Macdonald, Soroush Shakibakho, Ganive Bhinder, Annika Sun, Helen Chen, Natalie Firmino, Kiran Bhullar and Romy Hoeplli in 2014. Eric Pesarchuk, Malihe Poormasjedi, Joanna Triscott, Kimberly Snyder, Aabida Saferali and Ali Farrokh in 2013.

AWARDS

The students in our program are highly successful in obtaining scholarships and awards from numerous sources, some of which are highlighted here.

Vanier

A highlight in 2013 and 2014 was that the Experimental Medicine program was allowed to submit 5 nominations each year to the UBC-wide Vanier Award competition, more than any other UBC program, and many of our nominees were forwarded to the National Competition in Ottawa. The Vanier scholarships are valued at $150,000 each and are paid out over a period of three years. The ExpMed students that received this prestigious award are: Erin Macri, and Sonja Babovic in 2014; and Kirandeep Bhullar, Yuanshen (Rachel) Huang, and Dominika Nackiewicz in 2013.

CIHR Scholarships

CIHR Doctoral Scholarships ($35,000/year for 3 years) were also awarded to the following students: Paul Miller, Amritpal Singh, Eric Druyts, Christopher Laver and Eva (Yee Wah) So.

CIHR Master’s Scholarships were awarded to: Johann Windt, Laura Graziano, Elizaveta Bulaeva and Dan Wu.
The Four Year Fellowship (4YF) provides a $18,000 stipend and a waiver of tuition for 4 years of Ph.D. study. These awards are allocated to each department based on total past funding success in national competitions and the ExpMed program has been allocated 5 awards per year. The five Ph.D. students in 2013 and 2014 who received these awards were: Farshad Babeijandaghi, Lisa Kosicki, Abdul Momin Kazi, Mark Kearns and Marcus Hirsh Allen in 2014. Ganive Bhinder, Christine Eisner, Guilaine Boyce, Jens Vent-Schmidt and Bernard Lo in 2013.

Graduate Student Initiative (GSI) Awards

UBC returns a substantial amount of funds to each graduate program to help support students directly. In 2013, $212,310 and in 2014, $225,713 were allocated among ExpMed students. The majority of these funds are used to support tuition for Ph.D. students in their first 4 years who have not received a major award that pays their tuitions (such as 4YF’s). The ExpMed program committee also decided that some of the funds would be used to support several other merit-based awards.

PUBLICATIONS

Experimental Medicine provides an annual publication award to students that have published a first or second author paper. In 2013, there were 46 students and in 2014, 67 students, who received this award.

ACADEMIC ACHIEVEMENTS

Experimental Medicine also provided students with a $750 award for their academic achievement. Students in the M.Sc. program completing their coursework with an average mark of 90% or higher receive this award – there were a total of 12 students in 2013 and 14 students in 2014 who were eligible.
OVERVIEW OF THE PROGRAM

The Residency Training Program in the Department of Medicine is a provincially distributed program situated at various sites throughout Vancouver and the lower mainland including all major tertiary care facilities as well as a number of allied institutions. In addition the training program makes use of teaching opportunities in non-tertiary care settings around the province. The Program offers a curriculum of education and research that stresses superb patient care as the key to excellent in academic medicine. Trainees proceed under the guidance and supervision of a faculty whose aims and outlook are progressive and innovative.

ACCOMPLISHMENTS AND HIGHLIGHTS

CaRMS

Successfully matched all PGY entry positions in Vancouver and Victoria for Canadian graduates (2013) and for both Canadian and International graduates in 2014.

Accreditation

In general, a very supportive RCPSC Accreditation Report (November 18-20, 2013 site visit) for the core internal medicine program. Continuation of efforts to address the concerns raised in the RCPSC Accreditation Report for the core internal medicine program to achieve full approval during the upcoming Internal and External Reviews including:

- SPH and VGH CTU Redesign: committees at both sites have been struck, with solutions to issues having been implemented/assessed and revised where necessary or in the process of being implemented. Ongoing evaluation of relevant outcomes continues.
- Completion of the PSQ in preparation for the Internal Review scheduled for March 30-31st, 2015.

Curriculum

Academic Half Day Content and Structure:
Under the guidance of Dr. Wendy Cook, the structure and content of the academic half day for the core IM program is being revised. A 3 year curricular map is being developed and many new sessions and formats (small group, interactive...) have already been implemented.

Resident Wellness Initiative:
A series of seminars and educational sessions have been successfully implemented as part of the
academic half day curriculum. A resident wellness committee has also been formed with the task to help sustain and build the existing program.

Direct Observation/Feedback Project: 
Dr’s Stephane Voyer, Rose Hatala and Cary Cuncic successfully obtained a RCPSC Medical Education Research Grant to continue the very popular initial pilot project that paired attending physicians with PGY 1 residents for dedicated observation and feedback/ mentorship.

Changes to the PGY 4 Program: 
Dr. Jane McKay has made significant efforts in updating/revising the clinical and academic structure of the PGY 4 GIM program. These efforts have been very well-received by the residents in the program and were highlighted as a strength of the overall program during the recent RCPSC Accreditation visit.

Resident Orientation/ Preparation for Residency: 
The development of a two week boot camp for incoming PGY1’s is under development for implementation in July, 2015. Focus will be on knowledge and procedural skills to manage patients safely during their first 2 months of residency particularly during the night. Topics will also be matched with weak ACP performance results.

Competency Based Education

Attendance at a special session in June 2014 of the Canadian Association of Internal Medicine Program Directors (CAIMPD) to begin the creation of milestones for Internal Medicine. Additional sessions are scheduled for the first half of 2015 to finalize the milestones and discuss evaluation and assessment of the milestones.

New Executive Team Members ( joining Dr. Roberts, Dr. Cook, Dr. Hatala and Dr. McKay)

Dr. David Shanks hired as the new Simulation Lead- July, 2013.

Dr. Rich Sztramko hired as the new Associate Program Director (Resident Wellness and Quality Improvement)- May, 2014.

Dr. Shane Arishenkoff hired as the new Ultrasound Lead – July 2014.
Report on the Internal Medicine Residency Global Health Program

The International elective program has been in place for 8 years and 62 residents have participated to date as well as 29 faculty visits. There are a number of different elements to this program that have developed since we initiated it in 2007

CLINICAL ELECTIVES

We completed our five year commitment to Donald Fraser Hospital and since 2013 we have been working at the Gulu Regional hospital allied with the Gulu University Medical School in post conflict northern Uganda. We are members of a coalition of universities working in this area- the University of Manchester and MacMaster University through the Uganda-UK alliance and have committed to supporting this program for five years. Our work in Gulu is supporting the clinical care that is provided in the regional hospital that is very under resourced in terms of staff and goods. This provides the residents a chance to understand the impact of poverty on health and well being and learn about diseases that are uncommon in Canada. The residents and faculty are very involved in bedside teaching of 3rd and 5th year medical students from the Gulu University Medical school. There are also Medical officers on the ward who have little organised teaching and they also benefit from the input from the UBC staff.

Feedback from residents and faculty who have worked in Gulu has been overall quite positive although clearly it is a challenging environment to work in. We have done a review of the feedback received from residents regarding the experience of overseas work in this program and applied a CanMeds framework to that. Every competency in CanMeds is impacted but the two that appear the most in the reports are medical expert and advocate. The element that is not captured in this framework is the excitement and passion they feel for the work that they do. When the project started one of the goals was to reignite the compassion and dedication that the trainees had as medical students and that studies suggest gets lost through residency. The quotes and feedback suggest that this project does achieve that goal

QUOTES FROM RESIDENTS

“Overall an extremely valuable experience, one of the most enriching of my medical career to date.”

“This rotation was the best month that I have had during my entire residency”

“Probably one of the most valuable rotations I have had. The learning opportunities were endless. I loved being able to teach the medical students as well as learn so much from them.”

The rotation was rated among the third best rotations in the residency program in 2015 with an overall rating of 4.6 out of 5.

LONGTERM IMPACT ON RESIDENTS

We surveyed the alumni form the program as to whether they were involved in global or northern health or work in marginalised populations. Of 25 responses - 4 have committed a large or full time of their practice to northern or rural practice and 6 to global health. A further 7 have committed some part of their practice to global or northern health or marginalised populations. Approximately 27% of 62 residents and 70 % of respondents are, or were involved, in some way providing medical services to underserviced populations after completing this elective. This is very consistent with the literature. The residents did not change direction because of this experience but felt supported in their passion for global health work and developed mentorship relationships with faculty through this experience.
RESPONSES OF OUR PARTNERS IN GULU

The medical students were surveyed as to how they experienced the UBC staff presence in Gulu. Quotes from medical students in Gulu, April 2015.

“Canadian doctors are good and very lively in teaching and training medical students on the ward and classroom lectures this benefits medical and clinical officer students”
- “Canadian doctors are social and practice team work which is fundamental in medical practice and training future doctors”
- “in presence of Canadian doctors, patients on ward improve quickly, because follow up is adequate plus consistent reviews”

Should we come back?
“yes of course, the benefits are overwhelming”

NEW INITIATIVES IN THE INTERNAL MEDICINE RESIDENTS GLOBAL HEALTH PROGRAM

Research- We have developed an active collaboration with Dr Rich Lester who is working in East Africa and is prepared to partner with our program to offer research electives and support to residents who want to do global health research. Dr Lester has strong research partnerships in Nanyuki in Kenya and some in Gulu. We are hoping to create an East Africa Clinical and Research Collaborative which can be built upon to leverage resources and funding.

Global Health Journal club- This is a resident led learning experience that happens on approximately a monthly basis and is part of the Residents academic half day.

Clinical Global Health Network- Work with the Clinical global health network on developing a modular curriculum so that residents can complete a modular course in global health. These matched with the electives would constitute a global and northern health stream within the residency program without disrupting the residents core curriculum.

Continue to participate actively in the Clinical Global Health Network which is set up to engage programs within the post graduate and undergraduate clinical programs to establish guidelines for electives and global health training at UBC.

Plan to bring trainees from Uganda to Canada for an elective experience – sourcing funds, coordinating and support.

We have no shortage of plans and goals for the future development of the program and remain inspired by the responses of the residents to this program.
OVERVIEW OF THE PROGRAM

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), Southern Medical Program (SMP), and Victoria (Island Medical Program (IMP). Each of the distributed sites have 32 medical students in the Undergraduate Education Program.

ACCOMPLISHMENTS AND HIGHLIGHTS

Ambulatory Program

Expansion of presence at ALC sites with the successful introduction of the Year 4 Ambulatory elective at Richmond General Hospital and Surrey Memorial Hospital. Ambulatory rotations now offered at 5 sites within the VFMP.

Delivery of Faculty Development workshops, in collaboration with the Office of Faculty Development, on teaching tips and how best to integrate students into the clinic setting. The sessions were well attended with very positive feedback.

Curriculum Renewal

Members of the Department of Medicine continue to contribute to this process by participating in working groups (Chairs and Members) and other leadership roles as the focus now shifts to Sub-group committee design re: integration of the specialties (Psychiatry, Medicine, Ambulatory) within the proposed new 16 week block structure.

Revamping of clerkship timing and curriculum content/format to accommodate transitional rotation reduction from 8 weeks to six weeks including Evaluation Studies Unit participation for subsequent assessment of changes and recommendations.
Academic Half Day revised to focus on ward relevant topics delivered by the Chief Medical Residents supported with recorded subspecialty topics and preparation for exam sessions.

Continued workshops with faculty to develop an in-house Multiple Choice Question exam bank to replace the National Board Medicine Exam effective August, 2015. Pilot exam scheduled with Year 4 students for April, 2015.

**Accreditation**

Created and implemented an Observed History, Physical and ECG Interpretation mandatory formative assessment review to strengthen curriculum and meet accreditation standards.

Continuation of efforts to improve student performance feedback with the introduction of encounter cards at Vancouver General Hospital.

Education Activity forms completed to contribute towards curriculum mapping.
DISCIPLINE SITE SPECIFIC LEADERS

ROYAL COLUMBIAN HOSPITAL

Clinical Professor
Dr. Victor Chan

Clinical Associate Professor
Dr. Gerald Da Roza

Clinical Assistant Professor
Dr. Yasemin Arikan
Dr. Ken Atkinson
Dr. Matt Bernard
Dr. Gerardo Carpenito
Dr. Dale Clayton
Dr. Charles Constantine
Dr. Maggie Constantine
Dr. Justin Cheung
Dr. Tabassum Firoz
Dr. Mohamud Karim
Dr. Jen Klinke
Dr. Julie Lee
Dr. Emily Lai
Dr. Cassie Lin
Dr. John MacCarthy
Dr. Samir Malhotra
Dr. Sangita Malhotra
Dr. Caroline Mariano
Dr. Sebouh Matossian
Dr. George Medvedev
Dr. Michael Noble
Dr. Peter O’Connor
Dr. Anne Priestman
Dr. Daniel Schwartz
Dr. David Shu
Dr. Robert Starko
Dr. Shirley Torgn
Dr. Clarissa Wallace
Dr. Sheila Webster
Dr. Chris Wong

Clinical Instructor
Dr. Brent Appleton
Dr. Agnieszka Barts
Dr. Steve Blackie
Dr. Erin Blake
Dr. Anibal Bohorquez
Dr. Melanie Brown
Dr. Preet Chahal
Dr. Jocelyn Chase
Dr. Paul Chin
Dr. Eliott Chum
Dr. Henry Chung
Dr. Randy Chung
Dr. Susan Cooper
Dr. Cori Gabana
Dr. Darin Krygier
Dr. George Lam
Dr. Julian Lee
Dr. Mitchell Lee
Dr. Anson Li
Dr. Nittin Rebye
Dr. Nidhi Sood
Dr. Bradford Strijack
Dr. Mitchell Uh
Dr. Lindsay Van Tongeren
Dr. Nishi Varshney
Dr. Henry Wong
Dr. Shaoyee Yao

In progress
Dr. Vicky Chan
Dr. Myles Horton
Associate Members
Dr. Michael Ramsden
Dr. Marguerite Stolar
Dr. Cathy Flanagan
Dr. Robert Rothwell
DEPARTMENT OVERVIEW

Royal Columbian Hospital serves as a tertiary/quaternary care centre for Fraser Health Authority and is the primary Internal Medicine teaching site within the health authority. The Department of Medicine at Royal Columbian Hospital comprises of 11 divisions: General Medicine, Endocrinology, Respiratory, Gastroenterology, Nephrology, Infectious Diseases, Neurology, Rehabilitation Medicine, Rheumatology, Hematology, Oncology and Geriatrics.

The Department continues to grow. We now have 61 active members who all have appointments or are in process of receiving appointments in the UBC Faculty of Medicine. Many members are directly within or are associated with their respective UBC subspecialty divisions.

Dr. Caroline Mariano has joined the Medical Oncology group. She joins us after completing a geriatric oncology fellowship at the University of North Carolina - Chapel Hill.

Dr. Vicky Chan has joined the Hematology group after completing her fellowship at UBC.

Dr. Nishi Varshney has joined the Geriatric Program. She completed her internal medicine and geriatrics at the University of Toronto.

Dr. David Yik has joined the Gastroenterology division. He brings further expertise in the area of GI Motility disorders.

Dr. Lindsay Van Tongeren joined the Respiratory Division after completing her fellowship at UBC.

Dr. Mitch Uh has joined the Rheumatology Division after completing his fellowship at UBC.

Dr. Myles Horton joined the Neurology Division. His primary interest is in acute stroke.

CLINICAL SERVICES

The Department of Medicine serves as the primary Internal Medicine teaching site for Fraser Health Authority. There is a five team CTU staffed by Internists and sub-specialists that provide 24 hour inpatient coverage and consultative services. We provide support for complex cases throughout the health authority and facilitate transfer of care if necessary. In 2014, a medical consultation service was started under the auspices of the Division of General Medicine. The goal of this service is to provide daily consultative expertise to the various surgical programs and the hospitalist program.

As a department, the Divisions of Gastroenterology, Nephrology, Respiratory and Endocrinology provide 24 hour consultative service to the hospital and the region. Neurology, Infectious Disease, Hematology, Oncology, Rehabilitation Medicine, Rheumatology and Geriatrics provide limited call coverage and week-day consultative service.

We have a number of services on site at RCH including in-centre dialysis, endoscopy, bronchoscopy, outpatient IV therapy and chemotherapy.

Our GI division is the only one in the region that offers EUS endoscopic ultrasound and pancreatic ERCP under the guidance of Dr. Justin Cheung.

The Internal Medicine Outpatient Teaching Clinic provides an internal medicine ambulatory experience for 3rd/4th year medical students from both UBC and other medical schools across Canada. Students rotate through clinics in Geriatrics, Medical Oncology, Rheumatology, Endocrinology, Respiratory, Hypertension, Perioperative Medicine, General Internal Medicine, and Complex Cardiovascular Disease.

TEACHING

Teaching is a primary focus of the department. All new hires have the expectation that teaching will be an important part of their career. The CTU continues to run with 5 full teams comprised of Internal Medicine residents, residents from other training programs and undergraduate medical students both local and international. Formal teaching activities include: morning report, weekly Respiratory rounds, case of the week rounds, weekly Department of Medicine rounds, staff-led physical exam sessions and special lectures on acid-base, ABG interpretation, EKG reading and chest x-rays.
The CTU has had the fortune of having outstanding Chief Residents who all have made lasting and vital contributions for the past year. Heartfelt thanks are extended to Drs. Sina Alipour, Tara Cessford, Jen Samilski, and Carson Chin for their outstanding work in 2013-2014. We are looking forward to having our 2015 chief residents, Drs. Shannon Galway and Kun Huang continue in this tradition of excellence.

The Department provides a variety of sub-specialty electives not only to Internal Medicine residents, but also to fellows, external residents (such as Anesthesia and Family practice) and medical students. The department also provides clinical education for all undergraduate years as organized through Dr. David Shu. Rotations are consistently ranked highly by the Internal Medicine residents for their teaching value. The UBC medical students consistently rank the Internal Medicine Ambulatory rotation at RCH as the highest amongst all the ambulatory sites. The department would like to express their appreciation for the support of Dr. Dale Stogryn and the hard work of Leila Bailey, Anna Esposito, and Kathleen Crowley in the Medical Education office.

Drs. Clarissa Wallace, Dale Clayton, and Samir Malhotra have served as Clinical Advisors in the Alternate Learning Community (ALC) Pilot Program at RCH. 16 students per year have received most of their education at Royal Columbian Hospital and in the surrounding community. Our initial pilot group of 7 students, who started in 2013, has nearly completed their 3rd year.

Dr. Gerald Da Roza won the 2013 Department of Medicine Fay R Dirks Award for Excellence in Teaching. Dr. Jocelyn Chase won the CTU teaching award in 2013 from the RCH Interns. Dr. Matt Bernard was the recipient in 2014. Drs. Clarissa Wallace, Gerald Da Roza, Daniel Schwartz, Dave Yik and Melanie Brown were on the UBC honour roll for clinical teaching excellence.

RESEARCH

Dr. Gerald Da Roza is head of research for Fraser Health Nephrology. In 2013-2014, he has published several papers regarding the use of hyperbranched polyglycerol in peritoneal dialysis.

Dr. Julie Lee, Dr. Agnieszka Barts and Dr. Jen Klinke are involved in a multicentre Canadian randomized clinical trial, the MiTy study. It is looking at the use of metformin during pregnancy in those with type 2 diabetes.

Dr. Caroline Mariano is involved in several projects focusing on oncology in the geriatric population. She has published several articles in oncology including a study of thymoma management and outcomes in BC.

Dr. Anne Priestman is leading the Endocrinology group in 2 phase III industry sponsored trials related to the treatment of diabetes mellitus. She was a primary investigator with the OpT2mize study, recently published in the Lancet.

Dr. David Shu coauthored the FullSTEP Study comparing 2 mealtime insulin strategies in type 2 diabetes.

Dr. Firoz is involved in global maternal health. She has published several papers on hypertension in pregnancy. She was the recipient of a Grand Challenges Canada Stars in Global Health ($100,000) and CIHR Meeting, Planning and Dissemination Grant ($25,000).

ADMINISTRATION

Department members have taken on significant administrative roles both within the hospital as well as the Health Authority as a whole.

Dr. Peter O’Connor
Program Medical Director Older Adult, Fraser Health Authority

Dr. Daniel Schwartz
Program Medical Director Nephrology, Fraser Health Authority

Dr. Gerald Da Roza
Head of Medicine, Royal Columbian Hospital
Division Head, Fraser Health Nephrology
CTU Director, Postgraduate

Dr. David Shu
Division Head, Fraser Health Endocrinology
CTU Director, Undergraduate
FUTURE DIRECTIONS

The Department plans to continue to expand as required to maintain access to clinical services. The goal is to continue to recruit into General Medicine and Geriatric Medicine.

The department will continue to work to optimize the blend of general internists and sub-specialists that cover CTU with a goal to enhance the trainee’s experience and learning. Out of this goal will come concrete steps to improve the procedural teaching available at RCH. We will continually strive to strengthen the already excellent collegial relationship we have with the other Departments such as Emergency Medicine and Surgery and look for additional educational opportunities.
Canada Research Chair for Neuropsychology of Vision and Eye Movements

Dr. Barton serves as Director of the Neuro-ophthalmology Clinic and Education Program, as well as the Human Vision and Eye Movement Laboratory. His research program on object recognition continues to reveal how complex structures like faces are encoded in the human visual system, and has expanded this work to studying visual word representations. His group has recently begun groundbreaking studies on the use of perceptual learning methods to rehabilitate patients suffering from prosopagnosia, the loss of face recognition ability, and to improve reading efficiency in hemianopic patients. The group has also imported psychophysical techniques to the study of neuro-economic decision making in Parkinson’s disease.

Canada Research Chair in Neurodegeneration and Protein Misfolding Diseases

Dr. Cashman was appointed Canada Research Chair in Neurodegeneration and Protein Misfolding Diseases at the University of British Columbia in 2005, and this appointment was renewed in 2011. He studies “protein only” infectivity of prions, driven by template-directed misfolding of the normal cellular prion protein (PrPC) by physical contact with the abnormal, disease-specific prion protein (PrPSc). Template-directed protein misfolding also participates in other neurodegenerative syndromes, including Alzheimer’s disease, amyotrophic lateral sclerosis (ALS), and Parkinson’s disease. Central programs in the lab include the development of immunotherapies for ALS and Alzheimer’s disease, which have been licensed by Biogen-Idec Corp in 2011 and Emergent Biosolutions in 2012, respectively. In 2013 and 2014, the Cashman lab held grants from Brain Canada, ALS Society of Canada, CIHR, Weston Brain Institute, and Industry as well as philanthropic sources. Dr. Cashman has been an author on 11 articles in peer reviewed journals in 2014, including in the Proceedings of the National Academy of Sciences. Dr Cashman has also served as Chief Scientific Officer of Amorfix Life Sciences in Toronto, and Academic Director of the ALS Centre at GF Strong Hospital. He provides teaching and mentoring for neurology train-
ees in the UBC Medical School and Vancouver General Hospital, as well as 6 current graduate students, 2 post-docs and 2 undergraduates in his laboratory.

In the past year, Dr. Conway’s research team has uncovered several previously unrecognized proteolytic and regulatory pathways that challenge decades of dogma. His group has determined that the coagulation enzyme, thrombin, directly cleaves and activates a key complement component, C5, generating previously undescribed, but more potent biologically active protein complexes. Antibodies have been generated that may be useful in monitoring therapies. His team has also determined that the major enzyme that dissolves blood clots also degrades a complement component, the fragments of which facilitate leukocyte clearance of invading pathogens. His group has also uncovered a novel naturally synthesized negative regulator of complement, administration of which shows promise as a novel treatment for age-related macular degeneration, the most common cause of blindness in the developed world.

Innate immunity and coagulation are orchestrated to simultaneously contain wounds by limiting bleeding with clot formation and fighting pathogens, thereby enabling rapid healing. Disease emerges when there is unchecked activation of the innate immune and/or coagulation responses. Excess coagulation and complement activation, the latter a component of the innate immune response, are evident in numerous diseases, including, for example, atherosclerosis, stroke, coronary heart disease, diabetes, organ ischemia-reperfusion, the metabolic syndrome, and other similarly serious disorders, including for example, age-related macular degeneration and hemolytic-uremic syndrome. With the discovery by several groups, including Dr. Conway’s, that common molecular mechanisms regulate coagulation and inflammation, the last decades have seen major progress in identifying the cellular and molecular links. However, there remain major gaps and new discoveries are urgently needed for the development of novel strategies to prevent and/or treat these diseases.

Dr. Conway continues to hold grants from the Canadian Institutes for Health Research (CHIR), the Canada Foundations for Innovation (CFI), and the Natural Sciences and Engineering Research Council of Canada (NSERC). He is also the recipient of a CSL-Behring Research Chair and is also supported from several industrial partners.
was Associate Professor Pediatrics, and Director of the Program in Neuroethics at the Stanford Center for Biomedical Ethics. She holds affiliate appointments in the UBC School of Population and Public Health, the UBC School of Journalism, and in the Department of Engineering and Computer Sciences at the University of Washington in Seattle, USA.

With the generous support of the Chairs program and other sponsors, Dr. Illes established the National Core for Neuroethics at the University of British Columbia, the only national research resource in the world in the area of neuroethics. Dr. Illes and her team are devoted to conducting research and delivering evidence-based guidance on the ethical translation of discoveries in neuroscience. Their overall goal is to promote brain health and wellness across the diverse people of Canada, and to facilitate the translation of new methods for diagnosis, prediction and treatment of brain diseases across the lifespan, in research, in the clinic, and in the consumer marketplace. Dr. Illes highlights the following selected accomplishments for 2013:

- Election to the Association for the Advancement of Science, Section on Neuroscience.
- Consultation with and recognition by the US Presidential Commission on the Study of Bioethical Issues, on the subject of incidental findings in research, clinical medicine, and the commercial marketplace.
- Ongoing leadership of the International Neuroethics Society, and service to the US-Canada Regional Committee for the International Brain Research Organization (IBRO), Women in World Neuroscience (IBRO), the Stem Cell Network, the Peter Wall Institute of Advanced Studies International Academic Advisory Committee, NeuroDevNet, Inc., and numerous academic UBC committees.
- New grants on the ethical, legal and social implications of stem cell research, and on brain health information in social media.
- Robust, ongoing activity in the areas of neuroimaging and consciousness, cross cultural issues in neurodegeneration and dementia, neurodevelopmental disorders, and neuroscience communication.
- New programs in environmental neuroethics.
and in brain injury with a focus on concussion in youth.

• Major funding from government, provincial and private sources for the international conference Brain Matters! Vancouver: Brain Science and Social Responsibility, to be held in March 2014.


• Major lectures, invited presentations, and conference leadership and participation worldwide.

• Two new books under contract, one on ethics and behavioral neurobiology and the other on the medical, social, and socioeconomic impact off-evidence prescribing of antipsychotics to children.

• Increased engagement of Neurology, Neurosurgery and Psychiatry residents in clinical neuroethics.

• Public outreach, Cafés Neuroéthiques, and frequent appearances and commentary in the press, and on radio and television.

Dr. Illes highlights the following selected accomplishments for 2014:

• Renewal of Canada Research Chair in Neuroethics, with top ranking in all categories by all reviewers.

• Invitation to participate in the CIHR Stage 2 Foundation funding scheme, with scoring success in Stage 1 competition in the top 10 percentile.

• Appointment to the Standing Committee on Ethics, Canadian Institutes of Health Research.

• Ongoing leadership of the International Neuroethics Society, and service to the US-Canada Regional Committee for the International Brain Research Organization (IBRO), Women in World Neuroscience (IBRO), the Stem Cell Network, the Peter Wall Institute of Advanced Studies International Academic Advisory Committee, NeuroDevNet, Inc., and numerous academic UBC committees.

• New grants on the ethical, legal and social implications of stem cell research, and on brain health information in social media.

• Robust, ongoing activity in the areas of neuroimaging and consciousness, cross-cultural issues in neurodegeneration and dementia, neurodevelopmental disorders, and neuroscience communication.

• New programs in environmental neuroethics, and concussion neuroethics

• World class Brain Matters! Vancouver: Brain Science and Social Responsibility, event held in March 2014.

• More than 20 new peer-reviewed; 6 trainees featured in Science in July 2014 for their contributions to a special section on ethics for young scientists.

• Major lectures, invited presentations, and conference leadership and participation worldwide including Sydney, Australia and Paris, France.

• Two new books forthcoming on ethics and behavioral neurobiology [Springer, 2015] and the other on the medical, social, and socioeconomic impact off-evidence prescribing of antipsychotics to children [Elsevier, 2015].

• Successful appointment of new Assistant Professor in Neurology, with a specialization in neuroethics, aging, and online health information, in July 2014.

• Trainees appointed to new faculty positions, and accepted in top choice career, graduate and postgraduate programs.

• Engagement of Neurology, Neurosurgery and Psychiatry residents in clinical neuroethics both in the academic setting and in research.

• Public outreach, Cafés Neuroéthiques, and frequent appearances and commentary in the press, and on radio and television.

The major goals for the upcoming year are to welcome a new junior faculty person to the team, and to continue expand the Core and its contributions to neuroethics worldwide.

Dr. Illes gratefully acknowledges Core faculty, Professor Peter Reiner (Psychiatry) and Professor Emerita Dr. B. Lynn Beattie (Geriatrics), and recognizes Core researchers and trainees, faculty affiliates, distinguished advisors, and collaborators across the UBC campus, Canada and internationally. Dr. Illes’ research and the activities in 2013 and 2014 were made possible by the generous support of the Institute of Neurosciences, Mental Health and Addiction (INMHA) of the Canadian...
Institutes of Health Research (CIHR), the National Institute of Aboriginal Peoples’ Health (CIHR), the Canada Foundation for Innovation (CFI), the British Columbia Knowledge Development Foundation (BCKDF), the National Institutes of Health (NIH/NIMH), the Vancouver Coastal Health Research Institute (VCHRI), the Stem Cell Network (SCN), the Foundation for Ethics and Technology, Genome BC, the Canadian National Centres of Excellence, the North Growth Foundation, and the Dana Foundation.

DR. JOHN SCHRADER

Canada Research Chair Tier I in Immunology

My major accomplishment is the discovery of a universal influenza vaccine that would potentially give lifetime protection against multiple strains of influenza viruses. A pharmaceutical company is developing my discovery and will conduct clinical trials. I also generated a human monoclonal antibody against GM-CSF protein, which may be useful to treat rheumatoid arthritis, multiple sclerosis, cancer and pain. We have increased fundamental knowledge about the human immune system and filed four patent applications on the generation of monoclonal antibodies. My national and international collaborations and ability to leverage over $5 million in research funding were enabled by the Chair’s prestige.

DR. KATE SHANNON

Canada Research Chair in Global Sexual Health and HIV/AIDS

Since receiving a CRC in Global Sexual Health and HIV/AIDS in April 2014, I have continued to be highly productive, including 25 peer-review publications in 2014 as first or senior author, and a lead author paper in the Lancet sex work and HIV series launched at AIDS 2014 in Melbourne. I have continued to support training of graduate and postdoctoral fellows, including supervising/co-supervising 11 graduate students (MSc, MPH, PhD) and 6 postdoctoral fellows in 2014, including two physicians. I continue to expand our 4th year undergraduate medical research elective in Sexual Health and HIV Research. In an effort to ensure translation of this research, I have contributed to over 100 media citations (including 75+ media interviews) in 2014; and organized a press conference based on a publication in British Medical Journal lead authored by my graduate student (Dr. Krusi) for which I am senior author on public health impacts of a new policing policy. This work was shared with all parliamentary leaders. I also organized an academic open letter sent to all MP, signed by over 300 top scientists in Canada and globally in response to C-36, based on peer review evidence by our team and others on policy reform. In 2014, I received two large operating grants – one from US National Institutes of Health renewing a cohort for another five years at 2.5 million (2015-2020) and a new cohort of women living with HIV focused on treatment outcomes, funded by CIHR (2014-2019). Based on the reach and impact of my work at BCCFE and UBC supported by my CRC, in 2014, I was invited to sit on the International AIDS Society Advisory Board for Key Populations and International Association for Physicians in AIDS Care (IAPAC) Guidelines Committee on
In 2013, Expertscape.com, a medical search and ranking website that ranks physicians, clinicians and researchers worldwide using a PubMed-based algorithm, ranked my lab as the leading COPD “expert” in North America and 2nd worldwide, only behind Dr. Peter Barnes of Imperial College. http://news.thoracic.org/december-2013/ats-members-recognized.php and http://www.expertscape.com/ex/copd/p/earth. This recognition is a testament to the hard work, dedication and creativeness of the entire staff working at Pacific Lung Center and the Center for Heart Lung Innovation at St. Paul’s Hospital, who are dedicated to providing new solutions through innovation and research for 3 million Canadians living with COPD. Regrettably, COPD remains the leading cause of hospitalization through emergency department and the only major cause of mortality whose rates continue to rise in Canada. To address this burden, our lab has focused on three major areas of innovation: 1) finding a simple blood test to diagnose and predict exacerbations (or “lung attacks”) in COPD; 2) understanding the fundamental molecular pathways of COPD and 3) reducing the risk of re-admission rates of “frequent flyers” through community outreach and “personalized care”. Our biomarker (blood test) work has been enabled through collaboration with the PROOF (Prevention Of Organ Failure) Center of Excellence and by $7.2 million funding (over 4 years) from Genome Canada/CIHR (and partners). This project is just beginning and we have already generated a list of very promising biomarkers that we will carry forward for validation and clinical implementation over the next few years. Our work on COPD pathophysiology has been enabled through local, national and international collaborations and funding from the US National Institutes of Health. Led by Dr. Avi Spira at Boston University, we have discovered promising novel genes and genetic signatures associated with COPD severity. These genes will be further interrogated to determine whether they control progression of COPD and whether they are modifiable (i.e. druggable) targets in COPD. Towards this end, we are collaborating with investigators at Laval University (Dr. Y. Bossé), Mount Sinai School of Medicine (Dr. K. Hao), Groningen University in the Netherlands (Drs. D. Postma and W. Timens) and University of British Columbia (Dr. P. Paré and J. Hogg) to determine whether these promising genes control COPD progression by altering gene expression (i.e. whether they are expression quantitative trait loci). Moreover, we are collaborating with Drs. J. Wright and A. Churg at UBC to determine whether by altering these genes, we can reduce the risk of COPD using mouse models of emphysema. Our third area of emphasis (the work to reduce re-hospitalizations in COPD) has already produced tangible benefits. With funding from the BC Ministry of Health, we established in 2012 a “Rapid Transition Team” consisting of one physiotherapist, nurse and respiratory therapist, who identify patients admitted to St. Paul’s Hospital with COPD and follows them into the community post-discharge. The team ascertains the most important needs of the patient and provides solutions to meet these needs (i.e. personalized care). By doing this, we have reduced re-hospitalization rate by 30% over 1 year in over 450 patients who are or have been enrolled in the program. Other successes of our work in 2013 include: 1) publication of more than 30 peer reviewed articles and some in the highest impact journals including JAMA, Journal of Clinical Oncology, Lancet Respiratory Medicine, and the American Journal of Respiratory and Critical Care Medicine; 2) training of multiple master’s and PhD students and post-doctoral fellows and transitioning post-doctoral fellows to faculty positions. This latter group includes Dr. Bradley Quon who is now a new faculty member in...
UBC Respiratory Medicine and Drs. Masashi Tsuruta, Hye Yun Park, and Ji Young Park who are faculty members in Japan and Korea, respectively; 3) knowledge translation through publication and dissemination of the international COPD “guidelines” called the GOLD document (GOLD stands for Global initiative for chronic Obstructive Lung Disease) and public forums on COPD and various media interviews and features.

Our major focus in 2014 was to discover novel blood based biomarkers to manage patients with chronic obstructive pulmonary disease (COPD). To this end, we received a major grant from Genome Canada and the Canadian Institutes of Health Research ($7 million over 4 years) to discover and develop blood biomarkers of COPD exacerbation, which is the leading cause hospitalization in Canada, accounting for over 70,000 hospital admissions per year. We are working with scores of collaborators at UBC and across the world to use revolutionary “-omics” technology to identify novel genes and proteins that will predict and diagnose patients with COPD, which in turn will lead to early interventions to abort emergency visits and hospitalizations. In 2014, we discovered a 6 protein panel in the blood that can accurately and robustly diagnose COPD exacerbations. We have tested this 6 protein panel in multiple different groups of patients with COPD in Canada and the US and have shown excellent performance characteristics that are reproducible. In 2015, we will refine this panel, making it more high throughput and cheaper, so it can be implemented clinically.

In 2014, our group in collaboration with investigators in the US and across Canada published a landmark paper in the New England Journal of Medicine demonstrating that simvastatin, a common drug to lower cholesterol, does not prevent COPD exacerbations, contrary to the long-held belief that statins could reduce morbidity in COPD by reducing infection and inflammation. However, while on average simvastatin had no effect on exacerbations, there was a subgroup of patients who did benefit. In 2015, we will explore potential biomarkers to determine which patients with COPD should and should not receive statins and inhaled corticosteroids in COPD. This will enable more personalized therapy for patients with COPD.

In 2014, our group in collaboration with investigators in the US and across Canada published a landmark paper in the New England Journal of Medicine demonstrating that simvastatin, a common drug to lower cholesterol, does not prevent COPD exacerbations, contrary to the long-held belief that statins could reduce morbidity in COPD by reducing infection and inflammation. However, while on average simvastatin had no effect on exacerbations, there was a subgroup of patients who did benefit. In 2015, we will explore potential biomarkers to determine which patients with COPD should and should not receive statins and inhaled corticosteroids in COPD. This will enable more personalized therapy for patients with COPD.

Canada Research Chair Tier 1 in Parkinson’s Disease

Dr. Stoessl was originally appointed a Tier 1 Canada Research Chair in 2000 and successfully renewed his Chair in 2007. Dr. Stoessl is Head of the Division of Neurology and directs the Pacific Parkinson’s Research Centre and National Parkinson Foundation Center of Excellence at UBC. The team’s research program uses functional imaging to study the progression of Parkinson’s disease (PD) and other related disorders, the basis for complications of advanced disease and its treatment, as well as the use of PD as a model to better understand the role of dopamine in the healthy brain. In 2013, team members continued their work on longitudinal studies conducted in asymptomatic members of families with dominantly inherited disease, as part of an international collaboration with investigators from Mayo Clinic Jacksonville, University of Washington, Norway and Japan. These studies have demonstrated abnormal dopamine turnover and release in clinically unaffected mutation carriers, many years prior to expected disease onset, and prior to other functional abnormalities in dopaminergic function. Additionally, the studies demonstrate that the trajectory of dopamine denervation in mutation carriers agrees well with a model derived from patients with established sporadic PD. These observations validate the extrapolated exponential function derived from mathematically modeling the data obtained in established PD, and support the study of asymptomatic mutation carriers to understand the evolution of preclinical disease (and ultimately to assess the effects of disease modifying therapies). PPRC investigators work closely with Dr. Matt Farrer, Canada Excellence in Research Chair in Neurogenetics and Translational Neuroscience, and internationally renowned expert in
In collaboration with investigators in the Departments of Psychiatry and Psychology, PPRC investigators continue to study the basis for depression and impulse control disorders in Parkinson’s. In 2013, the group initiated studies on the benefits of exercise in PD and their mechanistic basis. The group also initiated collaborations on imaging markers to identify which people exposed to minor traumatic brain injury are at increased risk for future neurodegeneration.

In addition to these activities, Dr. Stoessl served on the Editorial Boards of Annals of Neurology, Lancet Neurology, Journal of Parkinson’s Disease, Parkinsonism & Related Disorders and Translational Neurodegeneration and the Clinical Scientific Advisory Board of the National Parkinson Foundation. He chaired the Awards Committee of the Movement Disorders Society, the Mentorship Committee of the Parkinson Study Group and the Centre of Excellence Committee for the National Parkinson Foundation (USA). He sat on the International Executive Committee of the Movement Disorders Society, as a Councilor for the International Association of Parkinsonism & Related Disorders and co-chaired the Steering Committee for the World Parkinson Congress which was held in Montreal in October 2013.

In this past year, as a Tier 1 Canada Research Chair, I made significant contributions to the field of Parkinson’s disease (PD) research. We published several papers on progression of dopaminergic dysfunction and compensatory mechanisms in PD, used PET as a biomarker in genetic forms of PD, demonstrated the importance of the dopamine transporter and increased dopamine turnover to complications of treatment, and studied the effects of manipulating expectation on the placebo effect. The results have been published in high-rank journals, have resulted in numerous invitations to speak at international meetings and have been highlighted in national and international media.

---

Canada Research Chair in Neuroepidemiology and Multiple Sclerosis

Canada has some of the world’s highest rates of multiple sclerosis (MS). Everyday three more Canadians are diagnosed with this devastating disease for which there is no known cure. The brain and spinal cord are attacked by the body’s own immune system, leading to numbness and tingling, severe fatigue, coordination problems and potentially the need for walking aids or a wheelchair. MS is one of the leading causes of disability in young Canadian adults. Despite this, it is not known what drives or influences disease progression in MS. If specific factors could be identified, then this could dramatically improve outcomes for people with MS and perhaps prevent disability from occurring.

The research goals of Dr Helen Tremlett, Canada Research Chair in Neuroepidemiology and Multiple Sclerosis, are to investigate possible underlying factors driving disease progression – from genes to the environment. Dr. Tremlett is also investigating whether the current MS drugs affect disease progression by examining their long-term impact on disability and balancing any beneficial effects against drug safety. Together these initiatives will lead to a more individualized approach to care in MS. A core component of this program focuses on bringing together, for the first time, multiple large health and clinical databases created for over two decades. In addition, experts from a wide range of disciplines, including genomics, environmental geography, epidemiology, drug safety, statistics and neurology will collaborate to form a truly multi-disciplinary approach to MS research. Findings have already been
published in high-impact journals such as the Journal of the American Medical Association (impact factor = 30, 3rd top ranking medical journal worldwide, lead author Afsaneh Shirani). Published in 2012, we found no strong association between exposure to one of the commonly used drugs to treat MS, the beta-interferons, and disability progression. The study provides patients and physicians with more realistic expectations as to the potential long-term benefits of these drugs. This research was selected by the journal for a special press-release and media coverage included CTV and The New York Times. Ultimately, this research aims to improve the health, treatment expectations and outcomes for people living with MS. Dr. Helen Tremlett heads the Pharmacoepidemiology in MS (PiMS) Research group which includes a 15 strong dedicated team of trainees, fellows and post-docs from diverse backgrounds such as pharmacy, medicine, epidemiology, genomics and biostatistics. Highlights from 2013 include 19 papers published or accepted for publication and over 1.5 million dollars in research funding gained from sources such as the US National MS Society, CIHR, and the MS Society of Canada. Dr Tremletts research efforts are also generously funded through the UK MS Trust and the Martha Piper Fund.

1. Investigating the determinants of health related harms amongst street-involved youth resulting in a series of high impact publications that have now been published including three studies that generated substantial media interest and interest among policy makers.

2. I have also been very active studying the treatment of HIV among HIV-infected drug users and have had several high impact publications in this area as well. In 2013, I co-authored 34 studies in peer-reviewed journals from CIHR and US National Institutes of Health funded studies. These findings have been presented at a number of international scientific conferences. In 2013, I co-authored 36 conference contributions.

3. I have also been active designing innovative approaches for addiction treatment and have submitted 3 new randomized clinical trial proposals to CIHR. A fourth trial has been funded through the US National Institutes on Drug Abuse with myself as site PI.

4. I am continually active in developing and increasing opportunities to fill the void in addiction research, education and care. This includes training physicians and scientists in addiction research and addiction medicine. In August 2014, I was instrumental in securing $3 million dollars from the BC Ministry of Health to harness new ways to treat substance dependence and related health concerns in British Columbia. I am confident that by expanding the training of skilled addiction medicine providers and by developing new ways of helping patients, British Columbia will remain a leader in addiction treatment education, research and clinical supports.

5. To continue my dedication to develop innovative approaches for addiction treatment, I successfully secured funding for 5-years from the National Institutes of Health (NIH), National Institute in Drug Abuse (NIDA) to develop an addiction research fellowship. The Canadian Addiction Medicine Research Fellowship is designed to allow addiction medicine physicians to develop the skills required for a career in addiction research by developing and implementing evidence-based prevention and treatment modalities for substance use disorder.

6. Developing international collaborations is also important to my program. I am involved in a number...
of active collaborations with US investigators who are particularly interested in our work in the area of HIV treatment among intravenous drug users. This includes collaborations with investigators at Oregon Health & Science University (PI Dennis McCarty) and investigators at UCSF (PI James Sorensen). I am the site Principal Investigator on their NIDA sponsored clinical trial. This trial is based out of the United States and the University of British Columbia at St. Paul’s Hospital.

7. I successful in receiving funding from the Canadian Institutes of Health Research to develop The British Columbia Centre for Addiction Clinical Trials (BCCACT), which involves the development of a collaborative team of substance misuse researchers, service providers, the affected community and collaborating organizations. This initiative is in its first stages and the funding allows me to identify pertinent research questions along with emerging issues and priorities in substance misuse treatment and prevention, both in British Columbia and nationwide.

8. I regularly supervise medical residents in research. I supervise an elective, which is designed for highly motivated medical/graduate students who are interested in potentially pursuing a career involving epidemiology research or urban primary care. The students I mentor experience hands-on research with urban populations (street youth, injection drug users).

9. I presently hold funding from the Canadian Institutes of Health Research and the US National Institutes of Health through the US National Institutes on Drug Abuse. Through this funding, in 2014, I co-authored 57 peer-reviewed publications in scholarly journals and 23 conference proceedings.

In addition to the above, research accomplishments include a study from the Downtown Eastside looking at patterns of drug use cessation. In addition, a range of studies have examined risk factors for initiation of injection drug use among street-involved youth. As indicated by the enclosed publications, there has also been a range of studies looking at HIV treatment among intravenous drug users.

These past two years, I undertook many strategies to share information about the insights gained through my research with the media and policy makers. This includes dozens of media interviews and meetings with policy makers, community groups and the private sector. This included giving media interviews and organizing meetings with policy makers, community groups and the private sector. I was featured in a Vancouver Sun 3-part series that examined different aspects addiction and treatment, and I regularly speak at public events in order to make my research findings accessible to the public.

I also regularly wrote op-ed articles for the lay media. The most noteworthy example is my op-ed in the Globe and Mail on August 2012 entitled: “Canada should train addiction specialists” which was published while raising $3 million dollars from the private sector to create an addiction medicine training program and based on research regarding the need to train physicians in addiction medicine.

I also published an article in the Journal of the American Medical Association with US National Institutes on Drug Abuse Director Dr. Nora Volkow.

I’m involved in a number of active collaborations with US investigators interested particularly in our work in the area of HIV treatment among intravenous drug users. This includes collaborations with investigators at Case Western University (PI Alan Lavigne) and investigators at UCSF (PI Alex Kral).

I’m regularly involved in the supervision of medical residents in the conduct of research. This elective, which is supervised by myself, is designed for highly motivated medical/graduate students who are interested in potentially pursuing a career involving epidemiology research or urban primary care. Students experience doing hands on research with urban populations (street youth, injection drug users).

I presently hold funding from the Canadian Institutes of Health Research and the US National Institutes of Health through the US National Institutes on Drug Abuse. I have also raised $209,248 from US foundations and $3,000,000 from the private sector in Canada.

I have 80% time protected for research as part of my Canada Research Chair. My remaining time is split between administrative and clinical responsibilities.
Marianne Koerner Chair in Brain Diseases

My research program has continued to function well, with over 16 peer-reviewed articles, 13 research presentations, and 14 students at all stages (high school to post-doc) supervised in the lab. The students received 3 research grants, our lab obtained a new CIHR grant and I was awarded a CRC tier 1 with accompanying CFI grant. The clinical neuro-ophthalmology program that I direct is also successful. We graduated one clinical fellow, who is now studying at the University of Waterloo, and we have two new fellows who will be returning as academic faculty to the University of Ottawa and Université Laval. The program has expanded under my direction, with 2 new clinical faculty beginning this year, Jean Chuo of ophthalmology and Sara Simpson of neurology. I managed to secure funding for one fellowship position for each of the next 5 years. I continue to coordinate the educational program we offer to residents in neurology and ophthalmology, and I believe this to be the strongest such program in the country. I have a strong record of service to the profession, serving as president of the Canadian Neurological Society, as associate editor on several journal boards (PloS ONE, Cortex, Frontiers in Neuroophthalmology), and performing reviews of abstracts and grants for several organizations. I am in demand as a speaker, having given 13 invited talks this year, including one on scientific research on face perception to the Emily Carr College of Art and Design. I gave an address to the behavioural neurology section of the American Academy of Neurology, as a previous recipient of their Norman Geschwind Prize. I was one of 20 leading researchers in alexia invited to a symposium on this disorder in Copenhagen. In clinical education I continue to organize the neuro-ophthalmology course at the Canadian Neurological Sciences Federation meeting, and this year I have also been asked to organize a resident review course in neuro-ophthalmology.

AstraZeneca Chair in Occupational and Environmental Lung Disease

Dr. Carlsten published 13 peer-reviewed papers in 2013, and was the first or last author of 7 of these and 12 peer-reviewed papers in 2014, being the first or last author of 6 of these. He earned several grants including one from the United States Environmental Protection Agency. He continues to be invited to give oral presentations, including a named lecture this year and 5 internationally this year. Dr. Carlsten continued teaching within graduate courses in the School of...
Population and Public Health and School of Medicine. He was the primary supervisor for 5 graduate students and 3 post-docs, several of whom earned notable awards, and he served on committees for several other graduate students. Dr. Carlsten continues to teach medical students, residents and fellows routinely during his regular duties on the Respiratory Medicine service. He continued to serve as the co-Director of Respiratory Medicine Training (directing the experience of residents and medical student that rotate through the VGH Respiratory Service) and to serve as a resource for myriad informal UBC-based requests for my expertise. He was elected to be Chair of the Program Committee for American Thoracic Society’s Environmental and Occupational Health Assembly. Dr. Carlsten volunteered to speak regularly to the media and has peer-reviewed for elite journals extensively. He strives to fulfill and exceed the high expectations incumbent to the Astra-Zeneca Chair in Occupational and Environmental Lung Disease, and is privileged to do so.

In 2013 I published 44 peer-reviewed papers (I was first author on 4; and senior responsible author on 16). In 2014, I published 19 peer-reviewed papers (I was the first author on 2; senior responsible author on 10, collaborator on 7). I hold 7 peer-review grants from national and provincial research agencies ranging from 2012 to 2019, having successfully renewed a Principal Applicant grant and applied for a second one (which was successful) and have more applications in the pipeline. I also have a number of industry funded studies ongoing. I have fulfilled my role as spokesperson for the Heart & Stroke Foundation of BC & Yukon at a number of events, and will continue to do so as and when possible.

The Sauder Family and Heart and Stroke Foundation Chair has enabled me to provide a new direction and academic focus for the UBC Division of Cardiology. The UBC Division of Cardiology is embarking on a dramatic process targeting increasing its commitment to clinical research, and is seeking partnership in cultivating career investigators within the Division. The Division has several substantive initiatives:

1. The formation of the Cardiology Academic Practice Plan (CAPP), wherein Cardiologists have unanimously agreed to contribute clinical earnings to a common fund that will invest in Physician protected time to conduct research. This has launched as of January 2014 in partnership with UBC, the Heart and Stroke Foundation and both hospital foundations.

2. The linked formation of the BC Centre for Improved Cardiovascular Health, a 5-year/5 million dollar donation to the Providence Health Care Foundation to create research infrastructure for knowledge generation and translation into better cardiovascular health for British Columbians. The Providence Health Care Foundation is committed to provide matching dollars or in-kind support to nurture the centre, and perpetuate it.
3. Research café series – a series of research cultivation sessions combining instruction regarding the research process, brainstorming regarding project and program development, and mentoring to link junior faculty with mentors. This has recently transformed into the UBC Division of Cardiology Research Committee, chaired by former UBC Chair of Medicine Professor G. B. John Mancini.

4. Mentoring program – my role has enabled me to ensure that junior faculty has access to resources and mentoring to enhance chances of academic success. There are potential mentors within and beyond the Division membership that can provide constructive mentoring within the right structure. Dr. John Cairns (former UBC Dean) is a senior member of the Cardiology Division, and has championed a formal mentoring program aligning junior faculty with mentors, creating structured guidance for mentors and mentees, and reporting structures to bring function and accountability.

5. The Cardiology Academic Practice Plan (CAPP) will begin January 2014, with 10 Division members receiving support for time protection, linked to 6 Division members applying for peer reviewed grants, and 3 Division members obtaining peer reviewed grants in the last year. For a Division with a modest research track record, these are important steps in strengthening the UBC academic mission.

My role has been both challenging and rewarding since my appointment in the summer of 2012; and I look forward to another rewarding year ahead.

Mary Pack Chair in Arthritis Research

Dr. Diane Lacaille was appointed to the Mary Pack Chair in arthritis research from The Arthritis Society and the University of British Columbia in July 2011. She is a Senior Scientist at the Arthritis Research Centre of Canada, and was recently promoted to Professor at the University of British Columbia. Her research program focuses on two areas:

1) Employment and arthritis:

In previous research, Dr. Lacaille developed and pilot tested a program to help people with inflammatory arthritis deal with employment issues and remain employed. In response to feedback from participants, she then converted the program to an online eLearning program using funds from a CIHR Knowledge Translation and Exchange grant. Using funding from a five year CIHR Operating Grant, she is currently conducting a large randomized controlled trial to evaluate the effectiveness of the program at improving at work-productivity and preventing work disability in people with inflammatory arthritis. This research fills an important unmet need in arthritis health services research and has the potential to reduce the tremendous economic and social burden of RA. In 2014, recruitment continued in BC, for a total of 141 participants recruited to date, and 8 groups having completed the program. Preliminary work for expanding the recruitment to include sites in Alberta and Ontario was completed, such that recruitment in other provinces is expected to being in 2015.

She also continues to collaborate with other Canadian and international researchers on methodological research for the measurement of employment.
outcomes, and is part of the OMERACT initiative to determine a core set of employment measures for RCTs in rheumatic diseases. The group is evaluating instruments that capture limitations in people’s at-work productivity, a concept labelled “presenteeism”. They have also developed and are evaluating an instrument to measure the full spectrum of social participation in valued life activities. In July 2011, along with international collaborators, the team obtained a grant from EULAR for a multicentre study across Europe and North America to evaluate global measures of presenteeism.

2) Quality of care and pharmacoepidemiology research in rheumatoid arthritis:

Dr. Lacaille has assembled a population-based cohort of rheumatoid arthritis (RA) patients in British Columbia, using administrative data from the Ministry of Health. Her research has shown that the majority of RA patients in BC are not receiving the care they need: more than half are not using DMARDs and few are followed by rheumatologists. These results point to the need for educating family physicians and patients about the shift in RA treatment paradigms, and for increased rheumatologist access and manpower. With funds from a Canadian Arthritis Network grant she evaluated the effectiveness of an intervention that provides academic detailing to family physicians in order to improve compliance with current RA guidelines. Family physicians who participated in the study felt that the intervention provided high educational value, and reported improved confidence in managing RA patients. The impact of the intervention at improving adherence to RA treatment guidelines is currently being evaluated using administrative health data from her population based RA cohort. This research is important to people with RA and their health care providers and has potential to improve the quality of care and outcome of RA.

Dr. Lacaille received funding from the Canadian Initiative for Outcomes in Rheumatology Care to develop the Arthritis Health Journal, an online tool that promotes active involvement of people with RA in monitoring their own disease activity. Recommendations emphasize the need for early and aggressive treatment in RA, and the journal aims to facilitate this by providing early warning when targets are not being met. Design and development of the journal was guided by feedback from qualitative interviews with patients and rheumatologists and the online tool was developed in partnership with the Information Technology Department of Vancouver General Hospital. In 2013, development was completed, usability testing was conducted, and a randomized controlled trial was initiated that will assess whether use of the tool will lead to better treatment and health outcomes. In 2014, the waitlist control RCT to assess feasibility, satisfaction and impact on patient’s health care experience was continued. Recruitment was completed, with 95 participants recruited, and follow-up is ongoing.

Dr. Lacaille received CIHR funding to evaluate the impact of RA treatment on co-morbidities, using data from her BC cohort. Dr. Lacaille has demonstrated that biologic agents, expensive but very effective drugs used in RA, reduce the risk of mortality, and that glucocorticosteroids increase the risk of mortality. In 2014, Tim Schmidt, a Masters student under the supervision of Dr. Lacaille, identified that RA is associated with an increased risk of Diabetes Mellitus, and he also evaluated the quality of care for the prevention of cardiovascular disease, which is the main cause of excess death in RA. He demonstrated that despite the increased burden of cardiovascular diseases in RA, adherence to current guidelines for screening for Diabetes Mellitus and hyperlipidemia is suboptimal in RA. To support this research, in 2014, Dr. Lacaille held a CIHR operating grant (Care for RA); and was one of the principal applicants on a team who submitted and successfully obtained a CIHR signature imitative team grant in Inflammation (PRECISION).

Previous research has shown that arthritis is more prevalent and more severe among Canadian First Nations’ (FN) people than in other populations. In collaboration with FN communities in Haida Gwaii and Vancouver Island, Dr. Lacaille is developing a self-management program that will be consistent with the culture, values and preferences of these communities and that will involve family members. To understand the needs of the community, she conducted focus groups and numerous community consultations with people living with arthritis and their family members in order to identify community needs, as well as barriers and facilitators to self-management. In 2013, the content of the program was developed, in active collaboration with partner FN communities. In 2014, with funding from a grant from Vancouver Island Health Authority,
Dr. Lacaille worked in collaboration with partners in KDC and Old Massett Village to integrate information about traditional healing into the program, as this was identified as a priority by people with arthritis and family members in the community who were consulted about their needs and priorities prior to program development. A repository of medicinal plants used for arthritis and a video featuring elders talking about traditional healing practices, were created. The Arthritis Wellness Program will be family-centred, use a holistic approach to health, while being community-driven and culturally-relevant. Pilot testing of the program will be undertaken once content development is completed.

Dr. Lacaille also obtained funding, as principal investigator, from three funding agencies (CIHR- pilot project under PRECISION grant, The Arthritis Society of Canada, and CIORA grant from the Canadian Rheumatology Association) to design and evaluate a case manager model of care for First Nation Peoples to improve the management of arthritis and associated co-morbidities in an integrated and culturally-relevant manner. By providing a model of care responsive to First Nations people’s care needs, we hope to improve the use of health services available in the community, promote the implementation of culturally-relevant patient-centered care plans, increase adherence to treatment recommendations, and facilitate lifestyle changes for the management of arthritis and associated chronic conditions. After a community engagement phase to finalize the role of the case manager, a proof of concept study will evaluate the feasibility, acceptability and impact of the case manager intervention on health care experiences and health behaviors for arthritis and comorbidities. By improving the management of arthritis and other chronic conditions associated with arthritis, this research has the potential to improve health outcomes, prevent complications of arthritis and improve the quality of life of First Nation people living with arthritis.

In previous work, she found that exposure to biologic medications led to a significant reduction in mortality in people with RA. In 2013, she used the same methodology to evaluate the association between exposure to glucocorticoids and the risk of mortality, and found that glucocorticoids significantly increased the risk of mortality in people with RA. These findings have important implications for health policy makers, health care providers and patients.

Eric W. Hamber Chair

The Eric W. Hamber Chair in Medicine is one of the most significant endowments of its kind in Canadian health education history. Established in 1966 by Mrs. Eric W. Hamber as a memorial to her husband, the Hon. Eric W. Hamber, former lieutenant-governor of BC and UBC chancellor, this Chair is the first perpetually endowed and fully supported chair or professorship at UBC. It is a fitting memorial to the late Mr. Hamber, who gave the strongest support as Chancellor of the University to founding of the UBC Faculty of Medicine.

The purpose of the Chair is to support the Department Head. Fully supported endowments of this kind are very important in attracting outstanding medical teachers and researchers by providing financial resources beyond those ordinarily available to the medical school. Outstanding faculty members become magnets for others. This is particularly important as the competition for top teachers and researchers is growing stronger across Canada and around the world.

I was appointed Eric W. Hamber Chair, Department of Medicine on July 1, 2002, and was reappointed on July 1, 2007. I believe that my strength in leadership in an ever changing environment and my ability to be innovative, provide strategic direction and encourage and build collaborative relationships contributes to my success.

I have held peer-review funding from national and provincial research agencies and have an international reputation for studies of diabetes and carbohydrate metabolism in the elderly. I have published over 100 peer-reviewed papers, spoken and written widely in...
my areas of expertise, and have supervised many post-graduate trainees. I have been active in hospital service leadership in a variety of settings and am currently Physician-in-Chief, VGH. I bring broad perspectives of personal achievement in clinical investigation, an intense commitment to resident and student education, and innovative concepts of health service delivery across communities throughout the province.

DR. JULIO S. G. MONTANER

UBC and St. Paul's Hospital Foundation Chair in AIDS Research

Since 1997, the endowed UBC and St. Paul’s Hospital Foundation Chair in AIDS Research has allowed Dr. Montaner to carry out research, which has been at the center of optimizing morbidity and mortality outcomes in BC and around the world. More recently, Dr. Montaner pioneered the development of HIV Treatment as Prevention in BC. The latter has become the cornerstone of the international effort to control HIV and AIDS in the North and the South of the world.

In 1996, Dr. Montaner led one of two international pivotal trials responsible for the establishment of the effectiveness of highly active antiretroviral therapy (HAART). As a result, HAART became the global standard of care for the treatment of HIV infection. HAART has dramatically changed the natural history of HIV disease, from a rapidly fatal illness, to a long-term manageable condition. As a result, life expectancy among HIV-infected patients in BC has increased to over four decades.

Starting in the early 2000’s Dr. Montaner’s research has increasingly focused on the role of expanding coverage with HAART to simultaneously control progression to AIDS and death among HIV infected individuals and to stop the spread of HIV. This strategy is commonly referred to as “HIV Treatment as Prevention” (TasP). Under his leadership, the research team at the BC Centre for Excellence in HIV/AIDS (BC-CfE) has provided compelling evidence regarding the dramatic ability of HAART to decrease HIV transmission in all settings. Of note, BC is the only province seeing a consistent decline in new HIV diagnoses.

Based on the success of our four-year landmark BC-funded pilot project known as Seek and Treat for Optimal Prevention of HIV/AIDS in BC (STOP HIV/AIDS in BC), the BC Government committed about $20M/year to initiate the further provincial expansion of the program on a long-term basis, under the leadership of Dr. Montaner and the BC-CfE team.

TasP continues to be enthusiastically endorsed globally with a formal adoption of the 90-90-90 target by the Secretary General of the United Nations, Mr. Ban Ki-Moon, in September 2014 during a Special Session at UNGASS in New York City, as the pillar of their post Millennium Development Goal for the Global HIV/AIDS Control Strategy. I was appointed as Special Advisor on HIV Therapeutics to the Executive Director of UNAIDS, Michel Sidibe, and continue working with him and his group to expand and continue collaborations with multiple countries that have embraced TasP as a pillar of their national strategy including China, Puerto Rico, Swaziland, Panama, Brazil, France and others. In 2013, the World Health Organization incorporated Treatment as Prevention as the new cornerstone of the global guidelines.

In addition, Dr. Montaner continues to explore exporting the “seek and treat” approach to other therapeutic areas. Immediate target therapeutic areas include Hepatitis B and Hepatitis C. As of April 2013, Dr. Montaner secured $1.5M for one year from the BC Ministry of Health to further develop the “STOP Viral Hepatitis in BC” strategy in collaboration with Dr. Mel Krajden at the BC Centre for Disease Control.

In 2013, Dr. Montaner received the Argentine Senate of the Nation Award, Frederic Newton Gisborne Starr Award from the Canadian Medical Association, and Medal of Honour from the Rx&D Health Research Foundation. He was also the recipient of a honoris causa degree from the University of Buenos Aires. He
received the Distinguished Achievement Award from the UBC Faculty of Medicine as well as recognition in the Quarter Century Club at UBC.

In 2014, I was the recipient of the David Barry HIV Dart Award in recognition of invaluable contributions to the field of HIV drug discovery, as well as being honoured with the induction into the Canadian Medical Hall of Fame and as an Officer to the Order of Canada. The induction ceremonies will take place in 2015. I also received the Exemplary Leadership and Commitment to End AIDS Award by the International Association of HIV Providers of Care as well as the Museum of Vancouver Legacy Award that honours my commitment and contribution to the innovation and vision in the City of Vancouver. I received an honorary fellowship at Douglas College and was listed #10 on the 2014 Vancouver Power 50 list.

Dr. Montaner’s research and academic activities are supported by: the BC Ministry of Health; a National Institute of Drug Abuse (NIDA) grant, at the US National Institutes of Health (NIH); Genome Canada, and Genome BC. He has also received limited financial support from the International AIDS Society, United Nations AIDS Program, World Health Organization, French National Agency for Research on AIDS & Viral Hepatitis (ANRS), UNICEF, MAC AIDS Fund, and Open Society Foundations. He has received grants from Abbvie, Bristol-Myers Squibb, Gilead Sciences, Janssen, Merck and ViiV Healthcare.
PROFESSORSHIPS

DR. SILKE APPEL-CRESSWELL

Pacific Parkinson’s Research Institute Professorship in Parkinson’s Research Endowment

A generous gift from Pacific Parkinson’s Research Institute to the University of British Columbia (UBC) Faculty of Medicine has endowed the Pacific Parkinson’s Research Institute (PPRI) Professorship in Parkinson’s Research. Held since 2010 by Dr. Silke Appel-Cresswell, Assistant Professor in the Division of Neurology, the Professorship is accelerating UBC’s contributions to understanding this complex and debilitating neurodegenerative disease. Dr Appel-Cresswell feels particularly honoured to hold the Professorship named after Marg Meikle, a most inspiring woman and founder of Porridge for Parkinson’s.

At the Pacific Parkinson’s Research Centre (PPRC), she has established a clinical database capturing longitudinal, prospective, standardized clinical data. In collaboration with colleagues at the Centre, she engages in functional and structural imaging (MRI and PET) studies with Drs. Jon Stoessl, Martin McKeown, and Vesna Sossi, and in clinical genetics studies with Dr. Matthew Farrer. Closely related to her clinical work is her long-standing interest in psychosocial aspects of PD, with emergent formal studies in this area such as studies into coping strategies and outcomes, health behaviours, and health care utilization, as well as the associated costs. She aims to advance our understanding of PD to improve diagnosis, treatment, and care today, and to prevent and cure PD in the future.

This year’s launch of the Impact of Parkinson’s Care and Clinical Tracking (IMPACCT) project will be crucial to inform collaborative research by collecting valuable longitudinal clinical data while improving the quality of care for individuals and families living with PD. In addition, data from the IMPACCT project is expected to aid in lobbying government for improved funding of care for individuals living with PD.

The past two years were very productive for Dr. Appel-Cresswell with nine published peer-reviewed papers, one currently submitted, and another five about to be submitted on topics such as cognition, mood, apathy, exercise, and clinical aspects of deep brain stimulation.

Even with her demanding clinical responsibilities and extensive research program, Dr. Appel-Cresswell continues to teach medical students and neurology residents, develop new teaching resources, and deliver talks to other academics and clinicians as well as to individuals living with PD and caregivers. Feedback for these educational activities has been excellent. Notably, she has designed an innovative electronic studying module for the UBC medical school on Parkinson’s disease and movement disorders which in its first year was already very highly rated by the medical students. All of Dr. Appel-Cresswell’s efforts are geared towards improving the diagnosis, treatment and management of PD for patients today, training future physicians and medical staff, and developing ways of preventing and curing this challenging disease in the future.

Her reputation for excellence in research and clinical care continues to grow, as demonstrated by her participation in local, national, and international collaborations. Her research and clinical contributions, combined with her commitment to teaching the next generation of physicians, are undoubtedly leading to improvements in patient care.
Glen-Hillson Professor in Clinical HIV Virology

Dr. Harrigan is the Director of Research Laboratories at the BC Centre for Excellence in HIV/AIDS. For more than a decade, Dr. Harrigan has been a local, national, and international leader in the development of cutting-edge translational research with important implications for the clinical management of HIV. He has contributed extensively to our understanding of HIV drug efficacy and resistance, as well as the human and viral parameters that influence HIV disease progression. His lab has developed and distributed software for improved automated analysis of HIV drug resistance (“ReCall”), which is now being used worldwide. Dr. Harrigan’s research in these areas has played a key role in enabling the significant improvements in quality and duration of life afforded patients by Highly Active Antiretroviral Therapy (HAART). In April 2014, Dr. Harrigan was the recipient of the LifeSciences BC Innovation and Achievement Award. This award is given annually to individuals who have made a significant contribution to the development of British Columbia’s life sciences industry.

His work primarily focuses on HIV drug efficacy, drug resistance, and the human and viral parameters that influence HIV disease progression. At the BC Centre for Excellence in HIV/AIDS, his work has involved investigations using three major cohort studies (VIDUS, VLAS, and Vanguard), as well as the more than four thousand patients in the BC Drug Treatment Program. Research from these cohorts has produced over 271 peer-reviewed papers over the years.

In April of 2013, Genome BC awarded Dr. Harrigan a $5 million HIV/AIDS research grant, aimed at developing an improved HIV drug-resistance test, real-time drug resistance surveillance and better methods for personalizing treatment of HIV based on each patient’s unique DNA. The goal of this research is to develop new personalized tests, based on a patient’s DNA, to guide therapy as well and avoid serious side effects. The two types of tests—viral and human genomic—will help doctors prescribe the best drug cocktail for each patient, one that works well and minimizes side effects that may cause patients to stop treatment.

In April of 2014, Genome BC awarded Dr. Harrigan a $799,600 research grant aimed at developing a simprevir screening assay for hepatitis C therapy. The BC Centre for Excellence has extensive experience developing, validating and implementing screening assays based upon viral and human sequence variation, and the goal of this research is to extend this to screening for simprevir resistance and make access to this testing available to Canadians.

As well as the Glen-Hillson Professor in Clinical HIV Virology, Dr. Harrigan also holds the CIHR-GSK Research Chair in HIV/AIDS at the University of British Columbia, and is a Professor in the Division of AIDS (Faculty of Medicine) at the University of British Columbia.

UBC-Heart and Stroke Foundation Professorship in Women’s Cardiovascular Health

During this calendar year, I assumed the role of Scientific Director, BC Centre for Improved Cardiovascular Health. This provincial centre will focus on the generation and application of evidence to improve cardiovascular care in BC. The Centre has 10 staff, 2 graduate students and one co-op student. An international
Advisory Board and a provincial Executive Committee, with representation from each Health Authority, will provide guidance and support.

I was also successful in obtaining two CIHR grants. As PI, I will evaluate sex differences in cardiac troponins and the impact on care and outcomes; as co-PI I will work with Dr. Mackay to examine ethnicity-based differences in care of ACS patients presenting to the emergency department.

I published 9 peer-reviewed papers in 2013 and was invited to be the guest editor for a special edition of the Canadian Journal of Cardiology that will focus on women and heart disease. The special edition is scheduled for April–May of 2014 and will include 10 papers from invited experts. I was also invited to join the editorial board of Circulation, Cardiovascular Quality and Outcomes, the leading journal in cardiovascular care evaluation.

In 2014 I published 16 peer-reviewed papers and had abstracts accepted and presented at the Canadian Cardiovascular Conference in Vancouver, BC, the American Heart Association conference in Chicago, IL, and at the European Society of Cardiology in Amsterdam, NL. I also contributed to a chapter of a new book entitled, “Making It Better: Gender Transformative Health Promotion”, which was published on November 1st, 2014 by Canadian Scholar’s Press. The book is a collaborative piece that outlines a new approach to and a framework for health promotion for women.

After two years of discussion with the leadership at the Heart and Stroke Foundation of Canada, I have convinced them to convene an Advisory Committee on Gender and Equity. The committee is comprised of national experts in women and cardiovascular disease and will make recommendations to the Heart and Stroke Foundation regarding the importance of examining sex and gender in research funded by the Foundation and reporting outcomes by sex. The committee includes representation from CIHR and will hopefully establish a new benchmark for the inclusion of women in research and the need for sex-specific reporting. This will greatly facilitate research in this area.

In May 2013, I was invited to present to the Health Research Caucus of the Senate on Cardiac Research and Heart Health. The meeting took place on Parliament Hill and was attended by MPs and senators.

Throughout the year of 2014, I continued to play a key role in numerous scholarly endeavors. In July, I was invited to present on the impact of cardiac outcomes research to the National Institute for Cardiac Outcomes (NICOR) in London, UK. I was also a keynote speaker at the Women and Heart Disease CME in Vancouver, BC, as well as at the American Heart Association Scientific Sessions in Chicago, IL. Most notably, I contributed to the Heart and Stroke Foundation of Canada by recommending that all applicants indicate whether or not their study has taken gender into account. This modification has since been adopted into all grant application policies.

In continuing my active service to the scientific community, I became a member of the UBC Cardiology Research Committee and have taken on the role of reviewer for the PHC Innovation & Translational Research Award Review Committee. I have also taken a position within new scholarly committees such as the 3M TAVR Trial Operations Committee and the FFR Select Trial Steering Committee. Additionally, I served as a women’s health research consultant for a Global BC segment in March. I discussed an article on the differences in treatment for men and women who experience heart attacks and highlighted the implications of such differences.

DR. ANDREW D. KRAHN

Paul Brunes UBC Professorship in Heart Rhythm Disorders

The primary focus of the Professorship is research in heart rhythm disorders. This Professorship was created in 2012 and was awarded to me upon my
appointment at UBC in August 2012. The initial appointment is for 5 years, renewable subject to continued funding and a successful review of the Professorship holder’s research and performance relative to the objectives, with a review taking place in the fourth year of the appointment.

The objectives of the Professorship include:

1. Take an active leadership role locally, nationally and internationally in electrophysiology by providing expertise and research credentials in at least one of the following areas as this pertains to the treatment of ventricular tachycardia/fibrillation and/or sudden cardiac death: basic electrophysiology; clinical electrophysiology; clinical trials; innovative device management; device-related clinical trials, or epidemiology.

2. Take a leadership role in research that advances our understanding of the strategies to combat heart rhythm disturbances, particularly in the treatment of ventricular tachycardia/fibrillation and/or sudden cardiac death.

3. Provide mentorship and training to University undergraduate, graduate and postgraduate trainees in the areas of cardiology and cardiac electrophysiology in particular.

4. Support and advance the goals of the Metro Vancouver Heart Rhythm Program and the UBC Division of Cardiology.

In 2013 I published 44 peer-reviewed papers (I was first author on 4; and senior responsible author on 16. These predominantly focus on sudden death and genetics, with additional focus on arrhythmia device management and syncope (fainting). In 2014 I published 19 peer-reviewed papers (I was first author on 2; senior responsible author on 10, collaborator on 7). I hold 7 peer-review grants from national and provincial research agencies ranging from 2012 to 2019, having successfully secured a new Principal Applicant grant with a focus on the most common inherited cause of sudden death (Long QT Syndrome). I also have a number of industry-funded studies ongoing. I have fulfilled my role as spokesperson for the Brunes Professorship at a number of events, and will continue to do so as and when possible. I spoke on the topic of the Chair in France, England, in the United States and in multiple centers in Canada, including several national and international meetings.

I am pleased to lead and host 3 national registries related to inherited causes of sudden death. The database hosting was migrated to UBC in 2014 after my 2012 relocation. This is the research limb of a network of teaching hospital based clinics for family assessment when sudden death is a concern (Canadian Genetic Heart Rhythm Network- www.heartrhythmresearch.ca). We have 6 local trainees from medical students, residents, a Masters student to Cardiologists doing additional research training working on related projects. We have an upstanding staff of 3 research employees who support the program, aligned with our leadership in the provincial BC Inherited Arrhythmia Program (https://sites.google.com/site/bciaprogram/meet-the-bciat-team, http://www.providencehealthcare.org/bc-inherited-arrhythmia-program-bciap, http://www.phsa.ca/health-professionals/referrals/bciap-referrals). I am very proud and grateful to all those who have helped make these achievements possible.

DR. MARTIN MCKEOWN

UBC/PPRI Chair in Parkinson’s Research

This past year has been productive. I am now the Director of the Pacific Parkinson’s Centre, with the associated administrative responsibilities. We have published 7 peer-reviewed journal papers and 7 peer reviewed conference papers. I was a member of the CIHR "Neurosciences A" committee, the Canadian Parkinson’s Society Scientific Advisory Board, and a Principal Investigator for the UBC / Nanyang Research Centre of Excellence in Active Living for the ElderLY (LILY).
In addition to routine clinical teaching in both inpatient and ambulatory settings, I am on the Resident Training Committee for Neurology, and the Research Director for the neurology residents. I supervise a number of Graduate students in Neuroscience & Biomedical Engineering, as well as co-supervise students in Electrical and Computer Engineering.

The UBC/PPRI chair has had significant impact on our research program. This chair is facilitating recruitment of a Junior Faculty member who will broaden our ability to monitor and treat Parkinson’s. Funds from this endowment are also being used to support a PhD student examining brain stimulation as a novel treatment for Parkinson’s Disease. Finally, we are examining novel ways to capture electronic data for enhanced efficiency of providing care to patients with Parkinson’s disease, informing imaging research, and integrating this information with other clinics in the Centre for Brain Health.

**CIHR/GSK Professorship in Chronic Obstructive Pulmonary Disease (COPD)**

Over the past year our laboratory, with the support of the CIHR/GSK Professorship in COPD, has made wide variety of contributions to the better understanding of the pathogenesis of COPD. The broader goal of this Professorship is to address the role of both the local (lung) and the systemic inflammatory response induced by air pollutants, in particular the particulate matter component of air pollution, in the pathogenesis of COPD and how it relates to the downstream cardiovascular disease associated with COPD.

The research is multidisciplinary in nature and research efforts include work at molecular, cellular, organ, intact animal and human levels. There is currently solid evidence that exposure to air pollutions has similar implications for the development and progression of COPD that cigarette smoking. Our landmark paper in “Chest 140(6):1540-1549, 2011”, showed that the amount of particulate matter trapped and retained in the lung in subjects with COPD relates to the severity of the disease as well as the magnitude of exposure to cigarette smoke. This links the persistence of particulate matter in lung tissues with the development and possibly the progression of COPD. The mechanisms how this happen are still unclear but are an area of active research in our laboratory and by other investigators.

The concept of quantifying elemental carbon in lung cells such as airway macrophages as a surrogate marker for magnitude of exposure has been established by our laboratory in animal models (Mukae et al; Phagocytosis of particulate air pollutants by human alveolar macrophages stimulates the bone marrow. Am J Physiol Lung Cell Mol Physiol. 279:L924-31. 2000) and we (Swiston et al Eur Respir J 2008) and other workers (Alexis et al Am J Cell Mol Biol 2006, Brugha et al Am J Resp Crit Care Med 2012) have used this concept to use macrophage carbon loading as a biomarker of exposure to ambient particulate matter. The novelty of using carbon loading of macrophages as a biomarker of exposure is that it also take in account the response of the host to process and ultimately remove these harmful particles from the lung. We predict that this biomarker will be use more in the future to quantify the magnitude of exposure to ambient particulate matter.

To address this issue of the consequences of retained particles in lung tissues we have done a series of animal experiments. To study the potential mechanisms how airspace macrophages process and handle inhaled particles, we have selected to a use a commonly used medication in subjects with cardiovascular disease “statins”. Statins are traditionally used to treat high blood lipids, but these agents are known to have pleiotropic or anti-inflammatory properties and has been shown in epidemiological studies to benefit subjects with airways disease such as COPD and Asthma. In these studies we showed that statins alter the function of airspace macrophages to enhance their ability to process and remove inhaled particles from lung tissues (Miyata R, Bai N, Vincent R, Sin D & van Eeden
SF. Statins Reduce Ambient Particulate Matter (PM10)-Induced Lung Inflammation by Promoting the Clearance of PM10 from Lung Tissues. Chest 1;143(2):452-60, 2013). This interesting and novel observation has significant implications for the contribution of air pollution and cigarette smoke to the development and progression of a variety of lung diseases including COPD. In subsequent studies we have also showed that the statin induced reduction in lung inflammation following exposure to air pollution, also attenuate the downstream systemic inflammatory response (Miyata R, Bai N, Vincent R, Sin DD, Van Eeden SF. Novel properties of statins: suppression of the systemic and bone marrow responses induced by exposure to ambient particulate matter (PM10) air pollution. Am J Physiol Lung Cell Mol Physiol. 303(6):L492-499, 2012) and reduces the effect of this response on the vasculature (Miyata R, Hiraïwa K, Cheng JC, Bai N, Vincent R, Francis GA, Sin DD, Van Eeden SF. Statins attenuate the development of atherosclerosis and endothelial dysfunction induced by exposure to urban particulate matter (PM10). Toxicol & Appl Pharmacol. 2013 Oct 1;272(1):1-11). Currently, ongoing studies explore the potential mechanisms of how statins impact particle clearance in the lung, with the goal of identifying novel pathways that can be therapeutically targeted.

Translational studies is currently ongoing to determine whether subjects that have been on statin treatment prior to lung tissue removal (lobectomy or pneumonectomy for small peripheral tumors) have less carbon loading of airway macrophages to test hypothesis in humans. These studies are done with collaboration with Drs. Don Sin, James C Hogg and Peter Pare. The importance of the local inflammatory response in the lung induced by exposure the inhaled particulate matter and its contribution to the systemic inflammatory response and downstream vascular dysfunction, suggesting that lung disease (such as COPD and pneumonia) significantly contribute to the development and progression of cardiovascular disease. Work on molecular mechanisms that link chronic lung diseases (such as COPD) and cardiovascular disease is ongoing.

Over the past year the St. Paul’s group has continued its work in innovative procedures for structural heart disease. Vancouver has the world’s broadest experience with transcatheter heart valve implantation. First in human procedures have included transarterial and transapical aortic valve implantation, balloon expandable pulmonary valve implantation, device closure for transapical valve implantation, and transcatheter valve implantation in failing surgical valves in all 4 heart valve locations. These techniques have revolutionized the management of heart valve disease. Consequently Vancouver is recognized world wide as a global leader in terms of new transcatheter valve procedures, techniques, and technology.

We continued with our evaluation of new valve procedures, performing the first North American implants of several new types of heart valves, particularly for aortic regurgitation which previously could only be treated with open surgery. We continued to develop new valve implantation and evaluation techniques and strategies. Our high definition recording facilities allow us to record every aspect of our first in human heart valve procedures so that we and others can evaluate how to reproduce successful procedures.

In 2013, we prepared for the first transcatheter mitral valve implants in humans. This culminated in the first ever successful procedure in January 2014. Mitral regurgitation is the commonest valve disease and surgical correction carries significant risks. Consequently this new accomplishment is of global importance as
it is an important landmark which adds to our firsts in transarterial and transapical aortic valve implantation, and valve in valve aortic, mitral, and tricuspid implantation.

Multiple individuals have found opportunities to participate in this success. Jonathon Liepsic has developed a reputation as a global thought leader in transcatheter valve imaging and Sandra Lauck for multidisciplinary heart team program development, Anson Cheung and Jian Ye as innovators in surgical approaches to transcatheter valve procedures, David Wood for reducing the invasiveness of these procedures, and Robert Boone for helping implement our percutaneous mitral repair program.

During 2013 our group published in excess of 30 peer review journal articles and in 2014 over 40 publications, including papers in high impact journals such as Circulation, European Heart Journal, Journal of the American College of Cardiology, and others. We published chapters on Structural Heart interventional procedures and transcatheter valve implantation in several textbooks. We were invited to write a chapter for Braunwald’s Heart Disease, the most prestigious cardiology textbook. A very large number of meeting abstracts were presented and published by a number of members of the group. As a member of the PART-NER trial executive John is involved in the largest ongoing valve research group and is principle investigator of the multicentre European Sapien 3 trial and of the US PARTNER aortic valve-in-valve study. These responsibilities and teaching required ~1/3 of John’s time out of the country.

In 2013 John was awarded an honorary doctorate in science and was convocation speaker at Simon Fraser University. Currently John is Director of the BC Transcatheter Valve Program for Cardiac Services BC and the transcatheter valve program at UBC for both St. Paul’s and Vancouver General Hospitals and director of cardiac catheterization laboratories as well as the interventional cardiology research and fellowship programs at St Paul’s Hospital. Four cardiologists, from Australia and Israel, are enrolled in the two year interventional fellowship program.

We lead the Global Valve-in-Valve registry and the BC Transcatheter Heart Valve Registries. I was personally cited by Thomson Reuters as being among the top 1% of Canadian cardiology researchers and received an award for best grand rounds, as well as outstanding achievement awards from Lifesciences BC and the Canadian Association of Interventional Cardiology.

This June the St Paul’s program will celebrate >1,000 valve implants performed in Vancouver, the world’s first successful mitral valve implants and will host the largest international transcatheter valve meeting with ~1,000 attendees anticipated.
2013

AWARDS & HONOURS

FACULTY

Barton, Jason (Neurology)
CIHR Canada Research Chair: Tier 1 (Up to $200,000 per year for 7 years)

Chapman, Kristine (Neurology)
Donald M. Whitelaw Award for Outstanding Grand Rounds

Connors, Joseph (Medical Oncology)
LifeSciences British Columbia Award: Dr. Don Rix Award for Lifetime Achievement

Daley, Denise (Medicine)
CIHR Canada Research Chair: Tier 2 (Up to $100,000 per year for 5 years)- Renewal- total 10 years

Davies, Janine (Medical Oncology)
Future Leader in Oncology Award Winner

da Roza, Gerald (Nephrology)
Fay R. Dirks Award for Teaching Excellence

DeWitt, Dawn (General Internal Medicine)
Mastership

Eva, Kevin (General Internal Medicine)
Outstanding Achievement Award in the Evaluation of Clinical Competence

John P. Hubbard Award

Appointed as Acting Centre Director (July 1, 2013-June 30, 2014)

Honorary Fellowship

Feldman, Howard (Neurology)
Irma M Parhad Award for Excellence 2013

FitzGerald, J. Mark (Respiratory)
President

FitzGerald, J. Mark (Respiratory)
Chair

Gerrie, Alina (Hematology)
BCCA Translational Research Award

Harrigan, Richard (AIDS)
LifeSciences British Columbia Award for Innovation and Achievement

Harrigan, Richard (AIDS)
CIHR/GSK Research Chair Award

Hatala, Rose (General Internal Medicine)
Distinguished Achievement Award of Excellence in Education

Hatala, Rose (General Internal Medicine)
Master Teacher Award & Howard B. Stein Master Teacher Award (SPH)

Henderson, William (Critical Care)
VCHRI Clinician Scientist award
Humphries, Richard K (Hematology)
Fellowship Award

Huckell, Victor (General Internal Medicine)
Clinical Faculty Award for Career Excellence in Clinical Teaching

Huckell, Victor (Cardiology)
Master Teacher Award

Jamal, Shahin (Rheumatology)
Clinician Teacher/Educator Award

Illes, Judy (Neurology)
Co-chair

Illes, Judy (Neurology)
CRC Tier I

Illes, Judy (Neurology)
Women in World Neuroscience Leadership Award

Kerr, Thomas (AIDS)
Queen’s Diamond Jubilee Medal

Krahn, Andrew (Cardiology)
Donald M. Whitelaw Award for Outstanding Grand Rounds

Lam, Stephen (Respiratory)
UBC Killam Research Prize in the Science Category

Lansdorp, Peter (Hematology)
Fellowship Award

Lee, Agnes (Hematology)
Living with Illness” Award for Excellence in Quality, VTE Team, BC Patient Safety and Quality Council

Levin, Adeera (Nephrology)
Reginald T. Stott Award for Outstanding Contribution to Kidney Patients, Research and Care

Levin, Adeera (Nephrology)
Elected President

Levin, Adeera (Nephrology)
Outstanding Contributions to Canadian Nephrology

Lima, Viviane (AIDS)
New Investigator Salary Award

Montaner, Julio (AIDS)
Distinguished Achievement Award for Outstanding Service to the Community and the University

Montaner, Julio (AIDS)
Frederic Newton Gisborne Starr Award

Montaner, Julio (AIDS)
Distinguished Achievement Award for Outstanding Service to the Community and the University

Montaner, Julio (AIDS)
Senate of the Nation Award

Montaner, Julio (AIDS)
Professor Honoris Causa

Montaner, Julio (AIDS)
Quarter Century Club

Montaner, Julio (AIDS)
Health Research Foundation Medal of Honour

Nantel, Stephen (Hematology)
Larry Collins Award for Committee Service

Poon, Art (AIDS)
New Investigator Award, CHVI Vaccine Discovery & Social Research

Lansdorp, Peter (Hematology)
Fellowship Award

Reebye, Rajiv (Physical Medicine & Rehab)
Dr. Patricia Clugston Memorial Award for Excellence in Teaching

Ronco, Juan (Critical Care)
Clinical Excellence Award

Sehn, Laurie (Medical Oncology)
Associate Editor

Shannon, Kate (AIDS)
Appointed Expert Advisor on the IAS Advisory Group on Key Populations
Shannon, Kate (AIDS)
Appointed Expert Advisor on the Global Commission on HIV and the Law

Shannon, Kate (AIDS)
Appointed Expert Advisor for Guidelines on Key Populations

Shannon, Kate (AIDS)
Distinguished International Guest Speaker: Lancet Editors Meeting, Presentation as Lead Author on Lancet HIV & Sex Work Series

Shannon, Kate (AIDS)
Peter Lougheed New Investigator Award

Shojania, Kamran (Rheumatology)
Canadian Rheumatology Association Clinician-Educator Award

Sin, Don (Respiratory)
CIHR Canada Research Chair in Chronic Obstructive Pulmonary Disease: Tier 1 (Up to $200,000 per year for 7 years)

Stoessl, A. Jonathan (Neurology)
Co-chair

Tan, Chris YH (Neurology)
AIMBN Distinguished Lecture Award

Towle, Angela (Medicine)
Appointed Academic Director for the UBC Learning Exchange

Voyer, Stephane (General Internal Medicine)
Fay R. Dirks Award for Teaching Excellence & Graeme Copland Clinician Teacher Award (SPH)

Webb, John (Cardiology)
UBC Killam Research Prize in the Science Category

Wood, Evan (AIDS)
Queen’s Diamond Jubilee Medal

Wood, Evan (AIDS)
Department of Medicine Research Award

Wood, Evan (AIDS)
UBC President’s Award for Public Education through Media

Wood, Evan (AIDS)
University of Victoria Distinguished Alumni Award

Wood, Evan (AIDS)
Vancouver’s Power 50

Yoshida, Eric (Gastroenterology)
Martin M. Hoffman Award for Excellence in Research

STAFF

Allen, Aleta (Endocrinology)
UBC Department of Medicine Career Excellence Award

Eisner, Michelle (Neurology)
M&P Award of Excellence

Heck, Pat (Respiratory)
CUPE 2950 Award of Excellence

Helm, Jeffrey (Infectious Diseases)
Early Career Excellence
2014

**FACULTY**

**Bernstein, Vicki (Cardiology)**
Woman of Distinction in Health and Wellness

**Brunham, Robert (Infectious Diseases)**
Dr. Don Rix Award for Lifetime Achievement

**Cairns, John (Cardiology)**
Order of British Columbia

**Chen, Luke (Hematology)**
Fay R. Dirks Award for Excellence in Teaching

**Cheung, Winson (Medical Oncology)**
Overall Excellence – Early Career Barton Fellowship Award

**Chi, Kim (Medicine)**
British Columbia Cancer Agency Clinician Research Award

**Davis, Margot (Cardiology)**
Mentored Clinician Scientist Career Development Award

**Dawson, Keith (Endocrinology)**
Prime Minister’s Volunteer Award, Community Leader (B.C. and the North)

**DeWitt, Dawn (General Internal Medicine)**
Governor-elect of the British Columbia Chapter

**Farrell, Laura (Community Internal Medicine)**
Clinical Faculty Award for Excellence in Community Practice Teaching

**Finlayson, Heather (Physical Medicine & Rehabilitation)**
Best Province Wide Rounds Award

**Gelmon, Karen (Medical Oncology)**
Invited Guest Speaker

**Gill, John (Nephrology)**
Organ Donation Leadership Award

**Harrigan, P. Richard (AIDS)**
Research and Mission Award

**Holmes, Cheryl (Critical Care)**
Masters of Health Professions Education 2014 “‘Best Thesis’” Award for “‘Harnessing the Hidden Curriculum in Clinical Clerkship: A Four-Step Reflective Competency Approach’”

**Humphries, Richard K (Hematology)**
Fellowship Award

**Jamal, Shahin (Rheumatology)**
Clinician Teacher/Educator Award

**Krassioukov, Andrei (Physical Medicine & Rehabilitation)**
2 bronze awards for ‘2013 Horizon Interactive Awards’

**Keown, Paul (Nephrology)**
Elected to Senate

**Lam, Stephen (Respiratory)**
Scientific Achievement Award

**Landsberg, David (Nephrology)**
Canadian Society of Transplantation Clinical Achievement Award

**Lee, Agnes (Hematology)**
Martin M. Hoffman Award For Excellence In Research

**Leipsic, Jonathan (Cardiology)**
Faculty Research Award

**Levin, Adeera (Nephrology)**
“Fellow of the Canadian Academy of Health Sciences”
Levin, Adeera (Nephrology)
Awarded Fellowship to the Canadian Academy of Health Sciences

Levy, Robert (Respiratory)
2014: BC Quality Award – Living with Illness, for “Rapid Access to Consultative Expertise initiative”.

MacDonald, Ian (Cardiology)
Clinical Faculty Award for Excellence in Community Practice Teaching

Mariano, Caroline (Medical Oncology)
Invited Presentation

Montaner, Julio (AIDS)
Appointed to Order of Canada

Montaner, Julio (AIDS)
David Barry DART Achievement Award

Montaner, Julio (AIDS)
Douglas College Honorary Fellow

Mountain, Scot (Critical Care)
Clinical Faculty Award for Excellence in Community Practice Teaching

Murray, Melanie (Infectious Diseases)
PHSA+ Individual Award

Ostrow, David (Respirology)
Interim CEO of Fraser Health Authority

Pare, Peter (Respiratory)
Bill and Marilyn Webber Lifetime Achievement Award

Quon, Bradley (Respirology)
UBC Clinician-Scientist Award

Rabkin, Simon (Cardiology)
Distinguished Service Award

Rabkin, Simon (Cardiology)
Silver medal of Service

Rahmani P, upak (Anna) (General Internal Medicine)
Fay R. Dirks Award for Excellence in Teaching

Renouf, Daniel (Medical Oncology)
Co-chair

Ryerson, Chris (Respiratory)
Career Investigator/Scholar Award

Savage, Kerry (Medical Oncology)
Mentor of the Month

Scott, David W (Medical Oncology)
Invited Guest Speaker

Shannon, Kate (AIDS)
New Investigator Award

Shannon, Kate (AIDS)
Career Investigator/Scholar Award

Shannon, Kate (AIDS)
Canada Research Chair-Tier II, Global Sexual Health and HIV/AIDS

Shannon, Kate (AIDS)
Appointed Expert Advisor on the Implementation Guidelines for HIV/STI Prevention, Treatment and Care of Sex Workers

Shannon, Kate (AIDS)
AccolAIDS Award, Social/Political/Community Action

Shannon, Kate (AIDS)
Peter Lougheed New Investigator Award

Shepherd, John (Hematology)
Donald M. Whitelaw Award for Outstanding Grand Rounds Presentation

Simmons, Christine (Medical Oncology)
Chair and Founder

Shojania, Kam (Rheumatology)
Master Teacher Award

Shojania, Kam (Rheumatology)
Howard B. Stein Master Teacher Award

Teal, Philip (Neurology)
Master Teacher Award
Travlos, Andrew (Physical Medicine & Rehabilitation)  
Theo van Rijn Award for Contribution to the PM&R Residency Program

Underwood, Heather (Physical Medicine & Rehabilitation)  
Duncan Murray Award for Excellence in Teaching

Van Eeden, Stephanus (Respiratory Medicine)  
CIHR/GSK: Research Professorship in COPD (2010-15)

Villa, Diego (Medical Oncology)  
Best Oral Presentation

Villa, Diego (Medical Oncology)  
Young Investigators Award

Virani, Sean (Cardiology)  

Webb, John (Cardiology)  
Innovation & Achievement Award

Webb, John (Cardiology)  
Outstanding Achievement Award

Webb, John (Cardiology)  
Donald M. Whitelaw Award for Outstanding Grand Rounds Presentation

Wong, Graham (Cardiology)  
UBC Killam Teaching Prizes

Wood, Evan (AIDS)  
University of Victoria Distinguished Alumni Award

Yoshida, Eric (Gastroenterology)  
Fellow of American Association for the Study of Liver Diseases (FAASLD)

STAFF

Canvin, Maria (Physical Medicine & Rehabilitation)  
Staff Award of Excellence

Golding, Laurie (Department of Medicine Administration Office)  
Early Career Excellence Award

Page 125