THE UNIVERSITY OF BRITISH COLUMBIA
Department of Medicine
Faculty of Medicine
OVERVIEW
CO-ACTING DEPARTMENT HEADS

Diane Lacaille, MD, FRCPC, MHSc
Professor, Division of Rheumatology
Associate Head, Academic Affairs
Co-Acting Head, UBC Department of Medicine

Andrea Townson, MD, FRCPC, MScHPEd
Medical Co-Chair, Regional Rehab Program
Clinical Professor,
Division of Physical Medicine and Rehabilitation
Associate Head, Education
Co-Acting Head, UBC Department of Medicine

Teresa S.M. Tsang, MD, FRCPC, FACC, FASE
Director of Echo Lab, VGH
Professor, Division of Cardiology
Associate Head, Research
Co-Acting Head, UBC Department of Medicine

UBC ASSOCIATE HEADS

- Dr. Diane Lacaille, Associate Head Academic Affairs
- Dr. Andrea Townson, Associate Head Education
- Dr. Teresa Tsang, Associate Head Research

EDUCATIONAL PROGRAM DIRECTORS

- Experimental Medicine - Dr. Vince Duronio, Dr. Laura Sly (as of July 1, 2017), Dr. Tricia Tang (as of June 1, 2018)
- Postgraduate Education Program - Dr. J. Mark Roberts
- Undergraduate Education Program - Dr. Winson Cheung, Dr. Cary Cuncic (as of February 1, 2018)
- Director, Educational Research & Scholarship - Dr. Kevin Eva
- Clinical Faculty Representatives Committee Chair - Dr. Charles Li, Dr. Jasmine Grewal (as of November 1, 2017)

UBC DIVISION HEADS

- AIDS - Dr. Julio Montaner
  Dr. Richard Harrigan (as of May 1, 2017)
- Allergy & Immunology - Dr. Robert Schellenberg
- Cardiology - Dr. Andrew Krahn
- Community Internal Medicine - Dr. Barry Kassen
- Critical Care Medicine - Dr. Najib Ayas
- Endocrinology - Dr. Ehud Ur
  Dr. Marshall Dahl (as of February 1, 2018)
- Gastroenterology - Dr. Robert Enns
- General Internal Medicine - Dr. Anita Palepu
- Geriatric Medicine - Dr. Janet Kow
- Hematology - Dr. Stephen Nantel
- Infectious Diseases - Dr. Peter Phillips
- Medical Oncology - Dr. Caroline Lohrisch
- Nephrology - Dr. Adeera Levin
- Neurology - Dr. Jon Stoessl
- Palliative Care - Dr. Pippa Hawley
- Physical Medicine & Rehabilitation - Dr. Jennifer Yao
- Respiratory Medicine - Dr. Jeremy Road
  Dr. Christopher Carlsten (as of March 1, 2018)
- Rheumatology - Dr. Kamran Shojaian
The Department of Medicine in the Faculty of Medicine at the University of British Columbia aims to provide the highest possible standard of excellence in scholarly activities and service. Our strategic vision and mission emphasize continued advancement in Education, Research, Mentorship, Quality, Innovation, Equity and Diversity, and Fiscal Responsibility.

With over 1,500 faculty members, staff, trainees, and students, the Department of Medicine values open communication, transparency, and equity. The Department of Medicine and its members work together in the discovery of new knowledge that will advance patient care; ensure effective teaching and mentoring of trainees and students; promote both professional and personal fulfillment; and recognizes the efforts and achievements of Department members as they progress in their careers.

What makes the Department of Medicine a world-class department are its members and alumni and their accomplishments as well as the leadership provided by Division Heads, Program Directors, and members of the Executive Committee.

The 2017-2018 annual report highlights achievements across the Department’s eighteen divisions and Administration Office in the areas of research, teaching, and service. We are honoured to be the Co-Acting Heads of the Department of Medicine and would like to take this opportunity to recognize the activities of all department members over the past two years.
In January 2017, Drs. Diane Lacaille, Andrea Townson, and Teresa Tsang were appointed Co-Acting Heads, Department of Medicine, taking over from Dr. Graydon Meneilly who stepped down.

Drs. Lacaille, Townson, and Tsang continue the exemplary leadership of Dr. Meneilly who served as Head, Department of Medicine for an impressive fourteen years starting in July 2002.

As the prior Head, Dr. Meneilly brought leadership to the Department of Medicine and demonstrated an ability to be innovative, provided strategic direction and encouraged and built collaborative relationships with stakeholders. Dr. Meneilly will continue in his roles as Professor in Department of Medicine, Head of the Department of Medicine at Vancouver General Hospital, Physician-in-Chief at Vancouver General Hospital, and Regional Department Head for Vancouver Coastal Health and Providence Health Care.

Dr. Lacaille is a Professor, rheumatologist, and Senior Scientist at the Arthritis Research Centre. Dr. Lacaille also holds the Mary Pack Chair in Arthritis Research and was awarded the Queen Elizabeth II Diamond Jubilee medal in 2013 honouring her significant contributions and achievements.

Dr. Townson is a Clinical Professor, physiatrist, and Medical Co-Chair for the Regional Rehabilitation Program at the Vancouver Coastal Health Authority. Prior to being appointed as Co-Acting Head, Dr. Townson was Head of both the UBC and VGH Division of Physical Medicine and Rehabilitation as well as the Medical Site Lead for GF Strong.

The Department of Medicine recruited Dr. Tsang in 2009 from the Mayo Clinic in Rochester, Minnesota. Dr. Tsang is a Professor, cardiologist, and Director of the Echo Laboratories at both Vancouver General Hospital and UBC Hospital.

In their acting role, Drs. Lacaille, Townson, and Tsang will oversee one of the largest departments at UBC, as well as continue in their roles as Associate Heads of Academic Affairs, Education, and Research respectively.

Dr. Caroline Lohrisch was appointed Head, Division of Medical Oncology in January 2017, taking over from Dr. Karen Gelmon who stepped down as Interim Head.

Dr. Lohrisch is a Clinical Associate Professor and Head of Medical Oncology at the Vancouver Cancer Centre. Dr. Lohrisch specializes in treating breast cancer and is the past Chair of the BCCA Breast Cancer Systemic Therapy Committee. She is an active investigator in clinical research and has mentored residents and fellows. In this role, Dr. Lohrisch will provide leadership to the Division of Medical Oncology.

Dr. Richard Harrigan was appointed Interim Head, Division of AIDS in May 2017, taking over from Dr. Julio Montaner who stepped down.

Dr. Montaner was the inaugural Head, Division of AIDS since the Division of AIDS was first created in 2007. It was the first academic Division of AIDS established in Canada. Dr. Montaner will continue in his roles as Professor in the Department of Medicine and Director of the BC Centre for Excellence in HIV/AIDS. He also continues to hold the Chair in AIDS Research at UBC.

Dr. Harrigan is a Professor and holds the Glen Hillson Professorship in Clinical Virology. Dr. Harrigan has contributed to the understanding of antiviral drug efficacy and resistance, as well as the human and viral parameters that influence HIV disease progression. His research 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 his interim role, Dr. Harrigan will provide leadership to the Division of AIDS.

Dr. Jasmine Grewal was appointed as the Department of Medicine’s Clinical Faculty Representative on the Faculty of Medicine’s Clinical Faculty Advisory Committee taking over from Dr. Charles Li.

Dr. Li had been the Department of Medicine’s Clinical Faculty Representative since 2013. He will continue in his appointment as Clinical Associate Professor in the Division of Hematology.
Dr. Grewal is a Clinical Associate Professor in the Division of Cardiology. Her research focus is primarily in the area of adult congenital heart disease, pregnancy and heart disease with an imaging component. Dr. Grewal’s research reviews outcomes in this population with a view to interventions that can improve health and quality of life.

- **Dr. Laura Sly was appointed Director of the Experimental Medicine Program in July 2017 taking over from Dr. Vince Duronio who was acting as the Director of the Experimental Medicine Program.**

  Dr. Duronio was Director of the Experimental Medicine Program for years and helped grow the program to the faculty wide program it is now. Dr. Duronio will continue in his appointment as Professor in the Division of Respiratory Medicine.

  Dr. Sly is an Associate Professor in the Department of Pediatrics. Dr. Sly’s research focuses on macrophage phenotype in inflammatory bowel disease.

  Dr. Sly stepped down from this role in November of 2017 and Dr. Andrea Townson, Co-Acting Head, Department of Medicine stepped in to act as Interim Director of the Experimental Medicine Program.

- **Dr. Tricia Tang was appointed Director of the Experimental Medicine Program in June 2018 taking over from Dr. Andrea Townson who was acting as the Interim Director of the Experimental Medicine Program.**

  Dr. Tang is an Associate Professor in the Division of Endocrinology and Metabolism. Her research focuses on investigating low-cost and sustainable models for preventing the development of and complications from type 2 diabetes in high-risk and medically underserved populations. Dr. Tang is a passionate educator and mentor and was awarded the Division of Endocrinology’s Outstanding Research Mentor Award in 2015.

- **Dr. Paul Man stepped down from his roles as Associate Head, Department of Medicine and Head, Department of Medicine at St. Paul's Hospital in July 2017.**

  On July 1, 2017 Dr. Don Sin was appointed Interim Head, Department of Medicine at St. Paul's Hospital and on August 1, 2018, Dr. Janet Kow assumed the role.

  Dr. Man provided tremendous leadership, insight, and knowledge to the Department of Medicine as Associate Head. He will continue in his roles as Professor in the Department of Medicine, Associate Dean of Research at Providence Health Care Research Institute, Vice-President of Research and Academic Affairs at Providence Health Care, and President of the Providence Health Care Research Institute.

- **Dr. Marshall Dahl was appointed Head, Division of Endocrinology and Metabolism in February 2018 taking over from Dr. Ehud Ur who completed his two terms as Division Head.**

  Dr. Ur will continue in his appointment as Professor in the Division of Endocrinology and Metabolism.

  Dr. Dahl is a Clinical Professor in the Division of Endocrinology and Metabolism. He has held numerous leadership roles locally, provincially, and nationally. Dr. Dahl has been actively engaged in teaching at the undergraduate, postgraduate, and continuing professional levels. He is known to all as an excellent clinician with a particular interest in diabetes care, and a leader with strong interpersonal and administrative skills.

- **Dr. Christopher Carlsten was appointed as Head, Division of Respiratory Medicine in March 2018 taking over from Dr. Jeremy Road.**

  Dr. Road will continue in his appointment as Professor in the Division of Respiratory Medicine.

  Dr. Carlsten is a Professor in the Division of Respiratory Medicine and holds both the AstraZeneca Chair in Occupational and Environmental Lung Disease and the Canada Research Chair in Occupational and Environmental Lung Disease. His research focuses on air pollution, respirology, public health, occupational lung disease, gene-environment interactions, and epigenetics. Dr. Carlsten has been actively involved in teaching at all levels, has supervised undergraduate, graduate, and postgraduate students and clinical fellows, and has been recognized for his excellence as a mentor and as a researcher.

- **Dr. Diane Lacaille stepped down as Acting Co-Head for the Department of Medicine in order to take a position as the inaugural Associate Scientific Director of Arthritis Research Canada (ARC).**

  Dr. Lacaille’s last day as Co-Acting Head for the Department of Medicine was December 31, 2018. Dr. Lacaille will continue with her leadership role within the Department of Medicine as Associate Head of Academic Affairs.

  Dr. Andrea Townson and Dr. Teresa Tsang will continue in their roles as Co-Acting Heads for the Department of Medicine as well as continue in their roles as Associate Heads of Education and Research respectively.
HIGHLIGHTS

In January 2017, Drs. Diane Lacaille, Andrea Towson, and Teresa Tsang were appointed Co-Acting Heads, Department of Medicine, taking over from Dr. Graydon Meneilly who stepped down. Drs. Lacaille, Towson, and Tsang continue the exemplary leadership of Dr. Meneilly who served as Head, Department of Medicine for an impressive fourteen years starting in July 2002.

Dr. Diane Lacaille stepped down as Co-Acting Head for the Department of Medicine to take a position as the inaugural Associate Scientific Director of Arthritis Research Canada (ARC). Her last day as Co-Acting Head for the Department of Medicine was December 31, 2018. Dr. Lacaille will continue with her leadership role within the Department of Medicine as Associate Head of Academic Affairs.

Department of Medicine Events

Division Reviews
2017 - Endocrinology & Metabolism
2018 - Palliative Care
2018 - Infectious Diseases

Women in Medicine Workshop
2018 - January “Physician Wellness” presented by Dr. Jane Lemaire, University of Calgary
2018 - October “Imposter Syndrome” presented by Amy Stanley, Leading Light Executive Coaching

Annual Faculty & Staff Recognition Awards
Our Annual Faculty & Staff Recognition Awards were held as Breakfast Events at the Paetzold Auditorium, VGH on June 1, 2017 and June 7, 2018.

Annual Festive Celebration
To celebrate the festive season, the Department of Medicine’s Administration Office hosted an afternoon of mingling and cheer for all faculty, staff, trainees, and learners in the Department of Medicine. The 12th and 13th annual events were held on December 6, 2017 and December 14, 2018.

Human Resources

New Division Heads
- 2017 - Dr. Caroline Lohrisch (Medical Oncology)
- 2018 - Dr. Christopher Carlsten (Respiratory Medicine)
- 2018 - Dr. Marshall Dahl (Endocrinology & Metabolism)

New Program Director
- 2018 - Dr. Laura Sly (Experimental Medicine)
- 2018 - Dr. Tricia Tang (Experimental Medicine)

New Division Administrators
- 2017 - Barbara Yuen (Hematology)

New Staff in the Administration Office
- 2017 - Jasmine Lee (HR Assistant)
- 2017 - Krystal Han (HR Assistant)
- 2017 - Daisy Chan (HR Assistant)
- 2017 - Amanda Grenier (HR Manager)

2017 - Natalie Cheng (Sr. Program Assistant, PGME)
2017 - Niki Ward (Admin Assistant, PGME)
2017 - Sabina Fitzsimmons (new role as Sr. Program Assistant, UGME)
2017 - Anna Meredith (Research Manager)
2017 - Annie Ko (CBD Project Coordinator, PGME)
2017 - Laura Moss (new role as Education Manager, PGME)
2017 - Laurie Golding (new role as Communications and Office Manager)
2017 - Sayre Tripp (Admin Assistant, PGME)
2017 - Melissa Nightingale (Program Coordinator, PGME)
2018 - Allison Lee (HR Assistant)
2018 - Ginny Mak (HR Assistant)
2018 - Alex Dang (CBD Project Coordinator, PGME)
2018 - Melissa Peck (SMH Ambulatory Program Assistant, UGME)

New HR Initiatives:
Department of Medicine Admin Office Health Workplace Initiative (2018)
- Over 20 staff members in the main administration office participated in two 12-week sessions of a fitness program after we were awarded funding from UBC’s Healthy Workplace Initiative Fund.
- Our team took part in Yoga, Pilates, and Bootcamp classes for an hour a week and enjoyed some increased fitness, mental health benefits, and team bonding
ACADEMIC APPOINTMENTS, REAPPOINTMENTS, PROMOTIONS AND TENURE COMMITTEE (AARPT)

Chair
• Dr. Diane Lacaille, Professor, DOM Co-Acting Head and Associate Head, Academic Affairs

Vice-Chair
• Dr. Andrea Townson, Clinical Professor, DOM Co-Acting Head and Associate Head, Education

Administrative Assistance
• Jane Zhang, Faculty Hires & Promotions Manager

Committee Members (2017)
• Dr. W Bowie, Professor - Infectious Diseases
• Dr. J Cairns, Professor - Cardiology
• Dr. C Carlsten, Associate Professor - Respiratory Medicine
• Dr. K Chapman, Clinical Associate Professor - Neurology (term started in Sept 2017)
• Dr. E Conway, Professor - Hematology
• Dr. L Foltz, Clinical Associate Professor - Hematology
• Dr. J Gill, Professor - Nephrology
• Dr. R Hatala, Associate Professor - General Internal Medicine
• Dr. A Hill, Clinical Associate Professor - Geriatric Medicine (term ended in Aug 2017)
• Dr. C Holmes, Clinical Associate Professor - Critical Care Medicine (term started in Sept 2017)
• Dr. D Hogge, Clinical Professor - Hematology (term ended in Aug 2017)
• Dr. K Humphries, Associate Professor - Cardiology (term ended in Aug 2017)
• Dr. J Kelsall, Clinical Professor - Rheumatology
• Dr. P Keown, Professor - Nephrology
• Dr. P Lohrisch, Clinical Associate Professor - Geriatric Medicine (term ended in Aug 2017)
• Dr. V Lima, Associate Professor - AIDS (term started in Sept 2017))
• Dr. C Lohrisch, Clinical Associate Professor - Medical Oncology
• Dr. P Man, Professor - Respiratory Medicine and Vice Chair (term ended in Jun 2017)
• Dr. M Roberts, Clinical Professor - General Internal Medicine (term started in Sept 2017)

Committee Members (2018)
• Dr. O Benavente, Professor - Neurology (term started in Sept 2018)
• Dr. W Bowie, Professor - Infectious Diseases
• Dr. C Carlsten, Professor - Respiratory Medicine
• Dr. K Chapman, Clinical Associate Professor - Neurology
• Dr. S Chia, Associate Professor - Medical Oncology (term started in Sept 2018)
• Dr. E Conway, Professor - Hematology
• Dr. L Foltz, Clinical Associate Professor - Hematology
• Dr. A. Fung, Clinical Professor - Cardiology (term started in Sept 2018)
• Dr. H Ezzat, Clinical Associate Professor - Hematology (term started in Sept 2018)
• Dr. J Gill, Professor - Nephrology
• Dr. R Hatala, Professor - General Internal Medicine
• Dr. C Holmes, Clinical Professor - Critical Care Medicine
• Dr. J Kelsall, Clinical Professor - Rheumatology
• Dr. P Keown, Professor - Nephrology
• Dr. V Lima, Associate Professor - AIDS
• Dr. C Lohrisch, Clinical Associate Professor - Medical Oncology
• Dr. B Paty, Clinical Associate Professor - Endocrinology & Metabolism (term started in Sept 2018)
• Dr. M Roberts, Clinical Professor - General Internal Medicine
• Dr. K Shannon, Associate Professor - AIDS
• Dr. K Shojania, Clinical Professor - Rheumatology
• Dr. S Sirrs, Clinical Professor - Endocrinology & Metabolism
• Dr. J Telford, Clinical Professor - Gastroenterology
• Dr. A Tinker, Clinical Associate Professor - Medical Oncology
• Dr. S van Eeden, Professor - Respiratory Medicine
• Dr. E Yoshida, Professor - Gastroenterology
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, 2017 and December 31, 2018*

**Clinical Instructors**
- Aboulhosn, Kewan - Respiratory Medicine
- Alipour, Sina - Cardiology
- Amiri, Neda - Rheumatology
- Attwell-Pope, Kristen - Neurology
- Azadi, Arzu - Physical Medicine & Rehabilitation
- Bains, Puneet - Medical Oncology
- Balogh, Katalin - Geriatric Medicine
- Baradaran, Nazli - Community Internal Medicine
- Bittman, Jesse - General Internal Medicine
- Bogusz, Elliot - Neurology
- Boulton, Peter - Neurology
- Brar, Pawandeep - Palliative Care
- Bronn, Karen - Nephrology
- Brooks, Edward - Medical Oncology
- Budlovsy, Joshua - Geriatric Medicine
- Camateros, Pierre - Community Internal Medicine
- Chan, Aaron - Physical Medicine & Rehabilitation
- Chang, Albert - Gastroenterology
- Chen, Tychicus - Neurology
- Chow, Katherine - Respiratory Medicine
- Chu, Karen - Cardiology
- Clark, Heather - Respiratory Medicine
- Collins, Andrew - Palliative Care
- Corpusz, Jennifer - Rheumatology
- Craig, David - Neurology
- Cunningham, Cameron - Physical Medicine & Rehabilitation
- Daley, Lauren - Palliative Care
- Durocher, Andre - Neurology

- Fazil, Mohammad - Community Internal Medicine
- Fazlogic, Sasa - Community Internal Medicine
- Fiorino, Leathia - Medical Oncology
- Fong, Megin (Laura) - Community Internal Medicine
- Fowler, Adam - Palliative Care
- Frolova, Natalia - Community Internal Medicine
- Gabriel, Alexandra - Medical Oncology
- Galindo, Sylvie - Community Internal Medicine
- Geller, Georgia - Medical Oncology
- Gilmour, Suzana - Medical Oncology
- Golishevski, Nataliya - Community Internal Medicine
- Gustafson-Vickers, Sabrina - Palliative Care
- Gutierrez, Leanne - Community Internal Medicine
- Hahn, Nicola - Physical Medicine & Rehabilitation
- Ham, Hyungjoo (Steve) - General Internal Medicine
- Hanlan, Amy - Physical Medicine & Rehabilitation
- Harris, Claire - Nephrology
- Ho, Meghan - Community Internal Medicine
- Hodgkin, Mitchell - Hematology
- Holden, Reed - Community Internal Medicine
- Humphreys, Michael - Medical Oncology
- Jankowski, Theodore - Community Internal Medicine
- Jansz, Michael - Community Internal Medicine
- Jaswal, Dharmvir - Critical Care Medicine
- Jaworsky, Denise - Community Internal Medicine
- Jongewaard, Karmen - Community Internal Medicine
- Jovanovic, Vojislav - Gastroenterology
- Kahlon, Roopjeet - Community Internal Medicine
- Kalikias, Sina - Community Internal Medicine
- Kapeluto, Jordanna - Endocrinology & Metabolism
- Khara, Lovedeep - Critical Care Medicine
- Kostyniuk, Allan - Community Internal Medicine
- Kumar, Ritu - Community Internal Medicine
- Kwok, Clement - Infectious Diseases
- Lai, Leo - Geriatric Medicine
- Lakh, Sunjay - Community Internal Medicine
- Lam, Godfrey - Allergy & Immunology
- Lee, Dana - Cardiology
• Lee, Gibong - Geriatric Medicine
• Lin, Wendy - Geriatric Medicine
• Little, Christopher - Community Internal Medicine
• Lou, Cindy - Palliative Care
• Macgowan, Nori - Palliative Care
• Mackay-Dunn, Marion - Geriatric Medicine
• Mackenzie-Feder, Julian - Critical Care Medicine
• Mak, Raymond - Allergy & Immunology
• Mangat, Dilpriya - Geriatric Medicine
• Mann, Mandeep - Neurology
• Marcotte, Gregory - Rheumatology
• Materek, Lukasz - Endocrinology & Metabolism
• Meckling, Scott - Neurology
• Mitra, Anish - Critical Care Medicine
• Moosaviasl, Sarvenaz - Gastroenterology
• Mueller, Katelyn - Palliative Care
• Nash, Carla - Gastroenterology
• Newsome, William - Community Internal Medicine
• Nguyen, Lisa - Community Internal Medicine
• O’Brien, John - Palliative Care
• Ortved, Dayne - Community Internal Medicine
• Park, Kirily - Respiratory Medicine
• Pavlic, Mirjana - Endocrinology & Metabolism
• Perkins, Siobhan - Allergy & Immunology
• Pettit, David - Medicine
• Phan, Willy - Palliative Care
• Phang, Sen Han - Respiratory Medicine
• Polley, Gina - Community Internal Medicine
• Polson, Alasdair - Critical Care Medicine
• Pourshahnazari, Persia - Allergy & Immunology
• Pritchard, Julia - Respiratory Medicine
• Rachapalli, Satish - Rheumatology
• Rance, Brittany - Palliative Care
• Rodis, Belinda - Geriatric Medicine
• Sajjadi, Sharareh - Community Internal Medicine
• Sandhu, Davinder - Gastroenterology
• Sarkaria, Harsukhdeep Singh - Community Internal Medicine
• Sawatsky, Errin - Community Internal Medicine
• Schepmyer, Neville Andrew - Neurology
• Shaw, David - Rheumatology
• Siew, Dou-Anne - Community Internal Medicine
• Soeyonggo, Fify - Palliative Care
• Spencer, Martha - Geriatric Medicine
• Sriram, Swetha - Community Internal Medicine
• Stevens, Emilie - Infectious Diseases
• Stewart, Alan - Community Internal Medicine
• Stewart, Nicole - Geriatric Medicine
• Svarta, Sigrid - Community Internal Medicine
• Thomas, Trace - Community Internal Medicine
• Thornton, Pamela - Geriatric Medicine
• Todd, Jonathan Keith - Cardiology
• Tsang, Stephanie - Respiratory Medicine
• Vaid, Moninder - Community Internal Medicine
• van Breeman, Camara - Palliative Care
• von Sychowski, Jonah - Community Internal Medicine
• Wallach, JP - Community Internal Medicine
• Wan, Marisa - Geriatric Medicine
• Wan, Tony - General Internal Medicine
• Welsh, Edward - Nephrology
• Williams, Malcolm - Cardiology
• Wong, Davie - Infectious Diseases
• Wong, Patrick - Infectious Diseases
• Wong, Remy - Community Internal Medicine
• Wong, Wendy - Rheumatology
• Wormsbecker, Andrew - Community Internal Medicine
• Yau, Hoi Lun (Alan) - Gastroenterology
• Yu, Simon - Medical Oncology
• Yung, Terence - General Internal Medicine
• Zhai, Jacqueline - Palliative Care

Clinical Assistant Professors
• Ayach, Bilal - Cardiology
• Barclay, Robert - Gastroenterology
• Berger, Michael - Physical Medicine & Rehabilitation
• Bevilacqua, Mike - Nephrology
• Burgmann, Twila - Gastroenterology
- Burke, Donald - Community Internal Medicine
- Chawla, Kshitij - Physical Medicine and Rehabilitation
- Connors, William - Infectious Disease
- Dhawan, Priya - Neurology
- Dhesi, Sumandeep - Cardiology
- Dhindsa, Navjot - Rheumatology
- Elamin, Elsadig - Neurology
- Emery, Joel - Gastroenterology
- Ferris, Dwight - Infectious Diseases
- Flynn, Andrew - Gastroenterology
- Franco, Christopher - Cardiology
- Fu, Nancy - Gastroenterology
- Gervais, Charles - Neurology
- Gladstone, Pete - Cardiology
- Griffiths, Cameron - Hematology
- Haljan, Greg - Critical Care Medicine
- Hoffman, Alan - Community Internal Medicine
- Horton, Myles - Neurology
- Hughes, Ariana - Critical Care Medicine
- Joshi, Amrish - Palliative Care
- Kahlon, Amrit - Hematology
- Kaiway, Sarah - Neurology
- Kanungo, Anish - Neurology
- Kara, Sukaina - Palliative Care
- Khan, Razi - Cardiology
- Klaus, Markus - Rheumatology
- Kowal, Kristopher - Neurology
- Lail, Parabhdeep - Community Internal Medicine
- Lau, Benny - Cardiology
- Luecke, Kai - Hematology
- Luong, Michael - Cardiology
- Mackenzie, Garry - Cardiology
- Mackenzie, Lauren - Medicine
- Madhani, Jamilia - Neurology
- Mah, Allison - Infectious Diseases
- Mangat, Birinder - General Internal Medicine
- Masuda, Valorie - Palliative Care
- Mcdermid, Kevin - Community Internal Medicine

- Mian, Najam - Physical Medicine & Rehabilitation
- Moosavi, Mandana - Endocrinology & Metabolism
- Nasmith, Trudy - General Internal Medicine
- Pai, Rohit - Gastroenterology
- Patton, Daniel - Cardiology
- Paul, Terrance - Critical Care Medicine
- Pawlowska, Monika - Endocrinology & Metabolism
- Petrunia, Michael Denis - Gastroenterology
- Plewes, Katherine - Infectious Diseases
- Rajasekaran, Sathish - Physical Medicine & Rehabilitation
- Raju, Dharmapaul (Paul) - Nephrology
- Rastin, Tara - Neurology
- Salmon, Joanne - Infectious Diseases
- Simonett, Gillian - Physical Medicine & Rehabilitation
- Sra, Gursteven - Cardiology
- Stables, Christine - Neurology
- Tamber, Anoo - Palliative Care
- Van Gaal, Stephen - Neurology
- Vandegriend, Richard - Cardiology
- Walker, Gregory - Neurology
- White, Jennifer - Hematology
- Winstone, Tiffany - Respiratory Medicine
- Wong, Justin - Critical Care Medicine
- Yerman, Todd - Critical Care Medicine
- Zaki, Sami - Physical Medicine & Rehabilitation

Clinical Associate Professors
- Agha-Khani, Yahya - Neurology
- Calverly, David - Medical Oncology
- Cook, Victoria - Respiratory Medicine
- Davidson, Warren - Respiratory Medicine
- Dipboye, Keith - Medicine
- Gan, Seng-Ian - Gastroenterology
- Henderson, William - Critical Care Medicine
- Hooper, Richard - Cardiology
- Leung, Yvette - Gastroenterology
- Macpherson, Nicola - Palliative Care
- Massel, David - Cardiology
Clinical Professors
- Campling, Barbara - Medical Oncology
- Levy, Robert - Respiratory Medicine

Assistant Professors, Partner
- Boyd, Jade - AIDS
- Fast, Danya - AIDS
- Hay, Kevin - Hematology
- Knight, Rod - AIDS
- Krüsi, Andrea - AIDS
- Loree, Jonathan - Medical Oncology
- Nolan, Seonaid - AIDS
- Obeidat, Ma’en - Respiratory Medicine
- Robillard, Julie - Neurology
- Socías, M. Eugenia - AIDS

Associate Professors, Partner
- Kuchenbauer, Florian - Hematology

Adjunct Professors
- Farrell, Lindsay - AIDS
- Kalyan, Shirin - Endocrinology & Metabolism
- Nosova, Ekaterina - AIDS

Affiliate Assistant Professors
- Ahmadi, Amir - Cardiology

Professors
- Martin-Ginis, Kathleen - Physical Medicine & Rehabilitation

Clinical Assistant Professors
- Appleton, Brent - Rheumatology
- Cunic, Cary - General Internal Medicine
- Dehghan, Natasha - Rheumatology
- Fan, Anita - Physical Medicine & Rehabilitation
- Forzley, Brian - Nephrology
- Hemmati, Iman - Rheumatology
- Kang, Anna - Community Internal Medicine
- Kerrie, Jeffrey - Community Internal Medicine
- Prchal, David - Nephrology
- Shah, Justin - Gastroenterology
- Walzak, Alison - Community Internal Medicine

Clinical Associate Professors
- Al-Tourah, Abdul - Medical Oncology
- Bennett, Matthew - Cardiology
- Chakrabarti, Shanta - Cardiology
- Deyell, Marc - Cardiology
- Gill, Shavinder - Community Internal Medicine
- Johnston, James - Respiratory
- Kanani, Amin - Allergy & Immunology
- Kherani, Raheem - Rheumatology
- Ko, Hin Hin - Gastroenterology
- Macpherson, Nicol - Medical Oncology
- Markanday, Anurag - Community Internal Medicine
- Mazei, Michelle - Neurology
- Reebye, Rajiv - Physical Medicine & Rehabilitation
- Robinson, Simon - Cardiology
- Silverberg, Noah - Physical Medicine & Rehabilitation
- Toma, Mustafa - Cardiology
- Yee, Adrian - Medical Oncology
- Yenson, Paul - Hematology

Clinical Professors
- Dhingra, Vinay - Critical Care
- Gill, Sabrina - Endocrinology
- Javidan, Manouchehr - Neurology

FACULTY PROMOTIONS

Effective July 1, 2017
• Melosky, Barbara - Medical Oncology
• Pick, Neora - Infectious Diseases
• Roberts, James Mark - General Internal Medicine
• Saw, Jacqueline - Cardiology
• Wood, David - Cardiology

Associate Professors
• Cresswell, Silke - Neurology
• Lester, Richard - Infectious Diseases
• Pettersen, Jacqueline - Neurology

Professors
• Carlsten, Chris - Respiratory Medicine
• Hatala, Rose - General Internal Medicine
• Leipsic, Jonathan - Cardiology (Home Department – Radiology)
• Savage, Kerry - Medical Oncology
• Tebbutt, Scott - Respiratory Medicine
• Traboulsee, Anthony - Neurology

Effective July 1, 2018

Clinical Assistant Professors
• Ambler, Kimberley - Hematology
• Amiri, Neda - Rheumatology
• Barts (Zelichowska), Agnieszka - Endocrinology & Metabolism
• Chan, Angela - Medical Oncology
• Crossman, Mark - Physical Medicine & Rehabilitation
• Foley, Jacqueline - Physical Medicine & Rehabilitation
• Godin, Anick - Rheumatology
• Helper, Steven - Physical Medicine & Rehabilitation
• Ilyas, Amir - Neurology
• Ko, Jenny - Medical Oncology
• Lo, Lawrence - Geriatric Medicine
• Malhotra, Sangita - Infectious Diseases
• Van Tongeren, Lindsay - Respiratory Medicine
• Vergidis, Joanna - Medical Oncology
• Villanyi, Diane - Geriatric Medicine

Clinical Associate Professors
• Anderson, Helen - Medical Oncology
• Andrade, Jason - Cardiology
• Carruthers, Mollie - Rheumatology
• Chen, Charlie - Palliative Care
• Devonshire, Virginia - Neurology
• Donnellan, Fergal - Gastroenterology
• Dueck, Greg - Medical Oncology
• Ezzat, Hatoon - Hematology
• Farrell, Laura - Community Internal Medicine
• Henri-Bhargava, Alexandre - Neurology
• Reynolds, Jennifer - Rheumatology
• Rosenbaum, Debbie - General Internal Medicine
• Rosenfeld, Greg - Gastroenterology
• Sedlak, Tara Leanne - Cardiology
• Singh, Ranjit Andrew - Gastroenterology
• Sun, Sophie - Medical Oncology
• Tang, Jonathan - Cardiology
• Taylor, Susan - Community Internal Medicine
• Villa, Diego - Medical Oncology
• Wallace, Clarissa - Endocrinology & Metabolism
• Yip, Samuel - Neurology

Clinical Professors
• Arseneau, Richard - General Internal Medicine
• Chan, Wee Shian - General Internal Medicine
• Hawley, Pippa - Palliative Care
• Holmes, Cheryl - Critical Care
• Shuckett, Rhonda - Rheumatology
• Wong, Graham - Cardiology

Associate Professors
• Field, Thalia - Neurology
• Quon, Brad - Respiratory Medicine
EXECUTIVE COMMITTEE

Chair
- Drs. Diane Lacaille, Andrea Townson, and Teresa Tsang, DOM Co-Acting Head and Associate Head, Academic Affairs, Education, and Research

Members
- Associate Heads
- Division Heads
- Educational Program Directors
- Clinical Faculty Representative
- Senior Administration

Administrative Support
- Donna Combs, Administrative Coordinator to Department Head

Function
The Department of Medicine is led by a diverse team of senior leaders, who are recognized for their national and international contributions to academic medicine.

Education, Research, and Academic Affairs are the portfolios that drive the Department of Medicine’s strategic vision and mission – and each portfolio is led by one of our three Associate Heads. Each of our 18 divisions is led by an appointed Division Head.

The leadership team meets monthly at the UBC Executive Committee Meeting where members share departmental and university business as well as engaging in strategic planning for the department. The team works together to create goals and objectives that continue to grow and strengthen the UBC Department of Medicine. Meeting minutes are taken and are distributed to all committee members and are filed in the DOM administration office/UBC Archives as an archival record of departmental business.

The committee meets monthly.
EQUITY COMMITTEE

Chair
- Dr. Diane Lacaille, DOM Co-Acting Head and Associate Head, Academic Affairs

Members
- Dr. Anita Palepu
- Dr. Graydon Meneilly
- Dr. Andrea Townson
- Dr. Nadia Khan
- Dr. Heather Leitch
- Mary Liu, Director of Administration

Administrative Support
- Donna Combs, Administrative Coordinator to Department Head

Reports To
- Department Head, UBC Department of Medicine
- Associate Head, Academic Affairs, UBC Department of Medicine

Function
The Department of Medicine Equity Committee was created in 2009 to support the Department by monitoring and providing advice about matters that address issues of equity in the Department.

- To monitor the Department’s policies and practices in regards to equity issues and advise the Department Head of any practices which are perceived as discriminatory.
- To develop equity guidelines for the Department.
- To educate senior leadership on equity.
- To support and sponsor events and programs designed to foster equity in the Department.
- To promote appropriate change by initiating and participating in discussions designed to further equity in the Department.
- At this time the primary focus of the Committee is gender equity.

The committee meets quarterly.

MENTORING ADVISORY COMMITTEE

Director, Mentoring Program
- Dr. John Cairns (retired on March 1, 2018)
- Dr. Diane Lacaille (since March 1, 2018)

Members
- Dr. Diane Lacaille
- Dr. John Mancini
- Dr. Anita Palepu
- Dr. Neil Reiner

Administrative Support
- Jane Zhang, Faculty Hires & Promotions Manager

Reports to
- Department Head, UBC Department of Medicine

Function
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 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 2017, there were 23 mentor-mentee pairs in the program. Three individuals had achieved promotion, one switched to the clinical stream, one resigned from the appointment, and one more mentor-mentee pair was established for a net of 19 pairs in the program by the end of the year.

At the beginning of 2018, there were 19 mentor-mentee pairs in the program. One individual had achieved promotion, two switched to the clinical stream, one switched to Adjunct Professor, and 7 more mentor-mentee pair was established for a net of 22 pairs in the program by the end of the year.

Every Mentor-Mentee relationship has been reviewed and where necessary, rejuvenated, sometimes with the appointment of a new mentor. We endeavour 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 in 2017-2018:

- Dr. Aly Karsan – Department of Pathology and Laboratory Medicine
- Dr. Anita Palepu – Division of General Internal Medicine
- Dr. Brian MacVicar – Department of Psychiatry
- Dr. David Huntsman – Department of Pathology and Laboratory Medicine
- Dr. Deborah Money – Department of Obstetrics and Gynecology
- Dr. Ed Conway – Division of Hematology
- Dr. Fabio Rossi – Department of Medical Genetics
- Dr. Jane Buxton – School of Population and Public Health
- Dr. Jean Shoveller – School of Population and Public Health
- Dr. Joel Singer – School of Population and Public Health
- Dr. Lynn Beattie – Division of Geriatric Medicine
- Dr. Lynn Raymond – Department of Psychiatry
- Dr. Marcel Bally – Department of Pathology and Laboratory Medicine
- Dr. Mel Krajden – Department of Pathology and Laboratory Medicine
- Dr. Michael Barnett – Division of Hematology
- Dr. Miele Koehoorn – School of Population and Public Health
- Dr. Najib Ayas – Division of Critical Care
- Dr. Rob Holt – Department of Medical Genetics
- Dr. Sam Aparicio – Department of Pathology and Laboratory Medicine
- Dr. Sandra J. Salinger – Faculty of Pharmaceutical Sciences
- Dr. Stuart Turvey – Department of Pediatrics
- Dr. Ted Steiner – Division of Infectious Diseases
- Dr. Vesna Sossi – Department of Physics and Astronomy
- Dr. Vincent Duronio – Division of Respiratory Medicine
POSTGRADUATE RESIDENCY TRAINING COMMITTEE

Chair
• Dr. Mark Roberts, Director Postgraduate Education Program

Program Directors
• Dr. Wendy Cook, Curriculum
• Dr. Cary Cuncic, Evaluation & Assessment
• Dr. Jane McKay, PGY4
• Dr. David Shanks, Simulation
• Dr. Jim Spence, Assistant Director Vancouver Island
• Dr. Peter Weerasinghe, Wellness

CTU Directors
• Dr. Shane Arishenkoff
• Dr. Gerald Da Roza
• Dr. Barry Kassen
• Dr. Jasmine Kerr
• Dr. Sharla Olsen
• Dr. Allison Walzak

Subspecialty Representative
• Dr. Peter Neufeld

Associate Head, Education
• Dr. Andrea Townson

Undergraduate Representative
• Dr. Winson Cheung (2017), Dr. Cary Cuncic (2018)

Chief Medical Residents
• Dr. Mo Bardi
• Dr. Justin Gill
• Dr. Karmen Jongewaard
• Dr. Hasan Kular
• Dr. Vesna Mihajlovic
• Dr. Thomas Roston
• Dr. Katie Wiskar

Class Representatives
• Dr. Angela Babuk
• Dr. Jessica Clark
• Dr. Cassie Fayowski
• Dr. Jesse Greiner
• Dr. Andrew Hurlburt
• Dr. Matt Michaleski
• Dr. Vesna Mihajlovic
• Dr. Hayden Rubensohn

Administrative Support
• Kathy Standeven, Senior Education Program Manager
• Laura Moss, PGME Program Manager

Reports to
• Department Head, UBC Department of Medicine
• Faculty of Medicine PGME Office

Function
The Core Internal Medicine Residency Training Program meets monthly to review and plan the educational activities within the Department of Medicine Core Training Program as well as activities and issues as they may relate to 19 Clinical Teaching Units and 65 subspecialty training sites throughout British Columbia.
• To ensure the program meets the goals and specific standards of accreditation of the Royal College of Physicians and Surgeons of Canada (RCPSC)
• To provide an opportunity for resident participation in administrative issues as well as providing a forum to present and discuss resident issues as they relate to each year
• Acting as a review committee when dealing with resident issues of a sensitive nature
• To develop, implement and evaluate education and administrative policies relevant to the Core Internal Medicine Training Program
• Interviewing and selection of Chief Medical Residents
• Review and revise educational objectives and evaluations in compliance with CanMEDS roles as developed by the RCPSC
RECRUITMENT AND RESOURCES COMMITTEE

Chair
- Dr. Diane Lacaille, DOM Co-Acting Head & Associate Head, Academic Affairs

Members
- Dr. Adeera Levin
- Dr. Andrea Townson
- Dr. Anita Palepu (2018)
- Dr. Don Sin
- Dr. Graydon Meneilly (2018)
- Dr. Janet Kow (2018)
- Dr. Jon Stoessl
- Dr. Mark Fitzgerald
- Dr. Paul Man (2017)
- Dr. Teresa Tsang

Administrative Support
- Jane Zhang, Faculty Hires & Promotions Manager

Reports to
- Department Head, UBC Department of Medicine

Function
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 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.

UNDERGRADUATE EDUCATION COMMITTEE

Chair
- Dr. Winson Cheung (2017), Dr. Cary Cuncic (2018), Program Director

Members
- Associate Program Director
- Assessment Director
- All site DSSLs
- All site Directors
- Associate Head Education
- Student representatives for Year 3 & Year 4 at each site
- Clerkship Program Administrators

Administrative Support
- Kathy Standeven, Senior Education Program Manager
- Adriana Villegas, Senior Program Assistant, IM Rotation

Reports To
- Department Head, UBC Department of Medicine
- Associate Head, Education, UBC Department of Medicine
- MD Undergraduate Year 3&4 Sub Committee
- Student Promotion Review Board

Function
The Internal Medicine Undergraduate Education Committee (hereafter: “UEC”) is a standing committee responsible for planning, implementing, and evaluating the Year 3 Internal Medicine clerkship rotations 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, Discipline Specific site Leads, 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.
number of patients having to seek emergency care at hospitals. Place so patients can be treated at home and thus reduce the doctors to treat and prevent full blown lung attacks from taking attacks in their earliest stages. These blood tests will help also working to develop a simple blood test to diagnose lung Pulmonary Disease (COPD). Dr. Don Sin

Illes’ research has made contributions to ethical, social, and policy challenges at the intersection of biomedical ethics and neuroimaging, stem cells, cross-science, with a specific focus on aging and dementia, addiction and mental health, neuroimaging, stem cells, cross-cultural values, and the commercialization of health care.

Dr. Judy Illes – Canada Research Chair in Neuroethics. Dr. Illes’ research has made contributions to ethical, social, and policy challenges at the intersection of biomedical ethics and neuroscience, with a specific focus on aging and dementia, addiction and mental health, neuroimaging, stem cells, cross-cultural values, and the commercialization of health care.

Dr. Don Sin – Canada Research Chair in Chronic Obstructive Pulmonary Disease (COPD). Dr. Sin is developing a simple blood test that can be used in a doctor’s office to predict which chronic obstructive pulmonary disease (COPD) patients will have a “lung attack” and which patients will not. He is also working to develop a simple blood test to diagnose lung attacks in their earliest stages. These blood tests will help doctors to treat and prevent full blown lung attacks from taking place so patients can be treated at home and thus reduce the number of patients having to seek emergency care at hospitals.

Dr. A. Jon Stoessl – Canada Research Chair in Parkinson’s disease. Dr. Stoessl’s research uses positron emission tomography (PET) to study people at high risk of Parkinson’s disease. He researches susceptibility to future neurodegeneration following minor head trauma and uses PET to determine the benefits of exercise in Parkinson’s disease.

Dr. Helen Tremlett – Canada Research Chair in Neuroepidemiology and Multiple Sclerosis. Dr. Tremlett’s research leads a pan-Canadian study into Multiple Sclerosis to improve the health, treatment options and outcomes for people with the degenerative brain and spinal-cord disease.

Dr. Evan Wood – Canada Research Chair in Intra City Medicine. Dr. Wood’s research uses unique approaches to address substantial health and community concerns in low-income neighbourhoods where poverty, mental illness and drug addiction converge for the betterment of society.

Dr. Kate Shannon – Canada Research Chair in Global Sexual Health and HIV/AIDS. Dr. Shannon’s research focuses on evaluating and addressing sexual health and HIV inequities and social justice among marginalized women and gender and sexual minority populations.

Dr. Denise Daley – Canada Research Chair in Genetic Epidemiology of Common Complex Diseases. Dr. Daley’s research studies the genetic susceptibility to asthma and other allergic conditions and the complex epigenetic mechanisms that may be involved. Dr. Daley is working to determine what contribution gender, genes, and environment make to the development of asthma and how the epigenome responds to environmental exposures such as tobacco smoke.

Dr. Christopher Carlsten – AstraZeneca Chair in Occupational and Environmental Lung Disease and Canada Research Chair in Occupational and Environmental Lung Disease. Dr. Carlsten’s research aims to understand the effects of inhaled pollutants on the lungs in order to better prevent and treat lung disease.

Dr. A. Jon Stoessl – Canada Research Chair in Parkinson’s disease. Dr. Stoessl’s research uses positron emission tomography (PET) to study people at high risk of Parkinson’s disease. He researches susceptibility to future neurodegeneration following minor head trauma and uses PET to determine the benefits of exercise in Parkinson’s disease.

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Dr. Christopher Carlsten – AstraZeneca Chair in Occupational and Environmental Lung Disease and Canada Research Chair in Occupational and Environmental Lung Disease. Dr. Carlsten’s research aims to understand the effects of inhaled pollutants on the lungs in order to better prevent and treat lung disease.
Dr. Julio Montaner – UBC and St. Paul’s Hospital Foundation Chair in AIDS Research. Dr. Montaner’s current major research interests are harm reduction (including safe injection sites and needle exchange programs), treating hard-to-reach HIV-positive populations, and developing new antiretrovirals. He is also focusing on optimizing HAART (Highly Active Antiretroviral Therapy) treatment and authoring further studies on the “Treatment as Prevention” strategy.

Dr. Andrei Krassioukov – Chair in Spinal Cord Rehabilitation Research. Dr. Krassioukov’s research is devoted to helping people with spinal cord injuries maintain their cardiovascular health. His focus is on a condition commonly known as autonomic dysreflexia, a condition familiar to the majority of individuals with spinal cord injuries as well as their caregivers.

Dr. Yu Tian Wang – Heart and Stroke Foundation Chair in Stroke Research. Dr. Wang’s research focuses on understanding the molecular mechanisms responsible for regulating the function and intracellular trafficking of neurotransmitter receptors critical for brain functions, such as learning, memory and cognition, and investigating the manner by which these mechanisms may be altered in central nervous disease processes.

Dr. Diane Lacaille – Mary Pack Chair in Arthritis Research. Dr. Lacaille’s research has focused on studying the impact of arthritis on employment, preventing work disability and evaluating the quality and outcome of care for those with rheumatoid arthritis.

PROFESSORSHIPS

Dr. Silke Appel-Cresswell – Pacific Parkinson’s Research Institute Professorship in Parkinson’s Research Endowment. Dr. Appel-Cresswell’s research focuses on the role of the microbiome in Parkinson’s disease and other brain disorders, care delivery in Parkinson’s as well as coping strategies, resilience and neuropsychiatric features of Parkinson’s. She has established iCAPTURE PD, a large registry for Parkinson’s and related disorders which serves as a resource to understand clinical patterns and clinic-genetic correlations.

Dr. Richard Harrigan – Glen-Hillson Professorship in Clinical HIV Virology. Dr. Harrigan’s research has contributed to the understanding of antiviral drug efficacy and resistance, as well as the human and viral parameters that influence HIV disease progression. His laboratory 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 HAART (Highly Active Antiretroviral Therapy).

Dr. Stephan van Eeden – Glaxosmithkline Professorship in Chronic Obstructive Pulmonary Disorder. Dr. van Eeden’s research program focuses on the mechanisms of lung inflammation, particularly, lung inflammation caused by infection, cigarette smoking, and air pollution. Dr. van Eeden’s research covers a broad range of clinical conditions such as pneumonia, chronic bronchitis, emphysema, and acute respiratory distress syndrome.

Dr. John Webb – McLeod Family Professorship in Valvular Heart Disease. Dr. Webb performed the first transapical transcatheter aortic valve implantation in the world. Dr. Webb also completed the first ever transcatheter mitral valve-in-valve replacement and the first in-human TMVR (transcatheter mitral valve replacement) to be completed with the Neovasc Tiara device.

Dr. Karin Humphries – UBC Heart and Stroke Foundation Professorship in Women’s Cardiovascular Health. Dr. Humphries’ research focus is on sex and gender differences in the diagnosis, treatment, and outcomes in subjects with coronary artery disease. Dr. Humphries is currently investigating the treatment and outcomes of patients with chest pain, but angiographically normal coronaries.

Dr. Philip Teal – Sauder Family Heart and Stroke Foundation of BC and Yukon Professorship in Clinical Stroke Research. Dr. Teal’s clinical focus includes stroke prevention, acute stroke management, neuroprotection strategies, the planning, organization, and management of clinical trials. Dr. Teal will help translate findings from basic research into new therapeutic applications in the clinical setting.

Dr. Haakon B. Nygaard – Charles E. Fipke Professorship in Alzheimer’s Research. Dr. Nygaard leads a project to sequence the genomes of centenarians in search for a genetic cause of dementia-free aging. Dr. Nygaard hopes to bridge the gap between basic science and clinical neurology to facilitate novel therapeutic development in Alzheimer’s disease.

DISTINGUISHED SCHOLARS

Dr. Zackary Laksman – UBC Dr. Charles Kerr Distinguished Scholar in Cardiovascular Genetics. Dr. Laksman is conducting research on the genetic basis for diseases of the heart muscle, heart rhythm, and sudden cardiac death with an interest in atrial fibrillation. An element of Dr. Laksman’s work also involves using a stem cell model and growing heart cells in a dish. In doing so, Dr. Laksman can model an individual patient’s specific disease, apply medicines to it, and study the cause of the disease and the effect of treatment.

Dr. Nathaniel Hawkins – UBC Dr. Charles Kerr Distinguished Scholar in Heart Rhythm Management. Dr. Hawkins’ research touches on numerous stages of care for heart device patients, such as the development of registries and data systems to more effectively identify patients who could benefit from heart devices. Dr. Hawkins is also investigating outcomes for heart device patients, which could lead to fewer complications and higher survival rates.
AWARDS AND SIGNIFICANT HONOURS

UBC DEPARTMENT OF MEDICINE AWARDS

Faculty Awards

Donald M. Whitelaw Award for Outstanding Grand Rounds Presentation
2017 SPH - Drs. Nathan Brunner, John Swiston, Robert Levy (Cardiology, Respiratory Medicine)
2017 VGH - Dr. Steve Nantel (Hematology)
2018 SPH - Dr. Jocelyn Chase (Geriatric Medicine)
2018 VGH - Dr. Jan Hajek (Infectious Diseases)

Fay R. Dirks Award for Excellence in Teaching
2017 SPH - Dr. Janice Leung (Respiratory Medicine)
2017 VGH - Dr. Kam Shojania (Rheumatology)
2018 SPH - Dr. James Tessero (General Internal Medicine)
2018 VGH - Dr. Seonaid Nolan (AIDS)

Martin M. Hoffman Award for Excellence in Research
2017 SPH - Dr. Andrew Krahn (Cardiology)
2017 VGH - Dr. Adeera Levin (Nephrology)
2018 SPH - Dr. Najib Ayas (Critical Care)
2018 VGH - Dr. Thalia Field (Neurology)

Master Teacher Award
2017 SPH - Dr. Adam Peets (Critical Care)
2017 VGH - Dr. Graydon Meneilly (Geriatric Medicine)
2018 SPH - Dr. Jane McKay (General Internal Medicine)
2018 VGH - Dr. Silke Cresswell (Neurology)

Graydon Meneilly Award for Excellence in Mentoring
Established in 2017 and named in honour of Dr. Graydon Meneilly, former Head of the Department, to recognize a faculty member for their exemplary leadership as a mentor, fostering excellence in others (faculty, residents, students, or staff) and/or advancing the equity agenda of the Department.
2017 - Dr. Anita Palepu (General Internal Medicine)
2018 - Dr. John Cairns (Cardiology)

Staff Awards

CUPE 2950 Staff Award of Excellence
2017 - Annamarie Oliveri, Senior Program Assistant, UBC Postgraduate Education, Division of Cardiology

M&P Staff Award of Excellence
2017 - Mary Liu, Director of Administration, Department of Medicine

UBC FACULTY OF MEDICINE AWARDS

Award for Excellence in Mentoring Early Career Faculty
2017 - Dr. John Cairns (Cardiology)

Clinical Faculty Award for Career Excellence in Clinical Teaching
2017 - Dr. Stephen Sullivan (General Internal Medicine)
2018 - Dr. Roger Wong (Geriatric Medicine)

Clinical Faculty Award for Excellence in Clinical Teaching
2018 - Dr. Janice Leung (Respiratory Medicine)
2018 - Dr. Saul Isserow (Cardiology)

Clinical Faculty Award for Excellence in Community Practice Teaching
2018 - Dr. Amin Aminbakhsh (Cardiology)

Distinguished Achievement Award for Excellence in Clinical or Applied Research
2017 - Dr. Kate Shannon (AIDS)
2018 - Dr. Chris Ryerson (Respiratory Medicine)

Distinguished Achievement Award for Overall Excellence (Early Career)
2017 - Dr. Liam Brunham (General Internal Medicine)
2018 - Dr. Thalia Field (Neurology)

Distinguished Achievement Award for Overall Excellence (Senior Faculty Member)
2017 - Dr. Kevin Eva (General Internal Medicine)

Distinguished Researcher Award
2017 - Dr. John Webb (Cardiology)
2018 - Dr. Karin Humphries (Cardiology)

Margolese National Heart Disorders Prize
2018 - Dr. Andrew Krahn (Cardiology)

EXTERNAL AWARDS AND HONOURS

American Thoracic Society Fellowship
2018 - Dr. Peter Paré (Respiratory Medicine)
2018 - Dr. Keith Walley (Critical Care)

American Thoracic Society J. Burns Amberson Lecture Award
2017 - Dr. Peter Paré (Respiratory Medicine)

AST Clinical Science Established Investigator Award
2017 - Dr. John Gill (Nephrology)

British Geriatric Society Trevor Howell Guest Lecture
2017 - Dr. Roger Wong (Geriatric Medicine)

CAME Certificate of Merit Award
2018 - Dr. Adam Peets (Critical Care)

Canada’s Top 40 Under 40
2017 - Dr. Liam Brunham (General Internal Medicine)

Canadian Academy of Health Sciences Fellowship
2018 - Dr. Karen Gelmon (Medical Oncology)
2018 - Dr. Dermot Kelleher (Gastroenterology)

Canadian Cardiovascular Society Dr. Robert E. Beamish Award
2018 - Dr. Jason Andrade (Cardiology)

Canadian Council for the Arts Killiam Prize (Health Sciences)
2017 - Dr. Julio Montaner (AIDS)
Canadian Society of Internal Medicine Young Investigator Award
2018 - Dr. Liam Brunham (General Internal Medicine)

Canadian Critical Care Trials Group Deborah J Cook Award for Mentoring
2018 - Dr. Peter Dodek (Critical Care)

Canadian Society of Transplantation Research Excellence Award
2018 - Dr. Jag Gill (Nephrology)

Canadian Thoracic Society Honorary Lecture Award
2017 - Dr. Don Sin (Respiratory Medicine)

CaSTOR Collaborative Networking Grant
2017 - Dr. Thalia Field (Neurology)

CIHR Gold Leaf Prize for Impact
2017 - Dr. Julio Montaner (AIDS)

Doctors of BC Dr. David M Bachop Gold Award for Distinguished Medical Service
2018 - Dr. Marshall Dahl (Endocrinology & Metabolism)

Francis Family Foundation Parker B Francis Fellowship
2017 - Dr. Ma’en Obediat (Respiratory Medicine)

Hevert Foundation Dr. Wolfgang Hevert Prize
2018 - Dr. Jacqueline Pettersen (Neurology)

Life Sciences BC Dr. Don Rix Lifetime Achievement Award
2018 - Dr. Allen Eaves (Hematology)

Medical Undergraduate Society William A. Webber Teaching Award
2017 - Dr. Eric Yoshida (Gastroenterology)

MSFHR Aubrey J. Tingle Prize
2017 - Dr. Jim Russell (Critical Care)

MSFHR Health Professional - Investigator Award
2017 - Dr. Zachary Laksman (Cardiology)

2017 - Dr. Janice Leung (Respiratory Medicine)
2017 - Dr. Seonaid Nolan (AIDS)
2017 - Dr. Daniel Renouf (Medical Oncology)
2017 - Dr. Noah Silverberg (PMR)
2018 - Dr. Thalia Field (Neurology)
2018 - Dr. Del Dorscheid (Critical Care)
2018 - Dr. Melanie Murray (Infectious Diseases)
2018 - Dr. Jenny Ko (Medical Oncology)

MSFHR Innovation to Commercialization Award (I2C)
2017 - Dr. Andrei Krassioukov (PMR)
2017 - Dr. Richard Lester (Infectious Diseases)

MSFHR Scholar Award
2017 - Dr. Liam Brunham (General Internal Medicine)
2017 - Dr. Nadia Fairbain (AIDS)
2017 - Dr. Danya Fast (AIDS)
2017 - Dr. Rod Knight (AIDS)
2017 - Dr. Liangping Li (AIDS)
2018 - Dr. Shannon Kolind (Neurology)
2018 - Dr. Andrea Krüsi (PMR)
2018 - Dr. Ma’en Obediat (Respiratory Medicine)
2018 - Dr. Maria Socías (AIDS)

Order of Canada Member
2017 - Dr. Judy Illes (Neurology)

PHCRI Research and Mission Award
2017 - Dr. Keith Walley (Critical Care)

Resident Doctors of Canada Mikhael Award for Medical Education
2017 - Dr. Barry Kassen (General Internal Medicine)

Senate of Canada 150th Anniversary Medal
2018 - Dr. Julio Montaner (AIDS)

University of Oklahoma Patricia Price Brown Award in Biomedical Ethics
2018 - Dr. Judy Illes (Neurology)

VCHRI Investigator Award
2017 - Dr. John Staples (General Internal Medicine)
2018 - Dr. Thalia Field (Neurology)
2018 - Dr. Nathaniel Hawkins (Cardiology)

VMDA Award for Clinical Excellence
2017 - Dr. Graham Wong (Cardiology)

VMDA Award for Bringing Clinical Renown to Vancouver Community of Care
2017 - Dr. Michael Barnett (Hematology)

VMDA Award for Scientific Achievement
2017 - Dr. Mark FitzGerald (Respiratory Medicine)
2018 - Dr. Jacqueline Saw (Cardiology)

VMDA Award for Special Service
2018 - Dr. Agnes Lee (Hematology)

VMDA Bobby Miller Award for Excellence in Teaching
2017 - Dr. Stephen Nantel (Hematology)
HIGHLIGHTS
• Completed the final transition year of the Year 3 Internal Medicine clerkship and launched the renewed Undergraduate Year 3 curriculum in June, 2017.
• Successfully delivered Undergraduate Ambulatory clinic placements for the double cohort of Year 3 and Year 4 students completing their mandatory electives from the transitional curriculum.
• Successfully filled all PGY1 CaRMS positions for Canadian and International Medical Graduates (2017 and 2018).
  • Completed the first year of the renewed Year 3 Internal Medicine clerkship and launched the renewed Undergraduate Year 4 curriculum in 2018.
• Successfully realigned our Undergraduate Ambulatory clinic placements back into our Year 3 clerkship at three sites in VFMP and across the province at our distributed sites.
• Expansion of Simulation program with new mannequins, including resident-driven airway management course. VGH Simulation Centre opens.
• Expansion of CTU in Victoria with an additional team added.
• Planning, design and implementation of year-long “Soft Launch” of Competency By Design (CBD) in preparation for implementation in 2019.
• Implemented a “Wellness Break” for PGY1s with protected time to see a Wellness Counsellor.

LEADERSHIP
Dr. Andrea Townson, Associate Head, Education

Undergraduate Education Office
• Dr. Winson Cheung, Program Director (2017)
• Dr. Cary Cuncic, Program Director (2018)
• Dr. Harpinder Nagi, Program Director (2018)
• Dr. Jennifer Yao, Associate Program Director (2017)
• Dr. Jasjeet Rai, Associate Program Director (2018)
• Dr. Janet Kow, Assessment Director (2017)

Postgraduate Education Office
• Dr. Mark Roberts, Director Postgraduate Education Program
• Dr. Jim Spence, Assistant Director, Postgraduate Education Program Vancouver Island
• Dr. Peter Weerasinghe, Associate Program Director (Wellness )
• Dr. Cary Cuncic, Associate Program Director (Evaluation & Assessment January 2017 - October 2018)
• Dr. Martha Spencer, Associate Program Director (Evaluation & Assessment October – December 2018)
• Dr. Jane McKay, Associate Program Director (PGY4)
• Dr. Wendy Cook, Associate Program Director (Curriculum)
• Dr. Shane Arishenkoff, Lead Ultrasound Program
• Dr. David Shanks, Lead Simulation Program (2017)
• Dr. Nathan Chan, Lead Simulation Program (2018)
Leadership Changes Undergraduate Education

- Dr. Winson Cheung, Program Director, stepped down effective December, 2017.
- Dr. Cary Cuncic replaced Dr. Cheung in February 2018 to be replaced in November, 2018 by Dr. Harpinder Nagi.
- Dr. Jennifer Yao, Associate Program Director, stepped down effective March, 2017. Replaced by Dr. Jasjeet Rai as the new Associate Program Director.

Leadership Changes Postgraduate Education

- Dr. David Shanks moved to Vancouver Island on June 30, 2017. Replaced by Dr. Nathan Chan as the new Lead, Simulation Program
- Dr. Peter Neufeld’s term as Chair of the Subspecialty Program Directors Committee ended, and the Chair position was accepted by Dr. Parvathy Nair
- Dr. Cary Cuncic reduced her allotted Postgrad time to take over as Program Director, Medicine, Undergraduate Education followed by her complete departure when appointed as Associate Director of Curriculum, Undergraduate Education, Faculty of Medicine
- Dr. Martha Spencer appointed as Associate Program Director (Evaluation & Assessment) in October, 2018

Faculty Recognition

- Presented our annual “Honour Roll for Clinical Teaching Excellence Award” to recognize the top ten percent of Undergraduate and Postgraduate teachers for outpatient and inpatient learning experiences
- Updated the teaching opportunity contact list for all Undergraduate Scheduled Teaching
- Revised the Formal Educational Activities guidelines for Academic Faculty
- Started exploring Revenue Generating Education opportunities with partnering programs at UBC

Scholarship Promotion

- Meetings with partners such as CHES, Faculty Development
- Regular meetings with DOM Education Scholar to discuss ways to promote educational scholarship (at an individual and Departmental level)

UNDERGRADUATE EDUCATION PROGRAM

Internal Medicine Ambulatory Electives

- Continued growth of clinic placements with an emphasis at Surrey Memorial Hospital under the direction of the Site Lead Dr. Yazdan Mirzanejad
- Successfully managed to place the double cohort of students to meet the mandatory clinic placements required from June, 2017 to April of 2018
- Supported the continuing Fraser clinic growth with the hire of a dedicated onsite Program Assistant located at the Jimmy Pattison Outpatient Clinic in Surrey

Curriculum renewal

- Members of the Department of Medicine continued to contribute to this process by creating modified materials and processes reflecting the needed curriculum modifications and most significantly the addition of the Work Based Assessment to document direct observations/feedback
- Prepared for another question writing workshop planned for early in 2018
- Initiated an Ambulatory Working Group in October 2017 to meet quarterly to review site programs, clinical topics and objectives and recommend improvements as the new curriculum rolls out
- Continued to offer MCQ writing workshops with an emphasis on the Ambulatory exam content

Accreditation

- Education Activity forms for both the Body Block and the Ambulatory Block modified for Continuous Quality Improvement and links with curriculum mapping
- Implemented Continuous Quality Improvement changes to address opportunities as identified in the Evaluations Studies Unit survey from 2017-2018 academic year
POSTGRADUATE EDUCATION PROGRAM

Competence By Design
- Attended a special session in May of the Canadian Association of Internal Medicine Program Directors (CAIMPD) with representatives from the Royal College focusing on finalization and rollout of CBD and accreditation in Montreal, QC
- Mandatory Soft Launch of CBD including Workplace-based assessment pilots with EPAs, new ITERs with curriculum mapped to all rotations, and Academic Coaches

Curriculum Updates
- Successful delivery of 2 cycles of two week boot camp for incoming PGY1s in July 2017 and 2018. Resident evaluations were very positive
- Expansion of the formative OSCEs to include 2 PGY1 exams, 1 PGY2 exam (April 2017) and 1 PGY3 Exam (December 2017) with strong support and feedback from residents
- Successful delivery of formative OSCEs for all levels of training with strong support and feedback from residents
- In preparation for the Royal College Exams being moved to the PGY3 year, continued with the new Academic Half Day format of PGY1 Didactic Lecture Series, and Senior Resident Breakout Sessions and formalized study groups
- PoCUS Academy was launched with the aim of providing a comprehensive point of care ultrasound learning experience for residents interested in PoCUS
- Launched a pilot mentorship program for residents: a pilot group of residents was paired up with a faculty mentor for advice on career paths, research, role modelling, etc.

CaRMS
- Successfully matched all PGY1 positions in Vancouver and Victoria for Canadian and International graduates
- In 2018, formal implementation of a “buddy” system for PGY1s to match them up with a senior buddy prior to the start of the academic year

International Health Project
- In 2017, eight residents completed rotations in Gulu, Uganda
- In 2018, seven residents completed rotations in Gulu, Uganda

Events
- Resident Research Day
- Annual Winter Retreat
- Annual Resident BBQ
- In 2018, Inaugural event for the resident-led initiative with a focus on Women in Medicine

FUTURE DIRECTIONS

Office of Education
Continue to support Faculty development and scholarly opportunities across the divisions. Continue to search for partners to create revenue generating education courses.

Undergraduate Education
Continue to support the implementation of improvements to the curricular map and revised assessment modalities for the renewed Year 3 clerkship and the start-up of the renewed Year 4 clerkship scheduled to begin in July 2018.

Postgraduate Education
Continue to focus on the design and preparation for Competence By Design curriculum and infrastructure implementation now scheduled for July 1, 2019.
HIGHLIGHTS

- Experimental Medicine Career Development Day June 29, 2018 at the Medical Student and Alumni Centre
- The Experimental Medicine Graduate Program co-hosted the 6th and 7th annual Department of Medicine Research Expo held on October 31, 2017 and November 7, 2018 respectively.

LEADERSHIP

Dr. Laura Sly was appointed as the Director of the Experimental Medicine Program in July 2017 taking over from Dr. Vince Duronio.

Dr. Duronio was Director of the Experimental Medicine Program for years and helped grow the program to the faculty wide program it is now. Dr. Duronio will continue in his appointment as Professor in the Division of Respiratory Medicine.

Dr. Sly is an Associate Professor in the Department of Pediatrics. Dr. Sly’s research focuses on macrophage phenotype in inflammatory bowel disease. Dr. Sly stepped down from this role in November of 2017 and Dr. Andrea Townson, Co-Acting Head, Department of Medicine stepped in to act as Interim Director of the Experimental Medicine Program.

Dr. Tricia Tang was appointed Director of the Experimental Medicine Program in June 2018 taking over from Dr. Andrea Townson who was acting as the Interim Director of the Experimental Medicine Program.

Dr. Tang is an Associate Professor in the Division of Endocrinology and Metabolism. Her research focuses on investigating low-cost and sustainable models for preventing the development of and complications from type 2 diabetes in high-risk and medically underserved populations. Dr. Tang is a passionate educator and mentor and was awarded the Division of Endocrinology’s Outstanding Research Mentor Award in 2015.

EDUCATION

Experimental Medicine had 127 MSc students and 147 PhD students in 2017-2018. 26 MSc students and 28 PhD students graduated from the program.

AWARDS AND DISTINCTIONS

6 master’s students were offered CIHR CGSM. Two students received affiliated fellowship. One student received NSERC CGSM. 6 students received four-year doctoral fellowship.

The majority of GSI funding goes to 30 PhD students who did not receive any major award that pays their tuition. 17 students received GSI academic award with a GPA above 90%. 54 students were awarded GSI publication award because they published a first or second author paper.

FUTURE DIRECTIONS

The Experimental Medicine Graduate Program aims to guide students to design and conduct experiments and solve problems in their particular fields.
THE UNIVERSITY OF BRITISH COLUMBIA

Department of Medicine
Faculty of Medicine

RESEARCH
RESEARCH OFFICE

RESEARCH OFFICE STAFF
Dr. Teresa Tsang, Associate Head, Research
Dr. Jody Swift, Research Manager (2017)
Dr. Anna Meredith, Research Manager (2018)
Sabina Fitzsimmons, Program Assistant (2017)
Anne-Lise Bondon, Program Assistant (2017-2018)

HIGHLIGHTS
Chairs, Professorships, Distinguished Scholars, CRCs
• 11 Endowed Chairs
• 8 Professorships
• 2 Distinguished Scholars
• 11 Canada Research Chairs

Events
• 2nd Annual HealthTech Symposium co-hosted by Biomedical Engineering Graduate Program and Department of Medicine – May 26, 2017, Paetzold Health Education Centre, VGH
• 6th Annual Department of Medicine Research Expo co-hosted by the Experimental Medicine Graduate Program and Department of Medicine – October 31, 2017, Paetzold Health Education Centre, VGH
• 7th Annual Department of Medicine Research Expo co-hosted by the Experimental Medicine Graduate Program and Department of Medicine – November 7, 2018, Paetzold Health Education Centre, VGH
• Monthly VGH Medicine Grand Rounds

OVERVIEW
2017 was a year of transition in the Research Office, with numerous staffing changes and Dr. Tsang assuming the role of interim Co-Head of the Department.

The Research Office continued its focus on supporting the research activities of our faculty, as well as further strengthening partnerships with affiliated research institutes and centres in the lower mainland, and units across UBC.

The Research Office provided a single point of contact for information on funding opportunities and deadlines, grant development, ethics and compliance, finance, research agreements, statistics support, research mentorship, and medicine rounds for our over 1000 clinical and academic faculty.

In addition to providing pre- and post-award administrative support for over 500 funding applications submitted in 2017, the research office also worked with UBC SPARC to provide grant development and editorial review. The Research Office supported the 2017 Fall CIHR Project Grant competition and provided Faculty-wide one-on-one consultations for the MSFHR Scholar and inaugural Health Professional Investigator Awards, and VCHRI funding competitions including the Investigator Award, Team Grant, and Innovation & Translational Research Award. Research funding held by Department of Medicine faculty has continued to increase in a highly competitive environment where overall success rates have fallen.

The Department of Medicine is a vibrant and productive research environment, attracting $61.2M and $55.2M in research funding in fiscal years 2016-2017 and 2017-18 respectively, and publishing over 1500 papers in 2018. Our members attract approximately 20% of the total research funding in the Faculty of Medicine, and 10% of the total research funding at UBC.

The Research Office was established to enhance this culture of research and furthers the academic mission by supporting education, providing guidance and facilitation, and fostering collaboration. The primary focus of the Research Office in 2018 was to streamline the administrative processes for researchers within our department and provide timely guidance on navigating the research landscape at UBC. We streamlined the onboarding process for new faculty with new funding by providing one-on-one consultations in collaboration with departmental HR and Faculty of Medicine finance so our faculty are better equipped to get their research off the ground more smoothly and rapidly. The Research Office continued to work closely with UBC SPARC and the VCHRI Awards teams to provide grant development support. We provided Faculty-wide one-on-one grant development sessions for the MSFHR Scholar and Health Professional Investigator Awards, as well as the VCHRI Investigator Award, Team Grant, and Innovation & Translational Research Award in partnership with SPARC.
• Total Funding FY 2016-2017: $61.2M
• Number of HPI - 4
• Number of Scholar - 5
• Number of open studies in RiSE - 960
• Over 1400 publications
• Highly Impactful, with a Field-Weighted Citation Impact of 3.58
• 17.9 Citations per publication
• Highly collaborative, 51% of publications involving international collaboration, and 9% academic-corporate collaborations

• Total Funding FY 2017-2018: $55.2M
• Number of HPI - 4
• Number of Scholar - 3
• Over 1500 publications
• Highly Impactful, with a Field-Weighted Citation Impact of 3.19
• 8.3 Citations per publication
• Highly collaborative, 52% of publications involving international collaboration, and 8% academic-corporate collaborations
DIVISIONAL OVERVIEW
The Division consists of experienced researchers working on very different aspects of HIV and AIDS, with many of the researchers located at the BC Centre for Excellence in HIV/AIDS in Vancouver. These aspects include clinical care; basic and applied virology; drug use, addiction medicine and urban health; and gender and sexual health. Members of the Division were very successful in receiving funding from Canadian and International granting agencies.

Dr. Richard Harrigan assumed the role of Division Head in 2018. As well, four new assistant professors were appointed and joined the division in 2018, including individuals with expertise in social science, gender and sexual health, Indigenous health and cultural safety, and clinical research focused on addiction treatment. The research conducted by members is diverse, and spans epidemiology, social science, community-based research, clinical trials, program evaluations, and basic science, as well as topics ranging from gender and sexual health, substance use, HIV and Hepatitis C. Efforts are now underway to rename the division to better reflect the work done by its members. The Division is grateful for the administrative support provided by Julie Sagram, as well as the support of the British Columbia Centre on Substance Use (BCCSU) and the Centre on Gender and Sexual Health Equity (CGSHE).

HIGHLIGHTS
• Highlights of 2017 included our work on population level mortality in the HIV infected populations; illicit drug use among people who inject drugs, comprehensive assessment of supervised drug consumption facilities and the effects of criminalization of prostitution.

• Division members also work hard as patient advocates, helping get the BC government to approve coverage of HIV-prevention medications for high-risk groups; creating public efforts to reduce criminalization of HIV non-disclosure of people on suppressive HIV treatment, supporting a walk-in clinic for people with opioid addictions in Vancouver’s Downtown Eastside, and working to reduce risks to sex workers.


• In 2018, members garnered over $6 million in new peer-reviewed grant funding

• 6 members received or initiated their Scholar awards from the Michael Smith Foundation for Health Research in 2018 (Krusi, Nolan, Socias, Fairbairn, Fast, Knight)

• The Centre for Gender & Sexual Health Equity (CGSHE) was formally established (Sept 2018) as an academic research centre at PHC/PHCRI, with Dr. Shannon serving as inaugural executive director. This Centre currently consisting of over 80 staff and 20+ faculty will serve to promote UBC leadership in sexual health and gender equity research with underserviced and marginalized populations in BC, Canada and globally

• CGSHE was awarded $1 million from Ministry of Women & Gender Equality on best practices in addressing gender-based violence
• In 2018, Dr. Wood secured approximately $4M in philanthropy funding for research and academic positions tied to the establishment of the BC Centre on Substance Use (BCCSU). This includes securing $2.5M from Canopy Growth to create a new UBC professorship in cannabis science (awarded to Dr. Milloy) as well as a $1M donation from the Gordon and Leslie Diamond Foundation to create a new Addiction Medicine professorship at UBC (awarded to Dr. Seonaid Nolan).

• Dr. Wood secured a $1M grant from the Province of BC to create a new professorship in Indigenous Substance Use Leadership (awarded to Dr. Farrell).

• Division members served as the hosts for the province’s Provincial Opioid Addiction Treatment and Support Program, which is responsible for educating the province’s network of opioid treatment providers, and develops and stewards BC’s Opioid Use Disorder Treatment Guideline (Wood, Nolan, Fairbairn).

• Division members (Wood, Kerr) served on the Provincial Opioid Overdose Task Force.

• Dr. Farrell established the BCCSU’s Indigenous Advisory Council and began developing the BCCSU “Indigenous Cultural Safety Framework.

• Dr. Kerr provided expert advice to Health Canada focused on evolving practices within supervised drug consumption services.


• Dr. Fairbairn was a PHCRI Early Career Research Award recipient ($17,500).

• Dr. Nolan was the recipient of the UBC Department of Medicine Fay R. Dirks Award for Teaching Excellence.

• Dr. Socias was awarded the UBC Science Co-op Supervisor Recognition Award – UBC.

• Dr. Krüsi was the Lead Organizer of “Through Our Own Eyes: Photo-Voice Exhibition,” Centre for Gender and Sexual Health Equity (SHAWNA Team) in collaboration with the Afro-Canadian Positive Network of BC, Oak Tree Clinic, Canadian Aboriginal AIDS Network and YouthCo., Vancouver, Canada, (September 13-19, 2018).

• Dr. McNeil, with funding provided by SSHRC, launched “The Crackdown Podcast: A Community-Academic Knowledge Mobilization Project to Address Stigma and the Overdose Crisis” ($49,542 CAD) – which was recognized as the third most popular new Podcast in Canada.

• Dr. Kerr, in partnership with the Western Aboriginal Harm Reduction Society (WAHRS), created and released the film produced by Switchdef Productions titled “The Healthcare experiences of Aboriginal peoples living in Vancouver’s inner city”.

• The Division underwent its first external review, which noted the stellar productivity of the members as well as the diversity of work done by the Division.

**EDUCATION**

Division members provided learning opportunities on the diagnosis, treatment, management and care of HIV/AIDS and related conditions through personalized learning programs. Although these training programs are offered to health care professionals, allied health professionals and students throughout BC, Canada and abroad, they can also be accessed by the community at large. This training includes academic courses at the undergraduate and graduate levels, online training courses, webinar series, continuing education, preceptorship programs and ongoing educational events, like: HIV care rounds, HIV/ARV updates, forefront lectures, journal clubs and Continuing Professional Development (CPD) events.

Members deliver lectures to undergraduate students and engage in other undergraduate teaching throughout UBC, including in SPPH, Psychology, Experimental Medicine, Medicine Y1 MEDD 419 Flexible and Enhanced Learning (Knight), PSYC 361 Neuroscience of Motivation (McNeil), SPPH 400 Statistics for Health Research (Ti), ISCI 448 Directed Studies (Ti), INDE 443 (Krüsi), Psych 314 (Kerr), CBL (Milloy).

• The CGSHE and the BCCSU hosted large cohorts of UBC graduate students and postdoctoral fellows and MD students.

• The CGSHE expanded its 4th Year MD Undergraduate Elective and Flex Placements focused on Sexual Health & Gender Medicine (Shannon, Krüsi).

• The BCCSU expanded its Undergraduate Elective and Flex Placements focused on Substance Use (years 1-4) (Kerr, Milloy, Wood, Fairbairn, Socias, Nolan, McNeil, Ti, Boyd, Knight, Fast).

• Dr. Hull provided ongoing Infectious Diseases teaching for third year MSI students at St Paul’s and VGH during internal medicine blocks.
• Dr. Nolan served as the Medical Director for Providence Health Care’s Addiction Program, which trained over 250 medical trainees in addiction medicine in 2018

• The BCCSU continued to enrol physicians in the Addiction Medicine Clinical and Research Fellowship Programs (13 physician fellows in 2018; Fairbairn, Nolan, Wood, McNeil) The BCCSU & UBC Addiction Care and Treatment Online Certificate (Wood, Fairbairn, Nolan)

• The BCCSU’s Provincial Opioid Addiction Treatment Support Program (Wood, Fairbairn, Nolan)

• The BCCSU’s Enhanced Skills Training Program BCCSU & UBC Addiction Care and Treatment Online Certificate (Wood, Fairbairn, Nolan)

RESEARCH
In 2017-2018, members produced an array of research products and garnered significant funding from various sources, including CIHR, SSHRC, US NIH, the Vancouver Foundation, and the BC Ministry of Health. The members were also highly productive, producing greater than 250 peer reviewed articles, with many appearing in high impact journals, and a number of innovative projects were initiated or continued. Some notable contributions include:

• Emergent drug resistance with integrase strand transfer inhibitor-based regimens. (AIDS. 2017 Jun 19;31(10):1425-1434)

• Changes in mortality rates and causes of death in a population-based cohort of persons living with and without HIV from 1996 to 2012 (BMC Infectious Diseases 2017 17:174)

• Relative effects of antiretroviral therapy and harm reduction initiatives on HIV incidence in BC, Canada, 1996-2013: a modelling study (Lancet HIV. 2017 Jul;4(7):e303-e310)


• High-intensity cannabis use and HIV clinical outcomes among HIV-positive people who use illicit drugs in Vancouver, Canada. (Int J Drug Policy. 2017 Apr;42:63-70)


• Negotiating Violence in the Context of Transphobia and Criminalization: The Experiences of Trans Sex Workers in Vancouver, Canada (Qual Health Res. 2017 Jan;27(2):182-190)

• Intentional cannabis use to reduce crack cocaine use in a Canadian setting: A longitudinal analysis. (Addict Behav. 2017 Sep;72:138-143)

• 90-90-90 and ending AIDS: necessary and feasible. (The Lancet 390 (10092), 341-343)

• Intentional cannabis use to reduce crack cocaine use in a Canadian setting: A longitudinal analysis. (Addict Behav. 2017 Sep;72:138-143).

• The BCCSU & UBC Addiction Care and Treatment Online Certificate (Wood, Fairbairn, Nolan)

PATIENT CARE
• HIV and Hepatitis C care at St. Paul’s hospital site; HIV and Hepatitis C care at VCH community clinics - Pender and DCHC clinics (Hull)

• HIV PrEP care at VCH community clinics (e.g., Health Initiative for Men clinic; Hull)

• Providence Health Care’s Addiction Medicine Consult Service (Nolan; Fairbairn)

• Providence Health Care’s Rapid Access Addiction Clinic (Nolan; Fairbairn)

• Clinically assisting BC’s Licensing, Education, Advocacy and Practice Program (Wood)
Establishment of PHC’s Interdisciplinary Substance Use Division in the PHC Department of Medicine (Nolan, Fairbairn, Wood)

Development of provincial guideline for the treatment of alcohol addiction (Wood, Fairbairn, Nolan)

Development of national guideline for the treatment of opioid addiction with injectable opioid agonist therapy (Fairbairn)

FUTURE DIRECTIONS

Future directions in the division include branching out beyond AIDS to focus more on broader questions including health and health equity. Topics of drug use and gender and sexual health will become increasingly relevant.

- The Division will seek to find a new name to better reflect the work done by the members.
- The CGSHE will continue to expand its clinical training/education programs together in partnership with PHC and UBC
- Dr. Shannon will also be seeking Faculty of Medicine Centre Status for the CGSHE
- The BCCSU, as a UBC Faculty of Medicine Centre, will work with UBC Health to expand substance use disorder education and research
- The BCCSU will seek to establish a new professorship in addiction care with the support of UBC President Santa Ono and match funding from the Ministry of Health and philanthropic donations
- The BCCSU will release a provincial guideline for the management of alcohol use disorder

Dr. MJ Milloy accepts the Canopy Growth Professorship in Cannabis Science

Ministry of Women & Gender Equality press conference for funds to UBC/CGSHE announcement with Dr. Kate Shannon, MP Hedy Fry, Mike Allard (UBC, Vice-Dean, Health Engagement), Janice Abbott (ED of Atira) and Don Sin (VP, PCHRI).
DIVISIONAL OVERVIEW

The success of our relatively new training program has led to growth in our Division since new graduates have a keen interest in the academic mission, wishing to teach and partake in joint learning activities. An advantage we have is that individual allergists in the community can link into our weekly web-based academic half-day and contribute to issues raised in the presentations by fellows and staff. This program is jointly run with the Pediatric Division of Allergy and Immunology and associated programs at Dalhousie, Western and Manitoba Universities. Dr. Donald Stark, our program director, has worked diligently in this endeavor and we also wish to acknowledge the superb administrative support by Nicole Nielsen, whose assistance has been invaluable.

To provide excellence in outpatient clinical teaching, we have been fortunate to have community members who devote their time and expertise. In addition to those in the greater Vancouver area, the members in Victoria now offer rotations for our fellows and in Kelowna Dr. Hien Reeves provides elective rotations for residents in Internal Medicine. All have received excellent evaluations by trainees. These initiatives have led to an increasing number of superb applicants to our training program. Expansion of our numbers in British Columbia (BC) will clearly benefit patients’ access to allergy and immunology assessment.

The Allergy Update CME for physicians and health care providers had a very successful program in its second year with an excellent enrollment and evaluation by attendees. Dr. Amin Kanani initiated and organized this program with help from a number of our members as well as with our pediatric colleagues. 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 (SPH), we have initiated guidelines for surgical antibiotic use that have been accepted and applied. Over the last year we have expanded activities to evaluate Penicillin allergy in hospitalized individuals with this label. This has been highly successful with more than 200 patients being tested and challenged with Penicillin, leading to the removal of the Penicillin Allergy label from hospital, Pharmanet and GP records.

RESEARCH

The members at SPH have a major interest in management of Primary Immune Deficiency and have initiated a number of research projects as well as interactions with the lay organizations, Canadian Immune Deficiency Patient Organization and the Jeffrey Modell Foundation.

A new provincial initiative to improve care for patients with primary immune deficiency (PID) has been undertaken with the Provincial Blood Coordinating Office (PBCO). This involves assessment of provincial data, dissemination of algorithms for diagnosis and management, with the aim to have an integrated data base of PID patients to evaluate appropriate diagnosis, management and health outcome parameters. Divisional members on this committee include Drs. Kingsley Lee, Peter Lee, Hien Reeves, Seung Kim, Donald Stark, and Robert Schellenberg.

We continue to expand the subcutaneous immunoglobulin home-infusion program which provides convenience for patients as well as decreases hospital day care requirements. Additional measures have to undertaken to provide this for secondary immune deficiency and Dr. Schellenberg has been involved with the Division of Hematology and Bone Marrow Transplant Program in establishing this for their patients.

Together with Dr. Catherine Biggs, a Pediatric Immunologist at BC Children’s Hospital, and Dr. Persia Pourshahnazari, a recent graduate of our program, we are planning a transition clinic at SPH for patients graduating from the pediatric program, this will commence on Feb. 1, 2018. Dr. George Wong continues his specific
expertise in evaluation of complementary and alternative medicine practices and has presented on potential adverse effects of these preparations at international meetings. 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.

**AWARDS & DISTINCTIONS**

**Dr. Robert Schellenberg**
- Received the Canadian Society of Allergy and Clinical Immunology (CSACI) Distinguished Member Award in September, 2017 in recognition for his many contributions to the society and the Royal College Examination Committee in Clinical Immunology and Allergy.

**Dr. Donald Stark**
- Received the Canadian Society of Allergy and Clinical Immunology (CSACI) Distinguished Member Award two years prior, recognizing his major commitment to the national Society which included his establishment of a charitable organization that provides competitive research funding for members (Canadian Allergy, Asthma and Immunology Foundation).

**EDUCATION**

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. A new CME program for physicians organized by Dr. Amin Kanani, the Update in Allergy Conference, was for the second year very well attended and evaluated. Members of the St. Paul’s staff also present at the St. Paul’s Hospital (SPH) General Practitioner Update Course and have been involved with the St. Paul’s Internal Medicine Update Course.

**PATIENT CARE**

All members are actively involved in providing clinical consultative services in Allergy and Immunology to the community. Dr. Donald 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. Amin Kanani established a clinic in Surrey and Dr. Shamim Wadiwalla is now established full-time at that site with involvement with Surrey Memorial Hospital (SMH). Other new graduates have joined that facility and they have expressed wishes to join the division with an active teaching role. Dr. Kanani has also established a program training patients with Hereditary Angioedema to self-infuse C1 inhibitor at home. Dr. George Wong has had a specific interest in complimentary medicine practices and the potential harmful effects of specific treatments.

**FUTURE DIRECTIONS**

With the successful launch of a training program, developed by Dr. Donald Stark and Dr. Edmond Chan, and with the support of all members of both the adult and pediatric divisions, we continue to innovate and optimize our training modalities. Initially sharing academic half-day activities with the University of Manitoba pediatric and adult divisions via Skype, we have expanded this video-conferencing interaction to include the allergy programs at Dalhousie University and Western University 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 and immunologists who attend.

We plan to continue our initiatives in primary and secondary immune deficiency that entail home therapy and establishment of a transition clinic from pediatric to adult patients. Additional work with the Provincial Blood Coordinating Office should improve care of immune deficient patients throughout BC and establish a data base for outcome research. Working with the Provincial Blood Coordinating Office, we are establishing protocols and oversight for the appropriate management of both Immune Deficiency and Hereditary Angioedema (IDHA) patients within BC which should be of benefit to patients and care-givers.

We plan to continue initiatives with the Antibiotic Stewardship Program, hopefully duplicating the success achieved at SPH and at other major BC hospitals. Obtaining resources for an Adverse Drug Reaction Clinic and Food Allergy Clinic remain a priority as the needs clearly exist. Further recruitment of a full-time academic Allergist/Immunologist remains a priority as the present head of the division reduces his activities starting in 2018.
DIVISIONAL OVERVIEW

It comes as no surprise that the Cardiology Academic Partnership Plan (CAPP) springs to mind as a major step forward in partnership for the Division in its commitment to clinical academic excellence. We are pleased to see the extraordinary fruits of our efforts, including the maturation of several of our junior researchers into nationally and internationally impactful innovators, including growing roles in national guidelines, international leadership, Heart and Stroke and CIHR grant panels.

None of this could happen without the incredible contributions of our partners. Heart and Stroke continues to be our flagship partner, investing in the support for early career researchers. Renewed support for the CAPP vision has consolidated our growing relationship and commitment to discovery for the good of British Columbians. Our St. Paul’s Hospital (SPH), Vancouver General Hospital (VGH), and UBC Hospital Foundations do amazing work on our behalf, on many fronts including CAPP, and we are ever grateful. Bayer Pharmaceuticals is our longest tenured Industry partner, investing in innovation and its commitment to clinical academic excellence. UBC Department of Medicine, believing in the Division’s common goal. This speaks to return on investment by our partners who believe in us.

We have created a culture of innovation and excellence that we are fostering, and our commitment as individuals leads us towards accomplishing that common goal. This speaks to return on investment by both the Division members and by our partners who believe in us.

DIVISION HEAD
• Dr. Andrew Krahn

DIVISION STAFF
• Sima Allahverdian
• Lenka Antoni
• Yu Cao
• Jaclyn Chow
• Emma Christison
• Patrick Daniele
• Brianna Davies
• Karen Gibbs
• Hany Girgis
• Elizabeth Grieve
• Maja Grubisic
• Meijiao Guan
• Mark Hensley
• Esther Hogendoor
• Mona-Atieh Izadnegahdar
• Mikyla Janzen
• Heather Joe
• Craig Kamimura
• Tanja Kot
• Janet Liew
• Shirley Lim
• Christina Luong
• Jessica Maiorino
• Carol Marchand
• Ngaire Meadows
• Susan Munro
• Annamaria Oliveri
• Eunjoo Park
• Faye Pederson
• De Fen Peng
• Brady Robinson
• Arnold Ryomoto
• Gnalini Sathananthan
• Mehdi Shirmaleki
• Andriy Starovoytov
• Marion Thomas

DIVISION MEMBERS
• Robyn Tkatch
• Naomi Uchida
• Hyacinthia Van Hoof
• Ravi Varshney
• Livia Virgolici
• Chen Wei
• Shirley Wong
• Lauren Yee
• Eunice Yeoh
• Yinshan Zha

• Dr. A Fung
• Dr. P Gladstone
• Dr. O Gusbi
• Dr. K Gin
• Dr. J Grewal
• Dr. J Hamburger
• Dr. H Hadi
• Dr. F Halperin
• Dr. N Hawkins
• Dr. B Heilbron
• Dr. H Henning
• Dr. R Hiralal
• Dr. R Hooper
• Dr. V Huckell
• Dr. K Humphries
• Dr. A Ignaszewski
• Dr. K Ioannou
• Dr. S Isserow
• Dr. J Jue
• Dr. S Kendeep
• Dr. A Khusla
• Dr. M Kiess
• Dr. A Krahn
• Dr. Z Laksman
• Dr. A Lalani
• Dr. C Lane
• Dr. R Lau
• Dr. R Leater
• Dr. P Lee
• Dr. J Lemaitre
• Dr. J Leipsic
• Dr. I Macdonald
• Dr. G Mackenzie
• Dr. G Mancini
• Dr. M Mann
• Dr. D Manyari
• Dr. D Massel
• Dr. J Mayo
• Dr. J McKinney
• Dr. R Moss
• Dr. B Munt

• Dr. P Nair
• Dr. P Novak
• Dr. K Ong
• Dr. T Lyall
• Dr. S Pimstone
• Dr. K Pistawka
• Dr. A Rabinowitz
• Dr. S Rabkin
• Dr. J Rajala
• Dr. K Ramanathan
• Dr. D Ricci
• Dr. S Robinson
• Dr. J Saw
• Dr. T Sedlak
• Dr. K Shetty
• Dr. G Simkus
• Dr. R Sochocki
• Dr. L Sterns
• Dr. L Straatman
• Dr. E Swiggum
• Dr. J Tang
• Dr. C Taylor
• Dr. C Thompson
• Dr. M Toma
• Dr. M Tsang
• Dr. K Tung
• Dr. R Vandegriend
• Dr. S Virani
• Dr. T Verma
• Dr. J Vuurmans
• Dr. J Vyselaar
• Dr. R Tsang
• Dr. W Tsui
• Dr. K Wallace
• Dr. J Webb
• Dr. M Williams
• Dr. D Wood
• Dr. G Wong
• Dr. J Yeung
• Dr. S Yue Ping Au
PATIENT CARE

In 2017, the four Vancouver based hospitals continue to strengthen ties with guidance through the regional cardiac program. At SPH’s and Mt. St. Joseph’s Hospitals (MSJH), the expansion of general cardiology services has seen the recruitment of a new clinical cardiologist, refreshing the in-patient cardiology consult service and addition of a cardiology STAT clinic. This is coupled with an approved business case for increased physical plant and electrodiagnostics to address current access and capacity issues. There is continued growth of multi-disciplinary and multi-specialty quaternary clinics including Hypertrophic Cardiomyopathy, Cardiac Sarcoid, Inherited Arrhythmia, Cardiac-Obstetrics, Heritable Aortopathy, Adult Congenital Heart Disease, and Cardiac Transplant. The flagship valvular heart disease program continues to show global leadership through the Centre for Heart Valve Innovation (CHVI). Leadership and division members are actively participating in the St. Paul’s redevelopment process and Clinical Systems Transformation (CST). Finally, the process of recruitment of a new Division Head and Physician Program Director for the Heart Centre began.

The regional cardiac program has focused on updating the IMIT structure and is working towards implementing a $2.9 million regional echo reporting and cardiac solution (SYNGO) as well as updates of the ECG (MUSE) and device (PACEART) solutions.

At VGH, funding raising has been completed ($7.8 million) to build a new EP lab and to renovate some of the recovery areas. Expected to be operational by April 2019.

Funding has been completed ($2.5 million) to build a new VGH Cardiac Diagnostics Centre (CDC). This is expected to reduce the waitlist for echo by 30%. This will, in turn, allow for redevelopment of the 9th Floor, which should increase exam room space for the Atrial Fibrillation and Heart Failure Clinics by 305.

These areas are expected to be operational in late 2018, early 2019. Plans are also underway to recruit a cardiologist with expertise in palliative care to provide the full spectrum of care to patients.

In 2018, For St. Paul’s Hospital, upon completion of a formal internal and external recruitment process, Dr. Sean Virani joined the Division of Cardiology at Providence Health Care as the new Head in July 2018, replacing Dr. Andy Ignaszewski who had completed a two-term mandate.

In 2018 we appointed 7 new faculty members (M Luong, J Todd, C Franco, S Dhesi, G Sra, B Lau, D Lee). As well, in 2018 four of our faculty were promoted (G Wong, J Tang, T Sedlak, J Andrade). The PHC Division remained heavily engaged in planning for implementation of CST Cerner and redevelopment of St. Paul’s Hospital, two transformational projects that will define the way cardiac care is provided in British Columbia moving forward.

Other priorities for the Division included (1) a refresh of general cardiology services with recruitment of new physicians and renovation of existing spaces to meet the growing need for ambulatory cardiac care and diagnostic resources, (2) expansion and redesign of existing multi-disciplinary quaternary clinics to support increased demand based on population growth and new Provincial hub-spoke infrastructures implemented by Cardiac Service BC, and (3) a heightened focus on strategies to address quality metrics, including access and capacity, related to key services lines including diagnostic echocardiography, ambulatory rhythm monitoring and remote follow-up of cardiac implantable electronic devices.

2018 was a productive year for the VGH Division of Cardiology. The Division fundraised over 10 million dollars which enabled development of a new cardiodynamics centre which enabled a ≥20% increase in echo and Holter volumes. Plans are to expand the Heart Function, Atrial Fibrillation, Cardio-Oncology, Cardiac Amyloid, Women’s Cardiology and Aortic clinics into new space on the 9th floor. Palliative Cardiology is set to begin operations in 2019. A new state of the EP lab will be completed and operational in 2019.

RESEARCH

The Division published 270 individual peer reviewed manuscripts in 2017 from 92 registered and funded projects totaling $4.4 million in operating funds. In 2018, the Division published 320 individual peer reviewed manuscripts from $5.5 million dollars in operating funds.

Seventeen division members receive CAPP salary stipends or pilot project funds to protect time and conduct research. These are all increases from 2016.

The journey to achieve academic excellence is marked by the upstream struggle to obtain support to conduct research and sustain projects that subsequently de facto become a research program. CAPP invested $150,000 in pilot funds for Division members to kick start their goal of obtaining external funding to conduct research in 2017 and 2018. Several recruits with a larger scope of research focus have joined the ranks, matched by both internal and external funding, and emerging productivity. Research highlights can also be reviewed in our quarterly research newsletters which are distributed electronically and posted on our website.
HIGHLIGHTS

• $661,527 in peer reviewed funding in 2017. $2.5 million in peer reviewed funding in 2018.

• $304,121 in other research funding in 2017. $3 million in other research funding in 2018.

• Published 270 individual peer reviewed manuscripts last year from 92 registered and funded projects totalling $4.4 million in operating funds in 2017.

• Published 280 individual peer reviewed manuscripts last year from 92 registered and funded projects totalling 5.5 million dollars in operating funds in 2018.

• 17 division members receive CAPP salary stipends or pilot project funds to protect time and conduct research.

AWARDS & DISTINCTIONS

Dr. Andrew Krahn
• Recipient of the Providence Health Care, Department of Medicine Research, and the UBC Martin M. Hoffman Award for Excellence in Research.
• 2017 CANet Mentorship award.

Dr. Nathan Brunner
• Providence Health Care 2016 Donald M. Whitelaw Award for Outstanding Rounds Presentation, “pulmonary Hypertension – the other high blood pressure”.

Dr. Zachary Laksman
• Recipient of the 2017 Michael Smith Foundation for Health Research Health Professional Investigator Award for his project “Developing personalized anti-arrhythmic drug therapy for atrial fibrillation”.

Dr. Jacqueline Saw
• One of the 2017 Clinical Trials Leaders and Champions for her research on the SCAD Registry, and LAA Closure Registry.

Dr. Ken Gin
• Elected Fellow of the Canadian Cardiovascular Society (FCCS)

EDUCATION

The UBC Division of Cardiology continues to offer subspecialty training in adult angiography, adult echocardiography, adult heart failure, cardiac rehabilitation, electrophysiology, and adult congenital heart disease.

All programs remain committed to the Areas of Focused Competence (AFC) process as set out by the Royal College; four of these programs (adult heart failure, echocardiography, angiography, and electrophysiology) are currently RCPSC AFC compliant.

A financial model to disperse central funds from Cardiac Services BC to the 6 subspecialty programs was adopted after careful discussion and broad input from the Division. This model was implemented in July 2018. Funds are dispersed on an ongoing and annual basis to programs on the basis of program size, defined by the number of fellows trained/year and number of training sites. Funds are dispersed to the Program, and the Program is responsible for dividing the funds internally amongst the various training sites. Programs are encouraged to continue to apply for and canvas for external funding to supplement this base level of funding.
The Division held six continuing medical education events in 2017:

1. 13th Annual HOT TOPICS in Cardiology (Fully accredited by UBC CPD), 7.5 MOC Section 1 MAINPRO, Attendance n=135

   This is a whole day symposium, considered as the “UBC Flagship” for primary care CME with the majority of the speakers from the UBC faculty of Cardiology. We have seen this event slowly increase in the number of registrants. This event was also sponsored by many pharmaceutical partners and this year we were able to attract sponsorship from device companies. Through this event, we also built on a strong relationship with Heart and Stroke Foundation of Canada by providing space for display which is usually only available for bronze or higher level of sponsors. Similarly, we also provided space for UBC medical students to sell their artwork to raise funds. Evaluation of the program shows this to be a highly valued event and with many speakers receiving outstanding evaluations. Given the challenges in the industry to attract funds, we will in future years have to explore non-traditional funding sources.

2. Post ACC Review Journal Club Dinner Event*
   Attendance n = 40

3. Post ESC/ ADA Journal Club Dinner Event*
   Attendance n = 45

4. Post AHA Journal Club Dinner Event*
   Attendance n = 35

   *Events 2-4s are self-approved group learning activity (section-1) by the MOC program of the Royal College of Physicians and Surgeons of Canada. These continue to be highly successful with an excellent forum for dialogue between cardiologists from academic and non-academic sites to review and discuss new literature and its relevance to the BC population. In 2017, these events have evolved to be multi-sponsored events to mitigate any possible bias in the material presented. It is anticipated to build on the success of these events to arrange “Updates” following Specialty meetings such as the Heart Rhythm Society, TCT, Heart Failure/Transplant Society meetings.


   A collaborative event led by Cardiology to highlight the new and evolving literature in this field to develop strategies to better manage diabetic patients. Speakers and audience were representatives from all four-major subspecialties. This event was followed up by other several small group discussions meetings.


   The target audience for this event was specialists in the care of thrombotic complications including Cardiologists, Internists, Hematologists, and Vascular Surgeons. This event allowed us to rekindle the relationship we had enjoyed with Hematology.

The Division held five continuing medical education events in 2018:

1. 14th Annual HOT TOPICS in Cardiology (Fully accredited by UBC CPD), 7.5 MOC Section 1 MAINPRO, Attendance n=159

2. 3rd Annual UBC Heart Failure Symposium

3. Division of Cardiology ACC Update

4. Division of Cardiology ESC Update

5. Division of Cardiology AHA Update

FUTURE DIRECTIONS

In 2018 we anticipate further clinical and academic development with the renewal of Division leadership at St. Paul’s Hospital, as Andy Ignaszewski steps down after 13 years in the role. This aligns with the institutional push to focus on redevelopment of the new hospital. Aligned with this is a goal to broaden the academic mandate by hiring a research facilitator, and competing for new Academic Faculty positions in recently announced competitions. These goals all align with our 2015 strategic plan that targeted academic growth and clinical excellence.

As you read through this report, ask yourself how it reflects the intended culture of innovation and excellence that we are fostering, and how our commitment as individuals leads us towards accomplishing that common goal. We continue to see a return on investment by both the Division members and by our partners who believe in us.
DIVISION OVERVIEW

The Division of Community Internal Medicine is a large, diffuse and distributed group that participates in health care delivery throughout the province of British Columbia (BC) and in the education of the province’s future doctors. Community and Rural Internal Medicine (CRIM) has been an essential part of the growth of Internal Medicine in BC as it has promoted a special fee structure (amount) for Internists in the province. As most members are almost entirely dependent on the fee for service, this alone has increased the interest and promoted the discipline of Internal Medicine. CRIM has already achieved much since its inception spearheaded by Michael O’Brien in 2005. Dr. Danny Meyers further increased CRIM’s annual fee allocation after the last Master Agreement by applying for recruitment and retention as well as disparity funding. Since 2017, CRIM also added a team of executive officers, who have also contributed greatly to its decision making and functioning: Drs. Matt Bernard, Mitch Lee, Kevin McLeod, Anita Palepu, and Jane Wu.

Dr. Mike Kenyon has a leadership role internationally as governor for the American College of Physicians (ACP). We have Division members who are in provincial leadership (Dr. Shaw) President of Community and Rural Internal Medicine (CRIM) as well as Dr. Jennifer Grace who is Interim Executive Medical Director for Vancouver Island Health Authority (VIHA). Dr. Hector Baillie is participating in a provincial program with the BC College of Physicians and Surgeons in the capacity of assessment for Internal Medicine specialists in BC. We have members who are active site leaders for their Internal Medicine groups in various parts of the province. Dr. Jim Spence is the lead in Victoria, Dr. Jennifer Grace - Campbell River, Dr. Niels Schwarz - Nanaimo, Dr. Callum Reid - Salmon Arm, Dr. Chad Dyck - Penticton, Dr. Ed Auersperg - Maple Ridge, Dr. Y. D. Yu - Richmond, Dr. Kevin MacLeod - Lionsgate, Dr. Bruce Hillier - Comox.

EDUCATION

The University of British Columbia (UBC) training program has both four and five-year components, with the five-year program designated as sub-specialty in General Internal Medicine (GIM). Both of these streams have a large emphasis on training in the community with a significant part of the program dedicated to this training. The programs are led by Dr. Jane Mackay (four-year program) and Dr. Stéphane Voyer (five-year program). Both of these physicians have or had a presence in the community in the Internal Medicine care delivery. For the 2017 academic year, we had seven Doctors training in the four-year program, and fifteen in the five-year program.

PATIENT CARE

The clinical interests of the Division vary. The Community General Internist may provide critical care and specialized care in specific domains (i.e. HIV, Sports Medicine, etc.) in Palliative care and consultation care to hospitalized and ambulatory patient. The roles encompassed by Division members are often dictated by consultation care to hospitalized and ambulatory patient. The domains (i.e. HIV, Sports Medicine, etc.) in Palliative care and Internist may provide critical care and specialized care in specific domains.

FUTURE DIRECTIONS

The recognition that community and academic based physicians are not separate entities is a goal for the future. To that end support for community - based research and shared research (community and academic sites) is something, we should work toward.
DIVISIONAL OVERVIEW
The UBC Division of Critical Care Medicine is multi-disciplinary in nature. Our members are qualified critical care specialists with Medicine, Surgery, 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.

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, post-graduate, 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 from St. Paul’s, Vancouver General, and Richmond Hospitals participate, under the direction of Dr. Demetrios Sirounis, 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 and monitor performance in the ICU using the ICU database. 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. Greg Haljan is the Head of the ICU at Surrey Memorial Hospital. Dr. Ryan Foster continued as the Medical Director of Critical Care for Kelowna General Hospital and the Interior Health Authority.

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 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. The areas of ongoing active clinical research includes epidemiology and outcomes in traumatic illness (including TBI), sepsis, patient safety, and quality improvement.

EDUCATION
The University of British Columbia Adult Critical Care Medicine Training Program continued under the direction of Dr. Gordon Finlayson. 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.
DIVISIONAL OVERVIEW

The Division of Endocrinology and Metabolism successfully underwent a Program review and accreditation in 2017. The Division also underwent an external review in 2017. After two terms as Division Head, Dr. Ehud Ur was replaced by Dr. Marshall Dahl. The Division members are grateful and acknowledge Dr. Ur’s contributions under his leadership for over 10 years.

Dr. Dahl has been a Clinical Professor in the Division of Endocrinology and Metabolism since 2012. He has held numerous leadership roles locally, provincially, and nationally. He was a member of British Columbia’s Medical Services Commission. He was President of the Vancouver Acute Medical and Dental Staff from 2015-2017, and is currently Chair of the Vancouver Coastal Health Authority Medical Advisory Committee. He is President of the Endocrinology and Metabolism Society of British Columbia and past President of the British Columbia Medical Association. He was a council/board and general council member of the Canadian Medical Association, and President of the Professional Association of Residents and Interns of British Columbia. He has been the President of the UBC Alumni Association, a member of the Department of Medicine Academic, Appointment, Reappointment, Promotion and Tenure Committee and a member of the Admissions Policy Committee in the Faculty of Medicine. He served as Chair of the Councils on Health Policy and Economics of the British Columbia Medical Association and the Canadian Medical Association and was a member of the College of Physicians and Surgeons of BC Practice Assessment Committee. Dr. Dahl has been actively engaged in teaching at the undergraduate, postgraduate, and continuing professional levels since his UBC appointment. He is known to all as an excellent clinician with a particular interest in diabetes care, and a leader with strong interpersonal and administrative skills.

In this transition year, Dr. Dahl has focused on recruitment, collaborations with health authorities and a division-wide strategic funding model.

HIGHLIGHTS

- The Metabolic Bone Clinic was developed at St. Paul’s Hospital to provide care and treatment not only for patients with osteoporosis, but also patients with complex diseases and genetic abnormalities related to bone loss. The clinic is run by Dr. Sabrina Gill.
- A new faculty member was recruited to the Division, Dr. Jordanna Kapeluto. Dr. Kapeluto brings her additional training and expertise in obesity, bariatric medicine, and lipohypertrophy to the Division.
- New Division Head (Dr. Marshall Dahl) appointed in February 2018
- The Division of Endocrinology had several well attended and successful seminars:
  - 16th Annual Live Well with Diabetes Seminar organized by Drs. Breay Paty and Keith Dawson
  - 30th Annual Diabetes Directors Seminar organized by the Endocrine Research Society (Drs. Monika Pawlowska and Adam White)
  - 18th Annual BC Endocrine Day Conference organized by the Endocrine Research Society (Drs. Monika Pawlowska and Adam White)
  - 9th Annual Ted Wilkins Lectureship (from the grateful support of the Martin Hoffman Endowment Fund). This year’s guest speaker was Dr. Elizabeth Pearce from Boston Medical Centre.
  - Dr. Marshall Dahl awarded the Dr. David M. Bachop Gold Award for Distinguished Medical Service
  - Dr. Michelle Johnson awarded “Teacher of the Year”, an annual recognition to a division member (voted by the residents) for their outstanding teaching contributions.
**RESEARCH**

In 2017, Dr. Tricia Tang was awarded a grant from the Lawson Foundation on Project Bhangra: Drawing on cultural traditions to build lifelong exercise habits among South Asian children ages 8-12 at risk for developing type 2 diabetes.

Dr. Gordon Francis was a successful applicant of the 2017 Canadian Institutes of Health Research Fall Project Grant competition on his research project studying whether overexpressing LAL in arterial smooth muscle cells specifically can reduce atherosclerosis development and induce regression of existing atherosclerosis which could potentially reveal new information about the basic pathology of atherosclerosis, the primary cause of heart attacks (and therefore heart failure), and strokes.

In 2018, the Division of Endocrinology had a successful research year with a total of 50 publications (11 as first authored).

*2017-2018 Research Highlights:*

- Expansion of recruitment for the Islet Stem Cell Trials under the leadership of Dr. David Thompson Research Group.
- Dr. Gordon Francis received a CIHR grant ($512,550): Relative deficiency of lysosomal acid lipase in arterial smooth muscle cells as a novel target for atherosclerosis treatment and prevention.
- Dr. Tricia Tang received a VCHRI Team Grant Award: Fruit and Veggies for Life! Developing an intervention to increase fruit and vegetable intake in the Chinese-Canadian Community.
- Ongoing research at BC Diabetes (Dr. Tom Elliott) expanded to 15 clinical trials involving diabetes care.
- Several division members were invited speakers at International meetings in 2018:
  - Dr. Tricia Tang: Symposium Speaker: 5th Annual International Symposium of Diabetes Education and Management, August 9-11, 2018, Changchun, China
  - Dr. Jerilynn Prior: Department of Public Health and Primary Practice Research Meeting and Gynecology Department Seminar at the Norwegian University of Science and Technology (NTNU), Trondheim, Norway Sept 20-21, 2018

**EDUCATION**

Under the leadership of Program Director, Dr. Jason Kong, the Division of Endocrinology residency training program has expanded to 2 or 3 provincially funded positions and 1 or 2 clinical research fellows annually. The Program underwent a review and accreditation in 2017.

In 2018, the Division of Endocrinology residency training program (under the leadership of Dr. Jason Kong, Program Director) trained more subspecialty residents than ever before with 2 or 3 provincially funded positions and 1 or 2 clinical research fellows annually. Endocrinology training sites expanded to Royal Columbian and Surrey Memorial Hospitals and community sites, including Kelowna.

The Academic Half-Day was refined and improved by incorporating resident feedback, initiating physical examination sessions and practice examinations. Also, guest speakers from related UBC departments, such as radiology and pathology, and outside speakers, including academic endocrinologist were invited to meet with residents and mentor them on academic careers.

**PATIENT CARE**

Division members participate in patient care throughout the lower mainland including VGH, St. Paul’s Hospital, Royal Columbian Hospital, Richmond Hospital, Victoria General Hospital and Surrey Memorial Hospital.

**Specialty Clinics within the Division include:**

(At St. Paul’s Hospital): Thyroid Clinic, Pituitary Clinic, Reproductive Clinic, Prevention (Lipid) Clinic, Metabolic Bone (Osteoporosis)

(At VGH): Adult Metabolic Diseases Clinic, Islet Cell Transplant Clinic

**FUTURE DIRECTIONS**

Recruitment and address succession planning and new areas of expertise: cardio-active diabetes medication, women’s health, transgender care, population health, and young adult care.
DIVISION OF GASTROENTEROLOGY

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-St. Paul’s Hospital and Mount St. Joseph’s Hospital). The Division also has faculty members at the distributed sites including Richmond General Hospital, Royal Columbian Hospital, Lions Gate Hospital and Surrey Memorial 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.

HIGHLIGHTS
- Divisional lead meetings: Annual GI Forum (Oct) and Whistler GI Advances (June) and Liver Forum (Oct).
- Colon Cancer Screening Program (CSP) – expansion with endoscopic services throughout the Province to meet needs of Program Based Screening for colon cancer based on FIT testing.
- Role out of quality initiatives to do with CSP - Direct Observation of Procedural Skills (DOPS), endoscopic report cards, Train the Trainer, Skills Enhancement in Endoscopy (SEE).
- Recruitment of advanced therapeutic endoscopist for VGH.
- IBD Center development - laying groundwork with expansion and network of IBD specialists in Victoria, Kelowna, Burnaby, Richmond, and Vancouver.
- Development of strategic plan for Division - short and long term.

RESEARCH
The faculty of the Division of Gastroenterology is very involved in both clinical and basic science research. Drs. Baljinder Salh and Isabella 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). Dean Dermot Kelleher is involved in translational research and is presently working on a “bench to bedside” model with Dr. Fergal Donnellan and Dr. Rob Enns in the area of Barrett’s esophagus. 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, and non-viral hepatitis, hepatocellular cancer, and 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 site. Dr. Enns is actively involved in investigator-initiated clinical research and has developed outstanding clinical research expertise in capsule endoscopy and therapeutic endoscopy and is well-published in these areas. As well, Dr. Enns is a co-author on the National Consensus Guidelines for capsule endoscopy. Dr. Eric Lam and Dr. Fergal Donnellan are actively engaged in clinical research in the field of endoscopic ultrasound while at the same time developing areas of advanced endoscopic directives such as endoscopic submucosal dissection techniques. Drs. Brian Bressler, Greg Rosenfeld, and Yvette Leung have established a clinical research program in inflammatory bowel disease and is presently developing an IBD Research network and center. Working with Drs. Rosenfeld and Leung have

DIVISION HEAD
- Dr. Rob Enns

DIVISION MEMBERS
- Dr. A Chang
- Dr. H Chung
- Dr. D Krygier
- Dr. S Moosavi
- Dr. C Nash
- Dr. T Picton
- Dr. J Shah
- Dr. J Singh
- Dr. V Wong
- Dr. J Amar
- Dr. K Atkinson
- Dr. A Bak
- Dr. R Barclay
- Dr. A Buckley
- Dr. J Cheung
- Dr. O Pereira
- Dr. F Donnellan

- Dr. S Erb
- Dr. N Fu
- Dr. J Ho
- Dr. S Holland
- Dr. L Keyvani
- Dr. H Ko
- Dr. K Koziol
- Dr. M Lam
- Dr. Y Leung
- Dr. C Lin
- Dr. D Loomes
- Dr. V Azalgar
- Dr. P Mullins
- Dr. R Pai
- Dr. D Pearson
- Dr. R Perini
- Dr. D Pertunia
- Dr. K Render
- Dr. G Rosenfeld
- Dr. J Whittaker

- Dr. K Yik
- Dr. I Zandieh
- Dr. B Bressler
- Dr. N Chatur
- Dr. M Fishman
- Dr. W Kwan
- Dr. E Lam
- Dr. A Ramji
- Dr. R Singh
- Dr. M Byrne
- Dr. H Chaun
- Dr. R Enns
- Dr. J Gray
- Dr. L Halparin
- Dr. J Telford
- Dr. A Weiss
- Dr. H Freeman
- Dr. D Kelleher
- Dr. E Yoshida
- Dr. B Salh
- Dr. I Tai
an interest in IBD as it particularly relates to pregnancy and these clinics have been developed in a multidisciplinary fashion. Dr. Jennifer Telford is conducting multiple research studies, many of them directed toward the Colon Screening Program.

In addition to the BC Hepatitis Program, the Division of Gastroenterology at Vancouver General Hospital has created a separate Luminal Gastroenterology Clinical Trials Unit under the leadership of Dr. Bill Salh. Dr. Fergal Donnellan’s research interest is capsule endoscopy, EUS and quality control. Dr. Michael Byrne is developing Artificial Intelligence applications for GI endoscopy. It is expected that clinical research will continue to expand at both the main teaching hospitals and is a major strength of the Division.

EDUCATION
The faculty of the UBC Division of Gastroenterology are involved in several specific and specialized clinical academic programs. These include:

- Undergraduate medical education of 3rd and 4th year medical students
- Postgraduate medical education of medical and surgical residents
- Gastroenterology Fellowship Training Program
- IBD Fellowship Training Program Director
- Transplant Hepatology Fellowship Training Program
- Advanced Therapeutic Endoscopy Fellowship Training Program
- Colon Cancer Screening Program
- Skills Enhancement in Endoscopy (SEE)- which involves both Clinical Skills Enhancement as well as “train the trainer” courses.
- Continuing medical education events and conferences including monthly journal clubs, the Annual GI Forum, Liver Forum, IBD Mentoring, CSP Education Day, and Gastroenterology Advances.

PATIENT CARE
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. Approximately 80 liver transplants were performed in 2017.

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. Barrett’s esophagus management provincially is performed at the BC Cancer Agency by Dr. Alan Weiss and at St. Paul's and VGH by Dr. Rob Enns and Dr. Fergal Donnellan respectively.

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 UBC faculty with cross-appointments. As well, the Division is involved in clinical activity with British Columbia Transplant and the British Columbia Cancer Agency (PHSA).

In addition, ESD programs are being initiated at both VGH and SPH under the direction of Dr. Fergal Donnellan and Dr. Eric Lam respectively. 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. Provincial /Regional leadership in the Colon Cancer Screen Program is provided by Dr. Jennifer Telford and Dr. Rob Enns. Provincial quality assessment of endoscopic skills (DOPS) is lead at each hospital under the direction of Dr. Rob Enns, Dr. Michael Byrne, Dr. Fergal Donnellan, and Dr. Carla Nash.

AWARDS & DISTINCTIONS

Dr. Rob Enns
- Dr. Donald M. Carr Memorial Teaching Award
- 2018 ASGE International Recognition Award

Dr. Eric Yoshida
- William A Webber Award.

Dr. Hugh Freeman
- Chair of the UBC Clinical Research Ethics Board

Dr. Denis Petrunia
- Outstanding Contribution Award

Dr. Vladimir Marquez
- Lectureship Award

Dr. Chaoran Zhang
- Best Podium Presentation by PGY1 - Incidence of Suicide in patients with IBD (Supervisor: Dr. B. Bressler)

Dr. Eric Lam
- Dr. Hugh Chaun Mentorship Award in 2017

Dr. Steven Pi
- Best Podium Presentation by PGY2: Recognition of Lynch Syndrome Amongst Newly Diagnosed Colorectal Cancer Patients at St. Paul’s Hospital (Supervisors: Dr. j. Telford and Dr. R. Enns)
DIVISION OVERVIEW
• Providence Health Care (PHC) Division Head: Dr. Anita Palepu
• PHC/St. Paul’s Hospital (SPH) Site Division Head: Dr. Anita Palepu
• VGH Site Division Lead: Iain McCormick
• Physician Program Directors at PHC: Dr. Anita Palepu and Dr. Jane McKay
• SPH Ambulatory Education Lead: Dr. Ric Arseneau
• VGH Ambulatory Education Lead: Drs. Cary Cuncic and Aman Nijjar
• CTU Director SPH: Dr. Barry Kassen
• CTU Director VGH: Dr. Shane Arishenkoff
• UGME CTU clerkship SPH: Dr. Debbie Rosenbaum
• UGME CTU clerkship VGH: Dr. Sharmistha Das
• PGME General Internal Medicine (GIM) Specialty Fellowship Program Director R4-5: Dr. Stephane Voyer
• PGME GIM Specialty Fellowship Associate Program Director R4-5: Dr. James Tessaro
• PGME Core Internal Medicine PD: Dr. Mark Roberts
• PGME Associate PD (R4): Dr. Jane McKay
• PGME Associated PD Wellness: Dr. Peter Weerasinghe
• PGME Lead Ultrasound: Dr. Shane Arishenkoff
• UBC Clinical Educator Fellowship Program Director: Dr. Rose Hatala
• Clinical Academic Learning Initiative (CALI) Physician Coordinating Liaison: Dr. Iain McCormick, Dr. Aman Nijjar, Dr. Alex Chan, Dr. Wee-Shian Chan, and Dr. Anita Palepu
• UBC Clinical Educator Fellowship Program Director: Dr. Rose Hatala
• UGME Internal Medicine Clerkship Director: Dr. Harp Nagi
• UGME Associate Director, Curriculum (Year 3/4): Dr. Cary Cuncic

HIGHLIGHTS
• The Division successfully completed Phase 2 of three innovation projects as part of the CALI pertaining to ambulatory undergraduate education, inpatient system redesign, and urban GP-specialist linkage.
• The Division successfully launched their website at https://gim.med.ubc.ca/.
• A Division newsletter is sent twice a year via Campaigner and archived on the site.
• The Division successfully implemented three innovation projects as part of the Clinical Academic Learning Initiative (CALI) pertaining to ambulatory undergraduate education, inpatient system redesign, and urban GP-specialist linkage.
• Drs. Mark Roberts and Rose Hatala were promoted to Clinical Professor and Professor, respectively, and received their academic gowns. Dr. Debbie Rosenbaum was promoted to Clinical Associate Professor.
• Dr. James Tessaro received both the St. Paul's Hospital Graeme Copland Clinician Teacher Award and the Fay R. Dirks Award for Excellence in Teaching for 2018.
• Dr. Jane McKay received the Howard B. Stein Master Teacher Award for 2018. Dr. Don Sin, Professor in the UBC Department of Medicine, paid a touching tribute to Dr. McKay, highlighting her qualities as a humble, kind, consummate professional.
• Division members also received 10 out of 64 honour roll certificates for being in the top 10% rated teachers based on student evaluations: Cary Cuncic, Dr. M Dallaire, Dr. K Eva, Dr. S Ham, Dr. R Hatala, Dr. B Kassen, Dr. N Khan, Dr. G Kimel, Dr. L Kuyper, Dr. I Mackie, Dr. B Mangat, Dr. I McCormick, Dr. R McKay, Dr. E Morley, Dr. H Nagi, Dr. T Nasmith, Dr. A Nijjar, Dr. J Onrot, Dr. S Pimstone.
New Funding in 2018 to Division Members:

- Dr. Liam Brunham was awarded a Canada Research Chair (Tier 2) in Precision Cardiovascular Disease Prevention.
- Dr. John A Staples was Principal Investigator on a CIHR grant ($180,000; 3 years; 2018-09). Motor vehicle crash risk after cardioverter-defibrillator implantation: A population-based evaluation
- Dr. Nadia Khan was co-investigator on a CIHR Catalyst grant ($69,972; 1 year: 2018-09, PI Dr. Annalijn Conklin). Exploring the link and inter-relations between social relationships and objectively measured cardiometabolic risk factors in older adult women and men in Canada.
- Dr. Anita Palepu was co-investigator on a CIHR Transitions in Care- Best and Wise Practices Grant ($97,816; 1 year: 2018-10, PI Dr. Denise Jaworsky). Seeking best practices to optimize the patient experience in medical travel from Northern BC.

SELECTED PROJECTS:

**SAVE-BC**
Preventing heart disease in high-risk families: Heart attacks and strokes are highly heritable, especially when they occur at a young age, due to this heritability, the family members of someone with early-onset heart disease are themselves at high risk. Together with the co-principal investigator, Dr. Simon Pimstone, Dr. Liam Brunham is leading SAVE-BC, the Study to Avoid Cardiovascular Events in British Columbia (www.SAVEBC.ca). SAVE-BC aims to systematically identify families with early-onset heart disease in the province, in order to screen the family members for risk factors and institute preventative strategies. In addition, SAVE-BC is studying genetic and other molecular markers in these high-risk families to discover the causes of very early onset heart disease. Over the long term, SAVE-BC aims to significantly reduce the burden of early-onset heart disease in the province, and provide insight into why some young individuals develop this devastating disease.

**Cardiovascular Health in Women and Vulnerable Groups**
Dr. Nadia Khan’s research focuses on improving women’s heart health. Dr. Khan worked with a team of researchers for the past 4 years to develop a national cohort of young women and men with heart disease to identify early warning symptoms of a heart attack. She discovered that young women’s symptoms differed from men’s symptoms and that some symptoms occurred days and weeks before their heart attack. The next steps are to find out if aggressive treatment during this critical, early time window when symptoms start can prevent the development of heart attacks in young women. Dr. Khan also has found that Chinese and South Asian populations have among the highest death rates from stroke and heart disease compared to those of European descent. She is currently the Principal Investigator (PI) on the CIHR-funded NAMASTE (Novel Model for South Asian Treatment in Diabetes) randomized controlled trial that aims to assess the impact of a novel culturally tailored lifestyle and medication adherence intervention in South Asian patients with poorly controlled diabetes.

**Risk factors for motor vehicle crash**
Dr. John Staples’ CIHR-funded grant seeks to use BC’s world-class population-based data sets to identify medical diagnoses, particularly syncope, that increase the risk of a car crash through linkage of health services data with the Insurance Corporation of BC data on traffic accidents. Novel insights into the relationship between medical comorbidity and injury will be used to improve counselling of patients and to design more effective injury reduction policies.

**Does a complex care discharge planning initiative reduce unplanned hospital readmissions?**
Dr. John Staples has support from the Specialist Services of BC ($50,000) to evaluate a multi-million dollar hospital readmission reduction program.

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**Does a complex care discharge planning initiative reduce unplanned hospital readmissions?**
Dr. John Staples has support from the Specialist Services of BC ($50,000) to evaluate a multi-million dollar hospital readmission reduction program.
Housing, homelessness, and health
Dr. Anita Palepu’s research examines the health status of persons who are homeless and vulnerably housed. She was the Vancouver PI for the Health and Housing in Transition Study, a CIHR-funded longitudinal study that followed 396 homeless and vulnerably housed adults over 4 years. The survey data have been linked with PopData BC and the impact of housing transitions and determinants of longitudinal health service utilization is currently being examined.

Medsafer, Improving medication safety and reducing polypharmacy among hospitalized elderly patients
MedSafer is a current CIHR-funded multi-centre trial that examines an electronic describing intervention on potentially inappropriate medications and adverse drug events in the frail elderly. It is currently being conducted on the medical wards at SPH. Dr. Anita Palepu is the Vancouver PI and Dr. Nadia Khan is a co-investigator.

Palliative Care (inpatient and ambulatory): Dr. Gil Kimel attends on the Palliative Care ward at SPH and has been successful in building a healthy relationship with the CTU. He is the Physician Program Director of Palliative Care at PHC.

Rural and Remote OUTREACH: There are 4 faculty who regularly do outreach to underserved communities in northern BC (Hazelton, Bella Coola, Smithers, Terrace) and in Yellowknife, North Western Territories (NWT).

NWT: Dr. MP Dallaire has worked closely with Dr. John Pawlovich (Family Medicine) and Dr. Terri Aldred to build relationships with the many First Nations communities. She and others are using Telehealth to communicate and follow-up with the patients and the staff in these areas. We have a recent GIM graduate, Dr. Denise Jaworsky who was recently hired in Terrace, Mills Memorial Hospital. She will continue to collaborate with the group through outreach and provide longitudinal care to these patients.

Bridge Clinic (Refugee Health): Dr. Trudy Naismith is providing a weekly clinic for this patient population who frequently have undiagnosed and unmanaged medical conditions.

Urban Clinic Outreach: Dr. Debbie Rosenbaum has regular clinics at the Portland Hotel and the Pennsylvania Hotel with family physician Christie Sutherland and that has been a success in terms of providing access to specialist care to patients who are hard to reach and also provides important learning for the GIM fellows.

EDUCATION
Medical Education and Assessment: Dr. Rose Hatala is part of an international collaboration developing on-line adaptive tutoring systems for undergraduate and postgraduate medical education. Focussing currently on teaching ElectroCardioGram (ECG) interpretation, the investigators are demonstrating that it is possible to create a systematic large collection of medical images that fully represents the spectrum in the Electronic Health Record. Using advanced statistical and cognitive models, they are creating a more efficient and authentic learning algorithm that better matches an individual’s learning curve. Perhaps most importantly, they are developing an instructional framework that can generalize to visual learning in other domains.

Educational Practice in Health Professions: Dr. Kevin Eva’s research program focuses on: the value and limits of subjectivity; the promotion and assessment of non-academic characteristics of professional practice; the context of specific nature of performance; self-assessment; responsiveness to feedback; and the nature of clinical expertise. He continues to be a highly prolific scholar and widely sought consultant in these content areas. Dr. Eva is the Associate Director and Senior Scientist at the Centre for Health Education Scholarship.

All of our faculty are actively involved in teaching in both the inpatient setting when on the Clinical Teaching Unit or in the ambulatory setting at the Rapid Access Specialist Clinic (SPH) and the Internal Medicine Outpatient Clinic (IMOC) at VGH. This is integral to any care we provide and multiple members have been recognized for their substantial contributions to medical education through teaching awards.

The GIM R4-5 specialty program began implementing Competency Based Medical Education in 2018. The Division also offers specialized electives in Point of Care Ultrasound, Thrombosis and Obstetrical Medicine. Furthermore, GIM specialty fellows have at least 4 community electives with outstanding preceptors across this province as we recognize the need to train GIM specialists for the province.

PATIENT CARE
Most Division members participate in inpatient GIM services, either on the CTU (Clinical Teaching Unit) at St. Paul’s Hospital (SPH) or at Vancouver General Hospital (VGH). This includes ED Triage service and Medicine Consult Service, and at St. Paul’s Hospital, a Parallel Internal Medicine Service (PIMS) with a nurse practitioner for subacute patients with complex discharge needs to offload the CTU. The Division also provides ambulatory care through active clinics for CTU patient follow-up, pre-operative assessment, post-operative follow-up, ED referrals, and urgent referrals from primary care. We also have an active ambulatory GIM program at the Rapid Access Specialist Clinic that serves to provide CTU patient follow-up after discharge, ED referrals and urgent referrals from primary care at SPH and at the VCH Internal Medicine Outpatient Clinic. These are teaching clinics with medical students and residents with a focus on education and learning in the ambulatory setting, which is a very different experience from inpatient acute medicine. In addition, Division members actively participate in the GIM RACE (Rapid Access to Consultative Expertise) line.
Obstetrical Internal Medicine (inpatient and ambulatory): Drs. Wee-Shian Chan, Sue Purkiss, Jayson Potts, and Tessa Chaworth-Musters work at BC Women’s Hospital and do clinics at Surrey. Jayson Potts also does CTU at SPH as well an OB Internal Medicine clinic at the SPH Rapid Access Specialist Clinic.

Perioperative Medicine (inpatient and ambulatory): We have 4 (Iain Mackie, Erin Morley, Erin Sloan and Zach Schwartz) at VGH and 2 (Terence Yung, Steve Ham) at SPH with advanced training in Perioperative Medicine. The Internal Medicine Perioperative Care Team (IMPCT) is primarily sited at VGH where an active perioperative medicine consultation and follow-up service for patients on Orthopedics, Hepatobiliary and General Surgery is provided. They also see pre-operative patients in collaboration with Anaesthesia in the clinic as well as provide follow-up to high-risk patients in the ambulatory clinics.

Hypertension (ambulatory): We have four faculty at SPH (Drs. Nadia Khan, Jane McKay, Debbie Rosenbaum, and Biri Mangat) who are Hypertension specialists certified by the American Society for Hypertension Board exam. We have clinics for resistant hypertension at SPH to optimize blood pressure measurement and management for patients whose blood pressure has been challenging to treat. Poorly controlled hypertension is associated with substantial morbidity (renal, cardiac, stroke), acute care use with ED visits and hospital admission for hypertensive emergency and urgency, and premature mortality. We employ motivational interviewing techniques to improve adherence to medications and focus on lifestyle interventions in addition to pharmacologic treatments.

Thrombosis (ambulatory): We now have faculty (Drs. Anna Rahmani and Tony Wan) who provide thrombosis care at SPH and MSJ. They have expertise with the DOACs, bridging anticoagulation for procedures, DVT, and PE management. She is an invaluable resource for the Divisional members and for the hospital. They are able to see patients quickly and this can facilitate early discharge and follow-up from hospital.

Eating Disorders (inpatient and ambulatory): We have three faculty (Drs. Jane McKay, Debbie Rosenbaum, and Ric Arseneau) who have expertise in managing the medical complications of the Eating Disorder patients, which is a tertiary program housed in Mental Health at PHC. It is a provincial resource. These patients are very complicated medically and challenging to manage, particularly their re-feeding and electrolyte and volume management.

Ravensong (ambulatory): We have four faculty who do Internal Medicine clinics at this VCH Community Health Centre on a weekly basis: Drs. Harp Nagi, Cary Cuncic, Penny Tam, and Peter Weerasinghe.

Three Bridges (ambulatory): We have two faculty who do Internal Medicine clinics at this VCH Community Health Centre on a biweekly basis: Drs. Trudy Nasmith and Rosenbaum.

Chronic and Complex Disease Clinic (ambulatory): BCWH - Drs. Ric Arseneau, Jane McKay and a few others participate in this multidisciplinary clinic, which has become a highly successful multidisciplinary program under Dr. Arseneau's leadership.

Palliative Care (inpatient and ambulatory): Gil Kimel attends on the Palliative Care ward at SPH and has been successful in building a healthy relationship with the St. Paul's Hospital CTU. He is the Physician Program Director of Palliative Care at Providence Health Care. Dr. Rose Hatala used her sabbatical to do focused training in Palliative Care Medicine and now attends on the Palliative Ward and Consult team. They are also involved in training residents in serious illness conversations.

Rural and Remote OUTREACH: There are 4 faculty who regularly do outreach to underserved communities in northern BC (Hazelton, Bella Coola, Smithers, Terrace) and in Yellowknife, NWT: Stephane Voyer, Marie Pierre Dallaire, and James Tessaro. Dr. MP Dallaire has worked closely with Dr. John Pawlovich (Family Medicine) and Dr. Terri Aldred to build relationships with the many First Nations communities. She and others are using telehealth to communicate and follow-up with the patients and the staff in these places. We have a recent GIM graduate, Dr. Denise Jaworsky who was recently hired in Terrace ( Mills Memorial Hospital) and she will continue to collaborate with the group through outreach and provide longitudinal care to these patients. Dr. Dave Sohi regularly does outreach to Terrace, BC and Dr. James Tessaro goes to Yellowknife to provide Internal Medicine services.

FUTURE DIRECTIONS
- Continue to expanding our ambulatory and outreach activities including thrombosis, chronic disease management, perioperative medicine and obesity medicine
- Implement Point of Care Ultrasound Curriculum for residents and faculty with increased faculty recruitment at both sites (VGH and SPH)
- Expanding Perioperative Medicine Inpatient service at VGH and SPH with faculty recruitment
- Increasing educational research pilots and programs
- Increasing research capacity among faculty including QI
- Increase the number of GIM subspecialty trainees (R4-5) to meet the needs of the province
DIVISION OF GERIATRIC MEDICINE

DIVISIONAL 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 inpatient geriatric consultation services, 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 through VIHA and NHA. The Division’s major areas of research emphasis are in health services research, diabetes, dementia, osteoporosis, falls prevention and cardiovascular disease.

Dr. Janet Kow is the UBC Division Head and the Program Director for Elder Care for Providence Health Care administrating Geriatric Medicine and Rehab Medicine. She served as the Interim Physician Program director in 2015 for Palliative Care and is the Vice Chair at PHC of the Medical Affairs Committee as of 2018. Dr. Ken Madden is the VGH Division Head and has been awarded the prestigious Allan M. McGavin Chair in Geriatric Medicine. Dr. Graydon Meneilly is the Eric W. Hamber Professor and completed a Highly successful term as UBC Department of Medicine head in 2017. He continues as Physician-in-Chief at Vancouver Acute. 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. Marilyn Malone is Head of the Division of Geriatric Medicine at the Vancouver Island Health Authority. Dr Pamela Thornton took over as Geriatric Services Chief from Dr Peter O’Connor at Fraser Health, which has established Geriatric services in all Health Authority Hospitals. Over the last 3 years we have welcomed numerous new members, Drs Leo Lai, Wendy Lin, Gibong Lee, Josh Budlovsky, Katalin Balogh, Dilpriya Mangat, Martha Spencer, Pamela Thornton, Marisa Wan and Nicole Stewart.

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. In addition, Becky provides support to the division heads and the division’s academic staff and activities.

HIGHLIGHTS

- Dr. Kenneth Madden is named the Allan M. McGavin Chair in Geriatric Medicine, he continues to expand his National and International research leadership.

- Expansion of Specialized Geriatric services throughout the Province including Kelowna and all Fraser Health Hospitals.

- Innovative and responsive outreach throughout BC including Telehealth, joint outreach with Geriatric Psychiatry and Home visits including Home & Community and Residential Care.
• Rapid growth in Education from Undergraduate to CPD offerings, key players in incorporating and developing Competency by Design and Work-Based Assessment.

• Highly successful research endeavours, and $25 million funding for Healthy Ageing Research.

• Further networking and links with Medical, Surgical departments, and Primary Care throughout BC providing Health Care for Frail and Complex Seniors

EDUCATION

Undergraduate
Dr. Janet Kow finished her term as assessment director at the Undergraduate Education Committee overseeing the Third Year Internal Medicine Clerkship and instituted the incorporation of Work Based Assessment. Dr. Naaz Parmar is Week Chair for the Dementia CBL week 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 Case-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.

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 10 years including a number of Gulf State trainees. Dr. Janet Kushner-Kow completed her term as Chair of the Royal College Geriatric Medicine Examination Committee.

Dr. Roger Wong continues as 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 and is a national leader on advancing Quality Improvement in Residency training. He also has deep and active connections throughout Asia.

Dr. Wendy Cook is Associate Program Director - Curriculum for the UBC Postgraduate Internal Medicine Program and was instrumental in instituting the 1st year Boot Camp Course. She is very active in developing Competence by Design in the Internal Medicine Program.

Dr. Martha Spencer received the St. Paul’s Excellence in Teaching Award. Drs. Anson Li, Amanda Hill, and Jocelyn Chase have all been awarded the UBC Medicine Teaching Honour Roll. Division members generally have among the highest teaching ratings at UBC Medicine.

Geriatric Medicine Preceptors are a consistent year-round part of the CTU teaching rotations at SPH, VGH, and RCH. Dr. Amanda Hill runs the Internal Medicine Residency International Health Project. This partnership allows residents and attending staff to experience a very different practice of medicine and social advocacy by working at hospitals in Uganda.

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, Physical Medicine and Rehabilitation, Psychiatry residents and Nurse Practitioners.

Continuing Medical Education
The Division delivers a highly successful CPD program annually the “Geriatrics Intensive Course”, a 4-day course on Geriatrics for Family Physicians and Nurse Practitioners. It is fully subscribed yearly and has some of the highest ratings of all UBC CPD offerings. The plenaries are being distributed online. The course will be offered in a modified form in Kelowna in 2018. Dr. Janet Kushner-Kow is 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. 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. Kenneth Madden is currently the 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 and 1 CIHR team grant (value of $2 million dollars). He has demonstrated an increasingly 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 sessions at the Canadian Cardiovascular Congress. He is a reviewer for numerous scientific journals, including the Journal of Applied Physiology, and was a member of a CIHR peer review committee, and the CIHR Age-Plus Prize committee. He provides mentorship in research to fellows, residents and postgraduate M.Sc. and Ph.D. candidates.

Dr. Larry Dian is a 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. Despite the clinical faculty being a small division the research activities are numerous and highly regarded. Many research endeavours are trainee projects and have been presented at conferences internationally. In 2018 a $25 million donation to UBC for Health Ageing was announced, partly spearheaded by Dr Roger Wong’s efforts. This historic donation will support Geriatrics research in BC for decades. Plans are in progress for a Centre for Healthy Ageing at the New St. Paul's Hospital site.

FUTURE DIRECTIONS
The division will continue to spearhead clinical services to the rapidly growing BC senior population. Education for undergraduate, postgraduate and primary care practitioners will develop an encompassing network of Clinicians with Geriatric interest and expertise throughout the province. Research on Healthy Ageing, Prevention and Health Services to Older Adults will explode in the next decade.

PATIENT CARE
Division members are highly active in all parts of the Province and despite the Division’s small size have contact with numerous teams and patients in all BC Health Authorities, bringing Geriatric expertise to the frailest patients in the Province. The primary teaching sites in Vancouver, Victoria, White Rock and New Westminster participate in in-patient, consultative services, outreach and multidisciplinary clinics looking after thousands of patients annually in all the teaching hospitals and in the Community including Residential Care. Geriatric services are vital to hospitals working closely with Internal Medicine services to offer multidimensional inpatient and urgent care. Multiple division members participate in outreach throughout the province including Haida Gwaii, Terrace, Fort St John, Prince Rupert. These innovative outreach trips pair Geriatric Medicine and Geriatric Psychiatry clinicians, including Senior residents, to Northern Communities allowing a holistic comprehensive service to complex Older Adults who cannot otherwise travel for health care.

Telehealth from Vancouver to smaller communities in the Vancouver Island and Northern Health Authorities have also been successful and run throughout the year but particularly in the winter when travel is challenging. Division members work in a number of specialized clinics offering services beyond general Geriatric Medicine including the only Multidisciplinary Continence Clinic in BC, the Alzheimer’s and Related Dementias Clinic, Falls and Osteoporosis Clinics. In addition, partnerships with other Departments to offer appropriate Geriatric evaluations for Frail Perioperative, Cardiac and other patients have been developed throughout the Province.
DIVISIONAL OVERVIEW

The Division remains active in clinical care, teaching and research at the major teaching hospitals (VGH and SPH). These activities are supported by Division Members. There are several individuals who perform key leadership duties within the Division of Hematology including: Dr. Lynda Foltz, (Head SPH Division of Hematology), Dr. Luke Chen (Director, Residency Training Program), Dr. Raewyn Broady (L/BMT Program), Dr. Gayatri Sreenivasan (Apheresis Program), Dr. Agnes Lee (VGH Thrombosis Program), Dr. Paul Yenson (Head, VGH General Hematology Service), Dr. Shannon Jackson (Director, Adult Hemophilia program), Dr. Hatoon Ezzat (Head, Hemoglobinopathy Program), Dr. Heather Leitch (Head, SPH Hematology Research Program), and Dr. Agnes Lee (Director HRP, VGH). The contributions of these individuals are of great significance to the overall functioning of the UBC Division.

Exciting clinical developments in Hematology are providing access to novel therapies employing the immune system in control and treatment of many hematologic malignancies. These therapies include Chimeric Antigen Receptor (CAR) T-cells and novel monoclonal antibodies (eg. Daratumumab). Improved understanding of cellular pathways has led to the development of specific agents targeting these aberrations in these pathways (eg. FLT3 inhibitors). Improvements in post Allo-Transplant care continue to be a focus with augmentation of the long term follow-up clinic and assessment of long term complications which may occur. The recognition of the importance of exercise in Health and recovery is also being explored in Allo-Transplant patients. Following a successful pilot study Drs. Gerrie and Broady have begun a randomized study to better define the benefits of this intervention.

HIGHLIGHTS

- Dr. Agnes Lee, Medical Director of the Thrombosis Program, and Professor, Division of Hematology in the Department of Medicine was elected as councillor for the American Society of Hematology (ASH) Executive Committee. Dr. Lee will serve a 4-year term beginning December 2017.
- 86 peer-reviewed publications, consistently appearing in high-impact journals.
- Received a total of $1.7 million in contracts and research grant funding.
- Dr. Stephen Nantel received the Donald M. Whitelaw Award for Outstanding Grand Rounds Presentation at Vancouver General Hospital.
- Dr. Michael Barnett received the award for Bringing Clinical Renown to the Vancouver Community of Care from Vancouver Coastal Health and Medical Staff Association.
- Dr. Stephen Nantel received the Bobby Miller Award for Excellence in Teaching from Vancouver Coastal Health and Medical Staff Association.
RESEARCH

- Acute myeloid leukemia (AML) with positive FLT3-ITD mutation is associated with worse overall prognosis. Quizartinib is a novel oral tyrosine kinase inhibitor targeting FLT3-ITD and has been granted Fast Track Status by FDA. Hematology Research Program (HRP) worked on two Quizartinib studies for FLT-3 positive AML patients. One for relapsed/refractory AML with a total of 14 patients enrolled. In addition, there was an overall survival improvement on this study, some for a few months, and for more than two years for two patients. HRP screened a total of 48 AML patients and enrolled six into the study.

- 31 of 89 patients from Vancouver General Hospital were enrolled in the CIHR-funded study on anticoagulant management in 2017. This goal of this study was to establish a safe, standardized protocol for the perioperative management of patients with atrial fibrillation who were receiving a novel oral anticoagulant drug and required an elective surgery/procedure.

- Chimeric antigen receptor (CAR) engineered T cells – a promising new approach for cancer therapy. Kite Pharma’s Axicabtagene ciloleucel is an engineered autologous T-cell immunotherapy by which a patient’s own T cells are collected and subsequently genetically altered to recognize and target cancer cells. It has shown significant improvement of overall response rate. HRP began their first CAR-T cell study (ZUMA-1) with Kite pharma for Refractory aggressive Non-Hodgkin Lymphoma patients and two patients enrolled in 2017.

- Daratumumab – targeted immunotherapy for Relapsed/Refractory Multiple Myeloma. The Dara MMY3003 study started in 2014 and five patients were enrolled. In 2017, three patients were still receiving this treatment. Another Daratumumab study: MM-014, introduced a new cohort (cohort B), which allowed patients to be treated with Pom+Dex plus Daratumumab. Three additional patients were enrolled in this cohort.

- Selinexor – a novel, first in class, an oral selective inhibitor for Relapsed/Refractory Multiple Myeloma Phase I/II study (STOMP) for Selinexor began in 2016 with seven patients enrolled. There were four active patients. Two patients enrolled in Phase III study (BOSTON) with Selinexor.

- Seven new studies started in 2017, including three studies for GVHD patients, one for CMV infection post-transplant, one for ALL patients, and two for MM.

- Other research advances:
  - Extending survival from a few months, to a few years, to even decades for many myeloma patients.
  - Better therapy in elderly patients with acute leukemia or marrow failure.
  - Discovery of new, easier to take, medications for thrombosis patients. Many have switched from injections to oral medicine.
  - Fine-tuning surgery preparation for patients on blood thinners.

EDUCATION

- Continued to host weekly accredited group learning activities as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada.

- Hematology Semi-Annual Update Series continued (sessions in January and June) featuring local experts providing updates on important developments in the discipline. Sessions are video-linked to other centres in the Province.

- Continued to provide visiting electives and postgraduate training opportunities in Hematology as a subspecialty program (Medicine, UBC) to eligible residents in recognized Specialty (Royal College) training programs.

- Hematology Resident Rotations were taken at Vancouver General Hospital, St. Paul’s Hospital, BC Children’s Hospital, BC Women’s Hospital & Health Centre, BC Cancer Agency and various hospital locations in BC, including Vancouver, Surrey, Kelowna, and Victoria.

- Rotations offer residents, fellows, including international trainees, training in hematology, stem cell transplantation, thrombosis, and laboratory research.

- 17 Hematology residents, 15 Leukemia/BMT fellows (in overlapping academic years).

PATIENT CARE

- The Division of Hematology saw approximately 3,600 new patients.

- The Thrombosis Program looked after 13,000 patients with blood-clot-related problems.

- There were 520 new referrals to the Leukemia/Bone Marrow Transplant Program of BC. 239 transplants performed and broken down as follows: 42 related donors, 42 unrelated donors and 155 autologus.

FUTURE DIRECTIONS

- Currently in the recruitment process for the role of Clinician-Scientist. A candidate has been identified – Dr. Florian Kuchenbauer. The plan will be for him to join the Leukemia/BMT Program of BC (clinical); and research work with the Terry Fox Laboratory, BC Cancer, as a Senior Scientist. Dr. Kuchenbauer has developed a translational research program in acute myeloid leukemia (AML) and stem cell transplantation and will continue his work with the Division. His appointment start date is expected to be in late 2018.

- Currently in the process to recruit Dr. Kevin Hay, a former Resident with the Division. Dr. Hay completed a fellowship in clinical hematology and his research interests include cancer immunotherapy, cellular therapy, and lymphoma and leukemia treatments. Dr. Hay is in the UBC-CIP program (working at FHCRC, Seattle) and is in the progress of developing a novel chimeric antigen receptor T (CAR-T) cell directed against acute myeloid leukemia.
DIVISION OF INFECTIOUS DISEASES

DIVISIONAL OVERVIEW
During the past decade, the Infectious Diseases (ID) Division has continued to develop an increasing number of linkages and relationships important for the purpose of clinical care, research and education. These have included: BC Transplant, BCCDC, Medical Microbiology, BC Centre for Excellence in HIV/AIDS, School of Population and Public Health (UBC), Centre for Tuberculosis Research (UBC), BC Children’s Hospital Research Institute (BCHRI), and several geographic medicine sites (Aga Khan University Hospital, Nairobi, Kenya; Gulu University, Gulu Regional Hospital, Uganda, and Brasov Children’s Hospital, Romania).

The Division has been able to better engage Infectious Diseases groups at various hospitals, both within and outside Vancouver in the weekly clinical case conference presentations by way of teleconferencing. This has recently been expanded to include the weekly Journal Club rounds. The ID residency training program which has 3 new positions funded each year continues to attract over 20 applicants annually from across the country.

The following faculty members provide leadership in their respective disciplines: Dr. Julio Montaner (HIV/AIDS), Dr. Richard Lester (Global Health), Dr. Alissa Wright (Transplant Infectious Diseases), Dr. Victor Leung and Dr. Jennifer Grant (Antibiotic Stewardship).

HIGHLIGHTS
- Dr. Anthony Chow, 2017 Brandon University Alumni Association Wall of Fame Award
- Dr. Jennifer Grant, The ACCOLADE Award (Award for exCeptional COntribution to Learning and Education (Off-service Faculty Member)
- Dr. Yossef Av-Gay, Cystic Fibrosis Canada Robbie Award
- Dr. Tim Lau, Canadian Society of Hospital Pharmacists (BC Branch), Past President Award, 2017
- Canadian Society of Hospital Pharmacists, Patient Care Enhancement Award, (Shirley S.T. Yeung, Janice K. Yeung, Tim T.Y. Lau, Leslie A. Forrester, Theodore S. Steiner, William R. Bowie, Elizabeth A. Bryce), 2017
- Dr. David Patrick, Certificate of Appreciation for Role as Visiting Professor, National Centre for Antimicrobial Resistance, University of Melbourne, 2017.
Recipients of the Canadian Institutes of Health Research (CIHR) Project Grant: Fall 2018 competition

Principal Investigators
• Katherine Plewes (Malaria)
• Neil Reiner (Leishmania)

Co-Investigators (ID members bolded)
• Jennifer Grant, Victor Leung, Theodore (Ted) Steiner, Alissa Wright, (Amee Manges, PI, SPPH) (Antimicrobial Resistance)
• Melanie Murray, Neora Pick (Helene Cote, PI, BC Women’s) (HIV and aging)

Julio Montaner
• Doctors of BC Don Rix Award (recognizes lifetime achievements and exemplary physician leadership so outstanding that it serves as an inspiration and a challenge to the medical profession in British Columbia). Presented June 7, 2018

• City of Vancouver Civic Merit Award (for invaluable contributions to the medical and scientific community which have improved, extended and saved the lives of countless individuals around the work). City of Vancouver, Vancouver, BC. Presented October 30, 2018


Melanie Murray
• Michael Smith Health Professional Investigator 2018 award recipient.

Recipients of the 2018 UBC Department of Medicine’s “Honor Roll for Clinical Teaching Excellence”
• Michael Chapman
• William Connors
• Mary Kestler
• Sangita Malhotra
• Yazdan Mirzanejad (for Undergrad Ambulatory Rotation)
• Peter Phillips
• Natasha Press

EDUCATION

Undergraduate
Dr. Mary Kestler continues as the Undergraduate Education Supervisor for the Division of Infectious Diseases and has led a number of curriculum changes.

Postgraduate
The Residency Training Program Director, Dr. Natasha Press, along with deputy Program Director, Dr. Allison Mah, and Medical Education Coordinator, Kirstie Lang, have supervised inpatient and outpatient training of 91 trainees from various UBC medical and surgical programs, in addition to 13 trainees from other Canadian medical schools doing elective rotations. In addition to weekly journal club and also weekly Clinical Case Conference (accessible by video conferencing throughout the province) the other educational activities include once weekly Academic Half-Day for fellows, weekly Tropical Medicine teaching rounds, and twice weekly Combined Structured Teaching (CST) didactic presentations provided by the faculty for residents and students. There are currently five Infectious Diseases subspecialty residents in the training program.

Graduate Students
Masters and Ph.D. science students are affiliated with healthcare and epidemiology, laboratory medicine, microbiology and immunology, and medical genetics.

Courses
Several Division members participate in the Tropical and Geographic Medicine Intensive Short Course, which is convened annually by the School of Population and Public Health at UBC.

RESEARCH

Research programs are diverse and broad based including microbial pathogenesis, host defense and AIDS as well a wide range of epidemiological research focused on sexually transmitted, chronic viral hepatitis, and emerging infectious diseases. Clinical and translational research includes antimicrobial stewardship and links to emerging resistant organisms as well as influenza and Clostridium difficile. Research in solid organ and hematologic transplant infections is emerging. Linkages between the human microbiome and chronic diseases are being established. Digital health, eHealth, mHealth and telemedicine innovation and research in acute and transitional outpatient care have expanded, including cross-faculty collaborations in data science. Global health research includes participation in GeoSentinal surveillance and also the use of mobile devices to support medical practice. For example, specific studies involve the use of SMS texting to improve outcomes in the management of HIV/AIDS and tuberculosis in BC, the US, and Africa. Collaborations with external universities, public and private partners and policy bodies are numerous.
These include contribution to the World Health Organization task force on digital health for TB control among others. Division members have contributed at least 78 peer reviewed publications including top tier medical journals such as the Lancet and New England Journal of Medicine.

Over the last year, the Division of Infectious Diseases has strengthened its collaboration with the BC Centre for Excellence in HIV/AIDS (BC-CfE). The focus of the work carried out in collaboration with the BC-CfE primarily relates to the BC-CfE’s pioneered Treatment as Prevention® (TasP®) to accelerate the control of contagion diseases, predominantly of an infectious nature but also socially contagious conditions. HIV-TasP® is the cornerstone strategy used by the BC-CfE to control HIV and AIDS in British Columbia and has been adapted by the United Nations as part of the sustainable development goals. The strategy has also served as the foundation for the BC-CfE proposed 90-90-90 Target that was formally adopted by the United Nations AIDS Programme (UNAIDS) and later on the United Nations in 2015. The 90-90-90 Target has also been formally endorsed by the federal government of Canada. The 90-90-90 Target aims to have 90% of people tested for HIV, at least 90% of those tested engaged in antiretroviral therapy, and at least 90% of those on therapy virologically suppressed by 2020. Achieving the 90-90-90 Target by 2020 would be expected to lead to an approximate 90% decrease in AIDS deaths and at a 90% decrease in new infections by 2030. More recently, as of January 2018, the BC-CfE with the support of the BC Minister of Health has implemented a program of provincially-funded pre-exposure prophylaxis (PrEP) targeting individuals at high risk for HIV acquisition. The BC-CfE continues to actively monitor, evaluate and research the impact of the combined strategies of HIV-TasP® and PrEP. Over the last year the provincial Ministry of Health has committed to support the expansion of the HIV TasP® strategy to hepatitis C infection. The BC-CfE is now moving steadily to lead that strategy, particularly among hard-to-reach populations. In that context, the BC-CfE plans to open a new research facility in the Downtown Eastside within this calendar year. The BC-CfE continues to support the expansion of the TasP® approach to deal with other key morbidities, in particular diabetes in collaboration with Diabetes Canada and COPD/asthma with Vancouver Coastal Health.

FUTURE DIRECTIONS
The four priorities for the Division are:

- Complete the recruitment in Transplant ID (target total of three faculty members), preferably the third being a clinician-investigator.
- Further develop linkages with other research organizations having shared interests in order to enhance research grant applications and recruitment of academic faculty (e.g. Translational Medicine and Critical Succession).
- Global health: expand the clinical services at VGH, specifically with increased access for outpatient clinic evaluation of returning travelers with tropical diseases (e.g. initially three half day clinics per week, eventually five days/week).
- SPH: negotiate an alternate payment plan with the Ministry of Health. Also to recruit two additional clinical faculty in order to address increased workload.
DIVISIONAL OVERVIEW

The Division of Medical Oncology, within the Department of Medicine, has members from six BC Cancer Agency Cancer Centres 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. With an academic focus medical oncologists within the cancer centers have UBC academic appointments. The Division thanks Dr. Karen Gelmon for her years of service, and welcomes a new Division Head as of January 1, 2017, Dr. Caroline Lohrisch. We continue to encourage excellence in teaching, translational and clinical research, and patient care as activities in our Division. Many of our partner track division members were awarded merit in 2017 and 2018 by the Faculty of Medicine based on their teaching and scholarly activities.

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 Scot.

EDUCATION

Our division members participate actively in education at all levels of the Medical Faculty. The teaching commitment from the centres 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 high interest from residents nationally. Trainees spend the majority of their training time at the Vancouver Centre, with 6 months of elective time that they can use for electives in other centre within and outside BC and to learn and conduct research. We have an active program of fellows (post core residency training) under the stewardship of Dr. Cheryl Ho, with 8 fellows in 2017 hailing from across Canada, Australia, Italy, and the UK. A major activity of our group is the development and maintenance of evidence-based guidelines for cancer care across British Columbia. While aimed at providing evidence-based optimal care for British Columbians with cancer, our guidelines and treatment protocols have national and international reach. Division members also have national education leadership roles, including Dr. Tamara Shenkier who is the Chair of the Royal College of Physicians and Surgeons of Canada Specialty Committee for Medical Oncology (since July 2016); Drs. Amil Shah, Winson Cheung, and Christine Simmons who have been course directors for various undergraduate UBC medical school courses.
RESEARCH
Our members have and continue to make significant scientific contributions to the advancement of cancer management through research activities. A few highlights include:

- **Leadership at academic research consortia and conferences**: CCTG (Canadian Cancer Trials Group) Breast Disease Site committee co-chair (Dr. Karen Gelmon out-going in 2017, Dr. Stephen Chia in-coming in 2017), Genitourinary Disease Site co-chair (Dr. Kim Chi), Pancreatic Cancer disease co-chair (Dr. Daniel Renouf); Education co-chair for the American Society of Hematology (ASH) annual meeting (Dr. Laurie Sehn); ASH Plenary podium presentation (Dr. Joe Connors).
- **Continuing leadership education**: Sauder Business School Physician Leadership Program participation (Dr. Tamara Shenkier);
- **Scholarship awards**: American Society of Clinical Oncology Merit awards for trainees mentored by our faculty (Dr. Lucia Nappi, fellow supervised by division member Dr. Christian Kollmannsberger, Dr. Stephen Yip, fellow supervised by division member Dr. Christian Kollmannsberger; Dr. Danial Khalaf, fellow supervised by division member Dr. Kim Chi); Michael Smith Foundation Health Research Award (Dr. Daniel Renouf); NextGEn Clinical Research Fellowship Award (Prostate Cancer Canada) to Dr. Steven Yip, fellow supervised by division member Dr. Kim Chi.
- **Career recognition**: Dr. Joe Connors was recognized as being in the top 1% of cited medical researchers worldwide in 2016.
- Our division members have contributed meaningfully to multiple scientific publications in high impact factor journals, with too many publications to list.
- **Cracking Cancer**, a documentary produced by CBC’s ‘The Nature of Things’, about the Personalized Onco-genomics Program at BC Cancer which was co-founded by Dr. Janessa Laskin (Medical Oncology division) and Dr. Marco Marra, aired on CBC in February 2017.
- **Successful grant applications**, including Dr. Caroline Lohrisch ($450,000 Canadian Cancer Society Research Institute), Dr. David Scott ($345,000 NIH P01 team grant-within-grant, $535,000 Genome Canada Large Scale Applied Research Project grant-within-grant); Dr. Tamara Shenkier and Dr. Stephen Chia ($250,000 BC Cancer Foundation Innovations in Clinical Care grant); Dr. Chia ($150,000 co-applicant x2 Canadian Breast Cancer Foundation National grants); Dr. Anna Tinker and Dr. Sophie Sun ($250,000 BC Cancer Foundation Innovations in Clinical Care Award); Dr. Kim Chi ($10,000, Canadian Urologic Oncology Grant); Michael Smith Foundation Health Professional Investigator Award (Dr. Daniel Renouf, “Towards individualized treatment for pancreatic ductal adenocarcinoma (PDAC)”).
- **Clinical trials**: each BC Cancer centre has a clinical trials department and our division members actively participate in recruiting patients to both investigator initiated and industry trial. Several division members are part of clinical trials steering committees and study chairs for cooperative group trials and have grant funded investigator initiated trials to their credit.

FUTURE DIRECTIONS
The Division of Medical Oncology is justly proud of its members’ wide-ranging contributions to excellence in medical education, academic research, and improvements in clinical care for patients living with cancer in British Columbia and everywhere.
DIVISIONAL OVERVIEW

Our downtown sites are located at 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 unique distributed model of education, clinical care, and research have great potential for sustainability and dissemination. Together the faculty provides provincial leadership in research, education, and clinical care within the field of renal medicine.

The 21 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, 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 Pam Sewell (Admin and CME) and 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.

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 $4 million in research support in 2017, 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 50 scientific articles in 2017, 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.

DIVISION HEAD
• Dr. Adeera Levin

DIVISION STAFF
• Tammie Davis
• Pam Sewell

DIVISION MEMBERS
• Dr. S Barbour
• Dr. M Beaulieu
• Dr. M Bevilacqua
• Dr. M Brown
• Dr. B Cameron
• Dr. G Carpenito
• Dr. C Chan-Yan
• Dr. J Conley
• Dr. M Copland
• Dr. G Da Roza
• Dr. L De Luca
• Dr. J Duncan
• Dr. M Farah
• Dr. B Forzley
• Dr. J Gill
• Dr. J Gill
• Dr. C Harris
• Dr. K Horgan
• Dr. A Jamal
• Dr. J Jastrzebski
• Dr. O Johnston
• Dr. C Jones
• Dr. B Jung
• Dr. P Keown
• Dr. M Kiaii
• Dr. S Lam
• Dr. J Lan
• Dr. D Landsberg
• Dr. A Levin
• Dr. P Neufeld
• Dr. G Nussbaumer
• Dr. D Prchal
• Dr. A Rae
• Dr. D Schwartz
• Dr. K Scobie
• Dr. R Shapiro
• Dr. A Singh
• Dr. S Singh
• Dr. R Starko
• Dr. B Strijack
• Dr. S Torng
• Dr. E Welsh
• Dr. R Werb
• Dr. C Yeung
• Dr. N Zalunardo
• Dr. Y Zeng
• Dr. C Zhang
The UBC Division of Nephrology Research programs integrates members from the VGH and SPH/Providence Health sites and 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 HLI, CHEOS, 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, Katy Vela, and a number of highly qualified Research Coordinators.

**HIGHLIGHTS**

**Calendar year 2017 (January 2017-December 2017):**
- Genome BC with pan Canadian Transplant Group awarded large program grant $2.42 M: Dr. Paul Keown PI (James Lan, John Gill, Jag Gill and Olwyn Johnston co-investigators)
- CIHR Grant awarded to Dr. Jag Gill for International study to optimized cardiovascular assessment of Transplant recipients (2nd largest Clinical trial award)
- Launched first Palliative Care Nephrology Fellowship in collaboration with UBC Division of Palliative Care and BCPRA
- Launched first Provincial Hemodialysis Fellowship in collaboration with BCPRA
- UBC Clinical Teaching Awards to Dr. James Lan, Dr. Monica Beaulieu and Dr. Gerald Da Roza.
- Dr. John Gill appointed to American Transplantation Society Board of Dire

**Calendar year 2018 (January 2018-December 2018):**

**Grants:**
- CIHR Rewarding Success : Jagbir Gill BRIDGGE development grant: improving access to transplantation in Indigenous, rural and remote inhabitants of BC $100K)
- CST Research Excellence Award - Jagbir Gill Oct 2018
- CIHR Catalyst Grant: Dr Sean Barbour awarded “The derivation, validation and implementation of an international risk prediction model in IgA nephropathy” July 2018 for 2 years at $200k
- VCHRI: James Lan: Feasibility and acceptability of a mobile phone application in kidney transplant recipients ($9.7 million) 2018-19
- Transplant Research Foundation of BC: James Lan: Impact of long intermittent dialysis compared to conventional dialysis in delayed graft function: a pilot randomized controlled

**EDUCATION**

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, subspecialty residents in nephrology, 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. There is increasing exposure to clinical practice in locations outside of the lower mainland.

Province Wide rounds occur at least 2 Friday per month and feature a diverse set of educational and academic topics, usually presented by a visiting speaker or one of the Vancouver based nephrology experts. These rounds cover Pathology/GN, Transplantation, Dialysis, and general nephrology topics, and are part of the Division’s commitment to knowledge translation.
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 2017, Divisional program directors included Dr. Suneet Singh (Undergraduate Programs), Dr. Abeed Jamal (Postgraduate Programs), Dr. Adeera Levin (Continuing Medical Education), Dr. Jacek Jastrzebski (Advanced Nephrology Training Program) 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. Suneet Singh (provincial directors of Home Hemodialysis and Peritoneal Dialysis respectively). Trainees from UK Australia, and New Zealand were enrolled in the programs.

PATIENT CARE
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, the 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 working collaboratively with the BCPRA and BCT, as well as with other divisions (Infectious Disease, Cardiology, Endocrinology and Pharmacy) is continuing to grow its education, research and administrative activities. We are committed to enabling and enhancing a robust infrastructure to support these activities. Ongoing training of fellows in specific content areas (dialysis, transplant, palliative care) and partnerships methodologists and researchers within and outside UBC, including national and international partnerships, 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. In that context, we also advocate for ongoing integration of research activities into the fabric of clinical care in both outpatient and inpatient locations, to further enable best outcomes.
DIVISIONAL OVERVIEW

- Division Head is Dr. Jon Stoessl, who is also the Co-Director of the Djavad Mowafaghian Centre for Brain Health.
- Associate Head, External Clinical Affairs is Dr. Dean Johnston.
- Yvonne Ng is the Division Administrator.
- Division Administrator is Yvonne Ng, Administrative Assistant is Fanny Chan, and Program Assistant is Jessica Ye.
- The Residency Program is led by Dr. Hannah Briemberg, who is assisted by Kitty Pong.
- The Undergraduate Program is led by Dr. Gordon Robinson.

There are 18 Academic faculty (including 5 Canada Research Chairs), 1 partner appointment, 66 clinical faculty in VFMP, 10 in the Southern Medical Program, 11 in the VI program and 2 in the Northern program, as well as 25 associate, adjunct or affiliate faculty and 9 emeritus professors.

The Division continues to grow and spans many activities in clinical, research and educational spheres. There were over 200 publications in 2017-2018 with research grant funding of over $13m.

HIGHLIGHTS

- Dr. Judy Illes was named to the Order of Canada.
- New appointments:
  - Dr. Stephen van Gaal - Clinical Assistant Professor, Stroke Program
  - Christopher Fox – Clinical Instructor, General
  - Dr. Yahya Agha-Khani – Clinical Associate Professor, Epilepsy Program
  - Dr. Tara Rastin – Clinical Assistant Professor, Movement Disorders Program
  - Dr. Tyichicus Chen – Clinical Instructor, General Neurology Program
  - Dr. Priya Dhawan – Clinical Assistant Professor, Neuromuscular Program
  - Dr. Elsadig Elamin – Clinical Assistant Professor, General, SMP site
  - Dr. Charles Gervais – Clinical Assistant Professor, Neurophysiology
  - Dr. Neville Schepmyer – Clinical Instructor, General Neurology Program
  - Dr. Sara Simpson – Clinical Assistant Professor, Neuro-opthalmology
- Faculty Promotions:
  - Dr. Mano Javidan was promoted to Clinical Professor
  - Dr. Tony Trabousee promoted to Professor
  - Dr. Michelle Mezei promoted to Clinical Associate Professor
  - Dr. Virginia Devonshire promoted to the rank of Clinical Associate Professor
  - Dr. Alex Henri-Bhargava promoted to the rank of Clinical Associate Professor
  - Dr. Samuel Yip promoted to the rank of Clinical Associate Professor
- 8th and 9th Naveen Deshpande Lectureship with guest speaker Dr. Gabrielle DeVeber from Toronto presented in area of Stroke in infants and children and Dr. David Dodick from Mayo Clinic, in Scottsdale, Arizona presented in new treatment options of migraine.
- Paty Lectureship was presented by Dr. Howard Chertkow from McGill in translating cognitive neuroscience research on dementia during the 8th Annual Resident Research Day.

DIVISION HEAD
- Dr. Jon Stoessl

ACADEMIC FACULTY
- Dr. J Barton
- Dr. O Benavente
- Dr. N Cashman
- Dr. S Cresswell
- Dr. D Doudet
- Dr. T Field
- Dr. R Hsiung
- Dr. J Illes
- Dr. L Kastrukoff
- Dr. S Kolind
- Dr. M Mckeown
- Dr. H Nygaard
- Dr. S Pelech
- Dr. J Pettersen
- Dr. J Stoessl
- Dr. T Trabousee
- Dr. H Tremlett
- Dr. Yu Wang

CLINICAL FACULTY
- Dr. J Beckman
- Dr. N Bogod
- Dr. H Briemberg
- Dr. D Cameron
- Dr. R Carruthers
- Dr. K Chapman
- Dr. V Devonshire
- Dr. E Dilli
- Dr. S Dommann
- Dr. D Foti
- Dr. C Fox
- Dr. H Frykman
- Dr. G Gibson
- Dr. S Hayden
- Dr. C Hrazdi
- Dr. K Jack
- Dr. M Javidan
- Dr. D Johnston
- Dr. S Kaiway
- Dr. R Kayes
- Dr. C Krieger
- Dr. M Kula

- Dr. G Mackie
- Dr. S Mann
- Dr. J Madhani
- Dr. M Mezei
- Dr. F Moien-Afshari
- Dr. C Murphy
- Dr. A Prout
- Dr. G Robinson
- Dr. A Sayao
- Dr. S Spacey
- Dr. J Squires
- Dr. C Tai
- Dr. J Tan
- Dr. P Teal
- Dr. B Thiessen
- Dr. J Valerio
- Dr. S van Gaal
- Dr. M Varelas
- Dr. G Walker
- Dr. L Wilson
- Dr. A Woolfenden
- Dr. S Yip
Undergraduate Education

The Neurosciences Clinical Skills program provides first and second year students 18 hours of small-group instruction (6 - 8 students) in learning to perform a neurological examination. This consists of 32 student groups using on average 28 neurologists from the Division (includes VGH, UBCH and SPH staff).

Support materials have been developed and these are disseminated to distant sites as printed and video material. These sessions have been enhanced by the recruitment of volunteer patients who are used to demonstrate common deficits found on neurological examination. The demand for the elective in neurology at VGH continues to be strong. This has led to a decision to increase the capacity to 6 students for each block and limit international students. This has allowed students from UBC and Canada to participate.

The Division actively supports the Student Interest Group in Neurology (SIGN), an undergraduate student led group administered by the American Academy of Neurology. An annual career night for undergraduate students interested in neuroscience as well as other activities occur throughout the year.

Faculty members who are associated with the Division provide clinical teaching in the Vancouver Island, Southern Okanagan and Prince George programs.

Postgraduate Education

In 2018, the Postgraduate Residency Program in Neurology had 26 residents in various levels of training from PGY1 to PGY5. In the first two years of the program the residents rotate through various subspecialties such as Internal Medicine, ICU, Emergency, Neurosurgery, Pain Medicine and Psychiatry, in addition to participating in their first Neurology rotations. The years PGY3-5 are identified as core Neurology training years. Residents acquire their inpatient training at Vancouver General Hospital and St. Paul's Hospital. Many outpatient specialty clinics are provided at UBC Hospital. The residents also do at least one community outpatient rotation during their training.

Over the course of their training, the residents are actively involved in various research projects. The Division holds an Annual Neurology Resident Research Day in June, where neurology residents and graduate/post-graduate neuroscience students present their work.

Five residents graduated from the program in 2018, three of whom are pursuing fellowship training. Dr. Jonathan Fridhandler is doing fellowship training in multiple sclerosis at the University of Calgary, Dr. Clark Funnell is doing a fellowship in dementia at UBC and Dr. Athari Salmeen is doing a stroke fellowship here at UBC. Dr. Tychicus Chen joined the teaching staff at Vancouver General Hospital and Dr.

Bing Wei Wang went into private practice in the community.

Dr. Jason Randhawa won the Barbara Allan Scholarship.
Dr. Joshua Lai received Dr. Stephen Clarke Travel Awards.
Dr. Joshua Lai received the ANN Resident Scholarship.
Dr. Lily Zhou is the recipient of Ludmila and Henry Zeldowics Award.
Dr. Andrew Matter received the Resident Research Day Most Outstanding Presentation Award.
Dr. Michelle Chiu received the Resident Research Day Most Outstanding Presentation Award.

Basic Science

Basic research conducted in the Division of Neurology is focused on improving our understanding of the brain to better diagnose and treat these confounding and devastating illnesses.

Dr. Wang and his colleagues have made significant progress on elucidating the molecular mechanisms underlying the formation of learning and memory. Through these mechanistic studies, they have developed and tested several interference peptides as novel therapeutics for treatments of learning and memory disorders both in in various animal models. Recently, they have identified a novel glutamate binding site on glycine and on GABA-A chloride ion channel receptors, leading to the screening and identification of novel ligands that may be developed into therapeutic small molecules for reducing seizure and/or brain injuries following stroke.

Dr. Pelech’s group has produced hundreds of antibody probes that specifically target protein kinases and other signalling proteins that are present and affected in diverse diseases such as Alzheimer’s, Parkinson’s, Friedreich’s ataxia, diabetes and cancer. The team has also developed the world’s most advance microarrays with over 1325 of these antibodies to permit monitoring hundreds of these regulatory proteins simultaneously with as little as 25 ug of tissue biopsy protein. Using bioinformatics, Dr. Pelech’s laboratory has also applied computational approaches to predict protein-protein and drug-protein interactions, and to identify genetic mutations in the human genome that could reduce the effectiveness of established and experimental drugs for disease treatment to support the eventual delivery of precision medicine.

Dr. Neil Cashman has been a pioneer in the study of prions, which are infectious bioinformatics, Dr. Pelech’s laboratory has also applied computational approaches
to predict protein-protein and drug-protein interactions, and to identify genetic mutations in the human genome that could reduce the effectiveness of established and experimental drugs for disease treatment to support the eventual delivery of precision medicine.

Alzheimer
A team of clinicians continues to evaluate over 1000 patients per year on a wide range of neurodegenerative and geriatric cognitive disorders. The implementation of a multidisciplinary model of care, together with Neuropsychology, Genetic Counseling and Social Work, has been highly successful and deeply appreciated by the community.

Dr. Hsiung has led a number of clinical trials on novel pharmacological treatment of Alzheimer Disease in the clinic. Together with Dr. Mackenzie leading the FTD program at UBC and serves as the lead for FTD for the Canadian Consortium for Neurodegeneration in Aging (CCNA).

Dr. Nygaard has ongoing grant support from the Weston Brain Institute to study frontotemporal dementia using inducible pluripotent stem cells, and several papers on sleep in dementia.

They continue to be very active in providing teaching to trainees of multiple disciplines from undergraduate to post-doctoral levels. Several fellows completed their fellowships in behavioral neurology. Dr. Walid Al Keridy, Geriatrics, and Dr. Omar Al Faify, Clark Funnell, and Atri Chatterjee joined the program as fellows. They continue to improve their patient care model, including more educational materials through the clinic. They are also planning to build support groups for younger patients affected by dementia. From a research perspective, they continue to expand their clinical and translational programs with novel drugs as well as a significant expansion of stem cell research.

Epilepsy
Dr. Mano Javidan, Director of the Epilepsy Program has been actively developing a program of clinical research spanning the rates of non-convulsive status epilepticus, the outcome of patients with the diagnosis of non-convulsive status epilepticus, the localization and prediction of seizures by computerized analyses, the characteristics of patients with temporal lobe epilepsy and surgery without interictal epileptic activity on EEG and the weighted value of interictal and ictal EEG activity in the surgical outcome of patients with temporal lobe epilepsy.

Neuromuscular Disease Unit
The neuromuscular program consists of 5 Neurologists, 5 neuromuscular technologists, a clinical nurse educator, a research nurse, and 5 support staff members. The VH Neuromuscular Program provides neurophysiologic testing of the peripheral nervous system together with comprehensive clinical assessment and treatment of disorders affecting nerve and muscle.

The Medical Director of the Neuromuscular Program is Dr. Kristine Chapman. The academic director is Dr. Michelle Mezei, who coordinates clinical trials and supervises trainees. Dr. Briemberg coordinates the muscle rounds, and provides muscle biopsies. They are the principal Canadian site for the Patisiran study on hereditary amyloid neuropathy, which involves a novel therapeutic strategy for treatment of a fatal disorder. The program provided excellent education program for Neuromuscular Disease and neurophysiology to Fellows, Residents and Medical Students, and participated in Canadian education initiatives including Canadian Society of Clinical Neurophysiology courses and EMG/neurophysiology exam.

They are taking initial steps in initiating a neuromuscular Ultrasound program, with acquisition of a state of the art ultrasound machine. A two day hands on US course was hosted at VH. This will enhance the complex nerve injury program and enable research in nerve and muscle disease.

Expansion of the Complex Nerve Injury Program, with multidisciplinary focus involving 2 neuromuscular specialists (Dr. Jack, Dr. Chapman), two plastic surgeons (Dr. Seal, Dr. Bristol), and two physiatrists (Dr. Cunningham, Dr. O’Connor), providing patient focused care in a collaborative manner.

Dr. Charles Krieger is investigating important synaptic proteins and other proteins in the neuromuscular junction and muscle of the fruit fly, Drosophila melanogaster and mouse. This work is also related to amyotrophic lateral sclerosis (ALS) in that ALS is characterized by impaired synaptic function and nerve-muscle continuity.

Neuroethics
2017-2018 were banner years for Neuroethics, who delivered numerous major new publications, keynotes, presentations, and public and outreach events. Research area is focussed on ethics and neurotechnology in health care and the workplace, end of life decision-making, and psychiatric neurosurgery, neuroinnovation and commercialization, artificial intelligence in technology for demetia, patient experience of technology-based brain health interventions, and patient engagement in dementia research and care.

Neuroethics received a number of new grants, notably: $750K CAD from the NIH BRAIN Initiative for: Informing Choice for Neurotechnological Innovation in Pediatric Epilepsy Surgery, and a renewal of their Technical Safety BC contract to understand the role of biosensors and sensors in the workplace.

The work under ERAnet Neuron funding (CIHR) – a research consortium with Germany, Spain and Belgium on psychiatric neurosurgery continues under a no cost extension. In addition, CRISPR Gene Therapy to Prevent Blindness in Patients with Congenital Aniridia from Canadian Institutes for Health Research.
Other active funded studies include: End-user Led Evaluation of Assistive Technology (ELEVATE) by AGE-WELL; First Link Program Evaluation by Alzheimer Society of BC; A Virtual Training Guide as a Quality of Life Intervention by Alzheimer’s Association.

Their major outreach activities with Vancouver Roundtable and Science World with regular Community Conversations on ethics, mental health and neurologic disorders around metro Vancouver. They will continue to focus on neurotechnologies, and patient and public engagement.

Movement Disorders
Through a combination of peer-reviewed and donor funding, the Movement Disorders program maintains an active research program in microbiome, PET, MRI, EEG and behavioural research related to Parkinson’s disease. The centre as a whole published over 50 papers in high-impact journals related to PD. They continue to train fellows and residents in the Movement Disorder clinic, as well as undergraduate medical students. In addition, MSc and PhD in Physics, Engineering and Neuroscience students receive training through the Program. In 2017-2018, 37-42 trainees (graduate students, post-docs, clinical fellows, residents, work learn students, etc), received training in the Movement Disorder clinic.

The Movement Disorders clinic continues to be the largest dedicated Parkinson’s and Related Disorders in the province with patients travelling from across BC to attend, which resulted in greater than 5100 patients visits in 2018 alone. They provide a multidisciplinary approach that involves extended nursing, a nurse practitioner, physiotherapy and social work care. As people are living longer with the disease, comprehensive care is becoming more challenging, with non-motor features like dementia requiring special care. They have implemented an extensive Parkinson’s specific EMR template to assist in education, streamline patient processing, and provide comprehensive care. They have integrated Neuropsychiatry into the clinic with expertise in Mood Disorders and Functional Movement Disorders. They have piloted some telehealth consultations with patients in remote communities.

PATIENT CARE
- Inpatient unit at VGH is the only dedicated hospital neurology CTU in the province.
- Specialized Seizure Investigation Unit and Neuro Intensive Care Unit.
- High acuity patients including stroke, immune-mediated disease of central and peripheral nervous system.
- Diagnostic services including EEG, EMG (both VGH and SPH) and intra-operative monitoring (VGH).
- Development of a multi-disciplinary program for assessment and treatment of complex nerve injuries, in collaboration with Dr. Sean Bristol.
- Rapid Access Clinics at both VGH and SPH.
- SPH Neurology provides outreach services to Terrace, Whitehorse, Prince Rupert, Gibsons/Sechelt.
- Telehealth programs, especially in Stroke and First Nations Health.
- Health Authority and he has solidified the RACE Neurology line and eCASE services.
- Strengthening of Neurology services at MSJ Hospital, EEG and Consultation Service, full time clinical office now established at Mt St Joseph.

AWARDS & KUDOS - INDIVIDUAL ACCOMPLISHMENTS
- Dr. Joseph Tsui received Emeritus designation.
- Dr. Judy Illes was elected to the International Women’s Forum.
- Dr. Julie Robillard appointed as Associate Director of the National Core for Neuroethics.
- Dr. Yu Tian Wang won the 2017 CIHR Foundation Grants.
- Dr. Thalia Field received a Bayer-Canadian Stroke Consortium Young Investigator Award.
- Dr. Robert Carruthers awarded the 2017 VCHRI Team Grant Award.
- Dr. Dean Johnston awarded the Roche Award for Excellence in Clinical Skills teaching.
- Dr. Stephen van Gaal won 2016-2017 CIHR Frederick Banting and Charles Best Canada Graduate Scholarships.
- Dr. Philip Teal appointed as VCH Division Head of Neurology.
- Dr. Alister Prout was appointed as St Paul Division Head of Neurology.
- Dr. Virginia Devonshire became the new president of the CNMSC.
- Dr. Robin Hsiung has been elected as Fellow of the American Academy of Neurology.
- Dr. Judy Illes appointed as Vice Chair of the Internal Advisory Board of the Institute of Neurosciences, Mental Health and Addiction; awarded the 2018 Patricia Price Browne Prize in Biomedical Ethics.
- Dr. Jacqueline Pettersen received the Fritz Wörwag Research Prize for her work on vitamin D and cognition. She won the Wolfgang Hevert Prize, her second international research award in 2018.
- Dr. Silke Cresswell is recipient of the 2018 UBC Department of Medicine Master Teacher Award – VGH.
- Dr. Thalia Field awarded the Heart and Stroke Foundation of Canada’s (HSFC) National New Investigator award and Henry J.M. Barnett Scholarship; awarded the FOM distinguished achievement for Medicine: Overall Excellence Early Career; won the Michael Smith: Health Professional-Investigator Award 2018; recipient of the 2018 UBC Department of Medicine Martin M. Hoffman Award for Research Excellence.
- Dr. Julie Robillard appointed as Associate Director of the National Core for Neuroethics.
- Dr. Robin Hsiung has been elected as Fellow of the American Academy of Neurology.
- Dr. Judy Illes appointed as Vice Chair of the Internal Advisory Board of the Institute of Neurosciences, Mental Health and Addiction; awarded the 2018 Patricia Price Browne Prize in Biomedical Ethics.
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- Dr. Shannon Kolind won the MSFHR Scholar award.

FUTURE DIRECTIONS
- Aggressive recruitment to expand capacity in epilepsy service.
- As we have developed greater expertise in subspecialty areas, there is an increasing need to replenish our strength in general Neurology.
- Further develop programs in translational and patient centred neuroscience research, with focus on neuroimaging, neuroinflammation, and disease prevention and intervention.
**DIVISION OF PALLIATIVE CARE**

**DIVISIONAL OVERVIEW**

2017-2018 were years of exception growth in workload, with ongoing increase in requests for clinical rotations other educational experiences at the undergrad, postgrad and CME levels. This has presented significant challenges for the Division Head and small band of Division employees, as these additional trainees do not come with funding for additional administrative support work. We were pleased to welcome additional division support to join us for one day a week, which was very helpful. After our initial hire into this position did not work out, Niki Ward was appointed and was wonderful to work with for most of the year. Sadly, she left to pursue full-time work and we had a long gap with no support and a lot of extra work recruiting, interviewing etc. We now have Chloe Yeh in that position and are slowly catching up.

- **HIGHLIGHTS**
  - The Division’s annual Master Class for 2017 was “Palliative Care in the Age of Innovation and Change”, and was presented for the first time in partnership with the BC Centre for Palliative Care, and for the first time was a whole day. It was hosted from the BC Cancer Research Centre on December 6th, and over 400 health care professionals from multiple disciplines participated from over 30 sites in BC and the Yukon. The Division’s annual Master Class for 2018 was “Master Class: palliative care Strong Growth”, and was presented in partnership with the Victoria Hospice Society, and was for the second time a whole day. It was hosted from the BC Cancer Research Centre on November 28th, and over 400 health care professionals from multiple disciplines participated from over 30 sites in BC and the Yukon, and one site in Saskatchewan plus two in Ontario. It was very highly evaluated by attendees. It was very highly evaluated by attendees, and every year we have more sites and more participants.

- Our annual Hsu Hsieh Foundation International Speaker for 2017 was Dr. Gyatri Palat from Hyderabad, India. On March 27th Dr. Palat presented in Vancouver to a large audience of palliative care professionals and the public on “Palliative Care in the Indian Context: what is being achieved”. Refreshments were donated by a group from the South Asian community. A number of additional presentations were also made in Victoria and Kelowna, and a hugely successful gala banquet was also arranged in partnership with the Two Worlds Cancer Collaboration, attended by over 400 guests, with an auction in aid of Two Worlds hosted by CBC’s Fred Lee.

- Our annual Hsu Hsieh Foundation International Speaker for 2018 was Dr. Afshin Ganji from Strasbourg and London, UK. February 19/20th Dr. Ganji presented in Vancouver to a large audience of palliative care professionals and the public on “Minimally Invasive Palliative Procedures”. This was in partnership with the departments of Orthopedics and Interventional Radiology at VGH, and he presented at their departmental rounds as well. Dr. Peter Munk from IR kindly held a reception at his house, and a dinner was also held with Dr. Malcolm Moore, President of BC Cancer, as cancer patients are the most frequent recipients of palliative procedures done in interventional radiology.

**DIVISION HEAD**
- Dr. Pippa Hawley

**DIVISION STAFF**
- Kathryn Inman
- Niki Ward

**DIVISION MEMBERS**
- Dr. A Alexiades
- Dr. C Aparicio (2017)
- Dr. C Baldwin
- Dr. D Barwich
- Dr. E Beddard-Huber
- Dr. P Boston
- Dr. C Borenki (2017)
- Dr. D Braithwaite
- Dr. D Brathwaite
- Dr. P Brar
- Dr. S Bunn
- Dr. S Burgess
- Dr. A Cass
- Dr. C Chen
- Dr. G Chung
- Dr. L Cline
- Dr. A Collins
- Dr. M Cottle
- Dr. L Daley
- Dr. E Dubland
- Dr. E Drysdale
- Dr. P Edmunds
- Dr. B Eddy (2017)
- Dr. G Eirew (2017)
- Dr. B Fehlau
- Dr. G Fyles
- Dr. R Gallagher
- Dr. S Germain
- Dr. S. Gustafson
- Dr. A Hansson
- Dr. P Hawley
- Dr. N Hilliard
- Dr. C. Hoffman Borenko
- Dr. D Hsu
- Dr. J Jayaraman
- Dr. C Jones
- Dr. A Joshi
- Dr. S. Kara
- Dr. M Karim
- Dr. G Kimmel
- Dr. G Ladd
- Dr. A Lakha
- Dr. E Lee
- Dr. R Liebscher
- Dr. P Louie
- Dr. D Lobb
- Dr. R Love
- Dr. A Mabie
- Dr. L MacDonald
- Dr. N MacGowan
- Dr. N Macpherson
- Dr. A Mangalji (2017)
- Dr. K McAleer (2017)
- Dr. J McGhie (2017)
- Dr. C Metcalf
- Dr. S Minhas
- Dr. K Mueller
- Dr. R Moore
- Dr. P Munk
- Dr. J O’Brien
- Dr. R Love
- Dr. J Stoessl
- Dr. McGregor
- Dr. V Masuda
- Dr. S Nayar
- Dr. J Ridley
- Dr. J Slater
- Dr. B Spring
- Dr. P Squire
- Dr. L Straatman
- Dr. J Walker
- Dr. S Vickers
- Dr. J Pearce
- Dr. B Rance
- Dr. T Rosendenberg
- Dr. T Sakaluk
- Dr. S Saran
- Dr. I See
- Dr. F Soeyonggo
- Dr. C van Breemen
- Dr. D Williscroft
- Dr. W Yeomans
- Dr. M Yeung

**APPLICATIONS**

**PENDING**
- Dr. S Kara
- Dr. A Tamber
- Dr. L Shaw
The Division is very proud to be one of the first 4 universities in Canada to offer the new 2-year Palliative Medicine Royal College Subspecialty Residency Program, our first resident started in July; Mino Mitri, from Internal Medicine at Queen's University.

The Undergraduate Medical Program continued to implement the new curriculum, and the FLEX Legacy Project grew hugely in its third year, with 10 students participating. The impact of this unique project on both students and patents has been phenomenal.

**RESEARCH**

*Grants held by Dr. Andrew Collins:*
1. Peace Arch Hospital Innovation Grant: $3948 (for electronic legacy work)
2. Peace Arch Hospital Healthy Community Grant: $2000 (Palliative Care Art program)
3. BC Centre For Palliative Care Seed Grant $5000 (White Rock program wide legacy program)

*Grants held by Dr. Pippa Hawley:*
The BC Cancer Foundation Palliative Care fund supported 3 clinical trials:
1. Subcutaneous lidocaine infusions for severe cancer-related pain
2. PEG vs senna for opioid-induced constipation
3. Early integrated palliative care for GI medical oncology patients.
4. A grant of $1,050,000 was awarded for a study on medicinal cannabis extracts for cancer-related symptoms.

*In addition:*
Development of a study on medicinal cannabis extracts for cancer related symptoms was supported by a grant-in-aid from Medipure Pharmaceuticals.

*Grant held by Neil Hilliard:*
1. The Canadian Frailty Network, Fraser Health and the BC Centre for Palliative Care provided $150,000 to study Integration of the Palliative Approach to Care into Acute Care

**EDUCATION**

**Undergraduate**

1. Our capacity for undergraduate inpatient palliative care electives doubled from 2016 to 2017, with 15 students doing rotations totalling 43 weeks. In addition, approximately 40 students attended up to two pain and symptom management/palliative care clinics at the BC Cancer Agency.

2. The longitudinal FLEX Legacy project was undertaken by 3 students in 2017, following 2 in the previous year, and one in its inaugural year. One of the 2017 FLEX students had an article about the experience published in the BCMJ.

3. The new undergraduate curriculum is still in development, and palliative care content has increased further with a large amount of content included in the TIPP course at the end of 4th year being planned for in 2018. Students encounter palliative care content from their third weekly case in first year, and interest in palliative care has as a result increased enormously. We look forward to seeing the effect this has on patient care once the new curriculum’s graduates enter clinical practice. The effectiveness of the new curriculum will be tested by having all residents starting a palliative care rotation doing a baseline knowledge test since summer of 2018, providing data with which to compare after graduates of the new curriculum enter residency training.

**Postgraduate**
The Division hosted a number of Palliative Care/Palliative Medicine full-time residents in 2018
- 2 Royal College Subspecialty trainees: one in first year and one in second, both with an Internal medicine background.
- 3 Year of Added Competence residents in the first half of the year and 4 for the second half.
- 3 Enhanced Skills CCFP trainees for 3 months each
- 2 Royal College enhanced skills trainees for a year each: one from GIM and one from Emergency Medicine
- We are hosting an Alaskan self-funded neurologist trainee for a part-time year of added competence to be taken over 2 years because of disability.

This number is dwarfed by the trainees from other programs that require mandatory palliative care rotations, or seek elective training opportunities. In the academic year 2016-2017, **199 residents from 19 different programs completed a total of 811 weeks of palliative care training.** A significant number of additional trainees completed advanced rotations/electives outside of the One-45 and some out of province trainees were also provided with elective experiences. Support was provided by the Division to those residents’ home programs by way of scheduling, provision of curriculum and educational support materials, faculty development and review of evaluations with feedback to preceptors. Some out of province trainees were also provided with elective experiences, which are becoming more and more difficult to accommodate due to lack of space, which affects our ability to recruit from other provinces into BC jobs, and negatively affects reciprocal educational opportunities.

The Emergency Medicine Palliative Care week-long elective is becoming well-established, and the annual day-long workshop on palliative care in emergency medicine continues to be highly rated by all residents in the program. Members of the Division also provide teaching at academic half days for many residency programs and other educational events.
Faculty Development
Dr. Chen led a number of well-attended faculty development sessions for Division members in 2018, including sessions on conflict resolution and learners in difficulty, and included residents from other programs in teaching residents to be better teachers.

PATIENT CARE
Members of the Division are increasingly challenged to provide high quality palliative care in a time of increasing patient numbers but have developed reasonably healthy working relationships with providers of Medical Assistance in Dying. This has not been easy and there was great demand for education about MAiD around the time of and initially after legalization. The clear separation for palliative care from Maid is now well understood and teaching about MAiD can now be delivered by a group of those who provide it. Palliative Care educators can concentrate on teaching assessment and management of suffering. A number of primary care initiatives have been identified where the “Palliative Approach to Care” is being implemented, and Division members continue to engage with these groups where health Authorities and the Ministry of Health are willing to collaborate.

FUTURE DIRECTIONS
We hope to refine the undergraduate curriculum palliative care components now that the first cohort is in final year and evaluation of the curriculum can be done.

We are also having more and more difficulty meeting requests for education from other programs. We will be working hard in the next few years to develop more teaching opportunities, for example in home hospice programs and in residential care, where there is sufficient expertise.

Finally, succession planning is an issue as the Head of the Division is now in her 6th year in the position, and the Division Administrator & Program Assistant is considering retirement. It is important to have an orderly handover with the new holders of these positions to maintain the tremendous achievements we have made over the last 5 years.
DIVISIONAL OVERVIEW
The Division continues to be led by Dr. Jennifer Yao with administrative support from Maria Canvin. The Division has gained new members across the province, including those with specialized training in pain management. We now have 75 Division members across the province. There is robust participation of PMR members in teaching, both at the undergraduate and post-graduate levels. The audiovisual system at the G.F. Strong Rehab Centre auditorium was upgraded to allow better web-based videoconference access to weekly Province Wide Rounds for division members outside of the lower mainland. This has helped tremendously to make our PMR colleagues in distributed sites to feel more included, and to provide them with CPD opportunities.

The Division CPD lead, Dr. Mark Adrian stepped down and Dr. Andrea Townson kindly took on this role in the interim. By the end of 2017, Dr. Gosia Sudol became the official CPD lead for the Division. The Division of PMR is functioning well with members with a wide variety of specialized skills and knowledge, and in varied practice settings. Division events are usually well-attended and very collegial.

HIGHLIGHTS
• Autonomic Symposium - chaired and organized by Dr. Andrei Krassioukov at the Blusson Spinal Cord Centre. This one day event is held every two years and is well attended by clinicians from many disciplines as well as researchers. This is a collaboration involving the Division of PMR, ICORD, Rick Hansen Institute, and VCH.
• Dr. Andrea Townson delivered a live webinar on Section 3 credits with the Royal College CPD program. She also stepped up into the role of Co-Acting Head of the UBC Department of Medicine in 2017.
• Annual Rehab Research Day – This annual event features oral and poster presentations of research within rehabilitation disciplines. It is also the forum where our division members and residents present their research and compete for awards. In 2017, Dr. Kathleen Martin-Ginis delivered the plenary presentation on “Enhancing Exercise and Sport Participation Among Adults with Spinal Cord Injury”. In 2018, we welcomed Dr. Mark Bailey.
• Dr. Paul Winston became chair of the Canadian Association of Physical Medicine and Rehabilitation.
• Annual Division Retreat – This yearly retreat brings the Division together to discuss topics of relevance and interest to division members. In 2017, the focus was on strategizing for the needs of PMR. In 2018, we had presentations from Dr. Paul Winston and his medical student on how to foster student involvement in Division research, and from Dr. Gillian Simonett on physician wellness.
• Annual Division Awards Dinner - We celebrated the 2017 and 2018 academic year ends with this evening event and recognized the excellence in teaching and research within the Division.

• In June 2018, The UBC division co-hosted the Annual Scientific Meeting of the Canadian Association of Physical Medicine and Rehabilitation(CAPMR) with our University of Alberta colleagues. The UBC Division will be hosting the 2021 CAMPR Annual Scientific Meeting in Vancouver.

• Dr. Jill Calder received the Doctors of BC (BCMA) Silver Medal Award for outstanding contributions to medicine and/or improving the welfare of British Columbians for her advocacy in the areas of ALS, Autism, and environmental impact on health.

RESEARCH
The Division consists mostly of clinical faculty. The Division is actively trying to foster new clinician-scientists.

Dr. Andrei Krassioukov is the only physician-scientist in our division with a grant-tenured position. Dr. Krassioukov is very productive and continues to mentor students and residents in research endeavours. Dr. Kathleen Martin-Ginnis is a professor based at UBC Okanagan with active research in chronic disease prevention. Dr. Michael Berger, a new graduate and Division member this year, is also a clinician-scientist who has great potential. The Division is actively looking for opportunities to retain him at UBC.

Dr. Hugh Anton continues to chair the Division Research Advisory Committee (DRAC). There is good collaboration between the Division of PMR and School of PT and OT in rehab research. A group of physiatrists within the division have also started to build research in the area of spasticity and tone management. This emerging area of research is being done collaboratively with colleagues in orthopedics from UBC and around the world.

Despite busy clinical practices, division members continue to actively engage in research and publication of their work.

EDUCATION
Undergraduate:
In 2017, Dr. Herman Lau, our undergraduate education coordinator, reviewed medical student electives in PMR, as there was noticeable increase in medical student numbers in 2017. It was found that the increase was mostly accounted for by elective students from non-Canadian centres. The division felt it would be best to not take non-Canadian students UBC in order to ensure capacity for Canadian students with interest in PMR. In 2018, we welcomed a new undergraduate education coordinator, Dr. Grace Li. She spearheaded our outreach clinic in Whitehorse, and this is now a regular part of PMR residency training at UBC.

AWARDS & DISTINCTIONS

Duncan Murray Award for Excellence in Resident teaching
2017: Dr. Dan DeForge 2018: Dr. Anibal Borhorquez

Best Resident Research Presentation at Rehab Research Day
2017: Dr. Mike Berger 2018: Dr. Lawrence Kei

Kiran van Rijn Centenary Scholarship Award and Resident Educator Award
2017: Dr. Nicola Hahn 2018: Dr. Sarah Courtice

Theo van Rijn Award for Contributions to the Division
2017: Dr. Derry Dance 2018: Dr. Russ O’Connor

Best Province Wide Rounds Presentation
2017: Dr. Nicola Han 2018: Dr. Geoff Frost

Maureen MacNeil Award for recognition of non-physicians who contributed significantly to PMR resident training
2017: Patrick O’Brien 2018: Dr. Stacy Bhola-Reebye
Dr. Heather Finlayson co-leads the MSK system for the Medicine Undergraduate Education Program and oversees the MSK cases in Years 1 and 2. Our Division members are regular lecturers and clinical skills teachers at UBC. In 2018, our faculty contributed to 222 hours of scheduled teaching at UBC in addition to approximate 200 weeks of teaching with patient care.

**Postgraduate:**
The PMR Postgraduate Training Program is led by Dr. Eric Hui (Program Director). The program successfully matched 2 new trainees via CaRMS in the first round of the match. We also successfully completed an internal survey in 2017. The residency program is functioning well and has active participation from division members across the province. Dr. Hui has started to form a Competency Committee in anticipation of CBD launch in PMR in 2020.

The Division has also stepped up to provide 2-week ambulatory electives in PMR for UBC Year 4 students in 2017-2018, coordinated by Dr. Jacqueline Foley at G.F. Strong Rehab Centre. The Division of Physical Medicine and Rehabilitation completed one CBD workshop in 2017, and three CBD workshops in 2018. This process is being led by Dr. Jennifer Yao, as the chair of the Specialty Committee in PMR at the Royal College. We are prepared to launch in July 2020.

The Division has two subcommittees and a 5-year residency training program:
- CPD committee – led by Dr. Gosia Sudol. The goals are to review all division CPD activities and develop strategies to improve quality and participation from all members.
- DRAC (Division Research and Advisory Committee) – led by Dr. Hugh Anton. This committee has 9 members with the goals of providing peer review of division research projects and offering mentorship to division members with emerging research interests.
- Residency training program – Dr. Eric Hui as Program Director. The program is fully accredited by the Royal College.

In 2018, we started a Senior Resident Clinic at GF Strong Rehab Centre. This helps to improve access to rehabilitation consultations at GF Strong while allowing senior residents to build competence in management and consultation skills.

**Future Directions**
- Active engagement in faculty development in advance of Competency by Design implementation scheduled for 2020.
- Increase involvement of division members in DRAC, and support emerging areas of research interest (e.g. spasticity management and ultrasound guided procedures)
- Continue to promote greater connectedness amongst all PMR Division members regardless of practice location and sub-specialization.

Dr. Jill Calder, a division member in Kamloops, has secured a $500 per week stipend for residents who do electives with her at Royal Inland Hospital in PMR. Other training sites being developed include rehabilitation units in Fraser Health Authority.

**Patient Care**
The Division has a wide breadth of scope and specialized practices within PMR. Our members continue to provide excellent patient care in both urban academic and community settings. Clinical services are delivered in inpatient, outpatient and consultative settings. Several members have outreach clinics on a regular basis to northern communities, including Whitehorse and Prince George. PMR also has presence in collaboration with other disciplines, including pediatric neuromuscular and spine clinics, adult multiple sclerosis clinic at UBC, and specialized upper and lower extremity clinics with plastic and orthopedic surgery respectively.

In 2018, we started a Senior Resident Clinic at GF Strong Rehab Centre. This helps to improve access to rehabilitation consultations at GF Strong while allowing senior residents to build competence in management and consultation skills.
DIVISIONAL 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 now a significant number of community respirologists distributed through the province, affiliated formally as either full or associate members of the Division. In 2017, Dr. Jeremy Road was the Division Head of the UBC Division of Respiratory Medicine, and in 2018, Dr. Chris Carlsten assumed the role. The UBC Respiratory Division participates in a 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.

Recognition of our prominence and success is furthered with ongoing recognition of lung and heart being one of five priority areas in the Faculty of Medicine strategic directions. Lung-related research remains a priority in UBC’s capital campaign.

Gagan Basi provides excellent administrative support for the Division, as well as the routine day to day activities of the Division, and she also provides administrative support for the Post Graduate training program. Ms Julianna Shipanoff based at VGH provides additional support and Ms. Bella Taj 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.
HIGHLIGHTS

- Dr. Van Tongeren recipient of the honour roll award for excellence in clinical teaching in 2017
- Dr. Chris Ryerson - Recipient of the 2017 Raja Abboud AZ Award of Excellence, Division of Respiratory Medicine, University of British Columbia and Merit Award, Department of Medicine, University of British Columbia
- Dr. Don Sin received a CFI grant to support research in airways disease “TOR (Towards Omics and Imaging to Revolutionize COPD and Asthma Health) in Canada,” CH Canada Foundation for Innovation (CFI) Innovation Fund in 2017 for $4,411,620
- Leon Judah Blackmore donated $3 million to establish 9 bed multifunctional Centre for Sleep Disorders Aug 2017
- An anonymous donor contributed $30 million to support research and improve health care of those suffering from airway disease, both COPD and asthma, awarded to the Respiratory Division
- Dr James Johnston- Recipient of the 2018 Raja Abboud AZ Award of Excellence, Division of Respiratory Medicine, University of British Columbia
- Dr Bradly Quon- 2018 UBC Department of Medicine Martin M Hoffman Award for Research Excellence
- Dr Bradly Quon- St. Paul’s Hospital, 2018-2019 PHC/St. Paul’s Hospital - The Department of Medicine Faculty Research Award

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 for 2017 and 2018 is $8.70 million and $10 million respectively for principle investigators in competitive grant funding. Major peer-reviewed publications totaled over 300 papers for 2017/2018. 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, translational, and clinical research with a particular focus on airways biology, cystic fibrosis, ILD, and COPD in particular. Divisional members based at HLI include Maen Obeidat, Scott Tebutt, Andrew Sandford and Denise Daley, who are focused on understanding genetic determinants of lung disease. Research leaders at SPH include Dr. Don Sin, Director of the HLI and renowned COPD expert. Other prominent investigators with active clinical/translational research programs include Drs. Stephan vanEeden (COPD, animal models of air pollution), Del Dorscheid (asthma), Janice Leung (HIV-related lung disease), Brad Quon (cystic fibrosis), and Chris Ryerson (interstitial lung disease). Drs. Scott Apperley and Tawimas Shaipanich conduct research in interventional pulmonology. Paul Man and Peter Paré are senior clinician-scientists, who provide mentorship and leadership for the entire group of 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.

Strong basic, translational, and clinical research also occurs at VGH and the associated Vancouver Coastal Health Research Institute, with strong leadership from Dr. Chris Carlsten (occupational and environmental lung disease) and a particular emphasis on clinical trials and epidemiologic research focusing on sleep-disordered breathing (Drs. Ayas, Fleetham, Ryan), interstitial lung disease (Dr. Nasreen Khalil, whose program spans basic to clinical science), airways diseases (Drs. Jeremy Road and Mark FitzGerald), and tuberculosis (Drs. Johnston and Cook). There is a major collaborative link between VGH-based Division investigators (Drs. Stephen Lam and Renelle Myers) and the BC Cancer Agency, focusing on better understanding of the pathogenesis, prevention and management of lung cancer. Additional Division members based at VGH and focused on basic and translational science include Dr Chris Miller (nitric oxide to treat lung infections) and Dr. Vincent Duronio (aberrant cell signaling in lung disease).

Dr. Jordan Guenette is an associate member of the UBC Respiratory Division. In addition Dr. Neil Eves from the UBC Okanagan campus likewise has an associate membership in the Division. Both Jordan and Neil bring strong expertise in assessing the cardiopulmonary response to exercise as well as the interaction of heart and lung in health and disease.
PATIENT CARE

The UBC Respiratory Division provides tertiary and quaternary respiratory subspecialty services in a distributed model with regional and provincial services in pulmonary transplantation, pulmonary hypertension, chronic home ventilation program, occupational lung diseases and tuberculosis based at VGH.

The programs based at Vancouver General Hospital and the Lung Centre include: Lung Transplant (Medical Director, Dr. Robert 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 and Dr. Bergeron), Interstitial Lung Disease (Dr. Nasreen Khalil), lung cancer and interventional bronchoscopy service (Dr. Steven Lam, Eve Lea Beaudoin and recently Dr. Renelle Myers), and pleural diseases (Dr. Frank 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. Tawimas 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. The program recently welcomed the addition of a sleep specialist and investigator Dr. Rachel Jen. The program has also received support for a new 9 bedded sleep clinic, and the Leon Judah Blackmore Centre for Sleep Disorders Clinic opened in 2017. Both major sites (VGH and SPH) 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 UBC Hospital, Mount St. Joseph’s Hospital, GF Strong and George Pearson Hospitals.

Both major sites continue to develop ambulatory care related resources with the Respiratory Ambulatory Unit at VGH, expanded pulmonary rehabilitation capacity at both major hospitals, 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. Both major sites conduct regular Morbidity and Mortality (M+M) Rounds and have been proactive in including fellows and trainees in this process. The latter involvement has facilitated quality assurance projects. Fellow attendance at M+M rounds is expected, particularly on service rotations at locations where M+M is held.

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).

EDUCATION

Undergraduate

In 2017, 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.

In 2018, Dr. Eve-Lea Beaudoin (VGH) and Dr. Janice Leung (SPH) coordinate undergraduate elective programs for medical students. They also support the residents rotating through respiratory medicine (e.g. Internal Medicine, Anesthesia) both internal and external.

For 2017-2018, Dr. Richard Cohen has responsibility for the CBL pulmonary block and brings specialty expertise in education to this role as well as his specialty training in Respiratory Medicine.
Postgraduate
Dr. Victoria Cook leads the Post Graduate Fellowship Program. She has been ably assisted in this regard by Gagan Basi who in addition to her Fellowship activities also provides administrative support for the UBC Respiratory Division. The program received full accreditation from the Royal College of Physicians and Surgeons of Canada in November 2013, with the next periodic external review by the Royal College in November 2020.

The training program typically accepts 2-4 new fellows each academic year. There are currently 6 clinical fellows in the program (3 CaRMS slots per year). 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.

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.

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).

One of the major Divisional CME activities is the UBC Respiratory Medicine Annual Update which is co-sponsored by the BC Lung Association and held in Vancouver in the spring.

Also in the Spring, and part of the Heart + Lung Health FEST that includes the Respiratory CME and the Air Quality + Health Workshop, is the Heart + Lung Scientific Symposium (http://fest.heartandlung.ca/). Built on dialogue, expansion of viewpoints and ideas, and good cheer, the annual Heart + Lung Health FEST provides an incredible opportunity to engage and learn alongside professionals from all relevant heart and lung domains. FEST is hosted by the Institute for Heart and Lung Health and offers participants the opportunity to hear from top experts, present their posters, network with like-minded professionals, and celebrate successes in research and knowledge.

In addition to the UBC Update, the UBC Lung Health and Research and Policy Day are held annually. This meeting provides a platform for showcasing the broad research programs across the Centre for Lung Health and its many affiliates. There are also a number of other local conferences and educational opportunities regularly scheduled in Vancouver (e.g. The Union – North American Region TB conference held in February on odd years).

Dr. Christopher Ryerson is the UBC Respiratory Division the chair of the UBC Respiratory Medicine Update. Dr. Frank Ryan serves on the RCPSC Fellowship Examination Committee. Dr. Cook is on the CRC NSRFS Steering Committee.

FUTURE DIRECTIONS
The division has developed expertise in research and clinical medicine in all the main sub specialties of respiratory medicine and is recognized as a center of excellence internationally. Our path has been set by these accomplishments and the division hopes to continue to develop and recruit the next generation of investigators and clinicians in order to maintain this excellence.
DIVISIONAL OVERVIEW

Dr. Kam Shojania is the Head of both the St. Paul's Division and of the Vancouver General Hospital Division, and became the Medical Director of the Mary Pack Arthritis Centre. Dr. John Esdaile continues as the Scientific Director of Arthritis Research Canada. Tracey Ernst continues as the Rheumatology Program Manager and Division Manager for UBC, St. Paul's, and VGH Divisions of Rheumatology.

Dr. Shahin Jamal is the Adult Rheumatology Program Director. Dr. Jamal started this challenging role at the start of 2017, at the beginning of the new CBME changes. Dr. Shahin Jamal has worked continually on improving the academic and clinical portions of our excellent training program, and spent considerable effort in 2018 working with the National Rheumatology Committee to prepare us for the upcoming CBME challenges of 2019. Dr. Jamal is keen and highly motivated to improve our program even further.

HIGHLIGHTS

- 52 Division Faculty (including Adjunct Members & 3 Emeritus)
- Four residents graduated from the Rheumatology subspecialty training program in 2017 and three of those are opening practices in British Columbia – one opening a much-needed practice in Prince George.
- Three residents and one clinical fellow graduated from the Rheumatology subspecialty training program in 2018, and all three residents are opening practices in British Columbia.
- 2018 was the first year of our new annual UBC Rheumatology Divisional Awards, awarded as follows:
  - Award for Innovation: Dr. Brent Ohata
  - Award for Teaching: Dr. Natasha Dehghan
  - Award for Advocacy: Dr. Michelle Teo

RESEARCH

Dr. Antonio Avina Zubieta received a two-year $115,000 Canadian Rheumatology Association/Canadian Initiative for Outcomes in Rheumatology Care Award for his project “Proof of concept study of an EMR reminder intervention to optimize the primary and secondary prevention of comorbidities in people with inflammatory arthritis”, with co-investigators Drs. Diane Lacaille, John Esdaile, Kam Shojania, Jason Kur, and others. Jolanda Cibere was awarded a three year Canadian Institutes of Health Research Grant of $531,675 for her project “Population-based longitudinal cohort study of femoroacetabular impingement of the hip using magnetic resonance imaging outcomes”, with co-investigators include Drs. John Esdaile, Jacek Kopec, Linda Li, and others. Drs. Linda Li and John Esdaile are Co-Principal Investigators on another successful Canadian Rheumatology Association/Canadian Initiative for Outcomes in Rheumatology Care Award entitled “Power to the patients: reshaping knee osteoarthritis diagnosis and secondary prevention with e-health”.

DIVISION HEAD

• Dr. Kam Shojania

DIVISION STAFF

• Tracy Ernst

DIVISION MEMBERS

• Dr. N Amiri
• Dr. B Appleton
• Dr. A Zubieta
• Dr. M Badii
• Dr. M Baker
• Dr. K Blocka
• Dr. M Carruthers
• Dr. A Chalmers
• Dr. J Chan
• Dr. C Chin
• Dr. J Cibere
• Dr. D Collins
• Dr. A Colwill
• Dr. J Corpuz
• Dr. N Dehghan
• Dr. N Dhindsa
• Dr. S Ensworth
• Dr. J Esdaile
• Dr. C Flanagan
• Dr. A Godin
• Dr. I Hemmati
• Dr. M Hiltz
• Dr. S Huang
• Dr. S Jamal
• Dr. J Kelsall
• Dr. R Kherani
• Dr. M Klaus
• Dr. A Klinkhoff
• Dr. B Koehler
• Dr. J Kur
• Dr. A Kydd
• Dr. D Lacaille
• Dr. J LePage
• Dr. G Marcotte
• Dr. A Marotta
• Dr. K Northcott
• Dr. R Offer
• Dr. B Ohata
• Dr. C Patterson
• Dr. S Rachapalli
• Dr. G Reid
• Dr. J Reynolds
• Dr. S Seigel
• Dr. D Shaw
• Dr. R Shuckett
• Dr. J Stewart
• Dr. M Sun
• Dr. M Teo
• Dr. M Uh
• Dr. J Wade
• Dr. J Watterson
• Dr. W Wong
• Dr. J Yeung
EDUCATION
Our new Program Director, Dr. Shahin Jamal, is actively involved in the Rheumatology Training Program, and immediately made great strides in preparing the program for the new CBME style by reviewing and revamping the curriculum in 2017. The two-year Rheumatology Subspecialty Program is fully accredited by the Royal College of Physicians & Surgeons of Canada and continues to be the second-largest clinical rheumatology training centre in Canada. In both 2017 and 2018, we welcomed six Ministry of Health-funded residents; and one and two internationally funded residents into our program respectively. We are proud that many of our division members are actively engaged in high-quality teaching, in ambulatory care and research at Vancouver Acute, St. Paul’s Hospital, Arthritis Research Canada, and in community practices throughout the Lower Mainland and in the Okanagan.

We also provide high-demand elective and mandatory rotations in Rheumatology to residents in Internal Medicine and other specialties from UBC and from other universities. Approximately 80 residents (2017) and 105 residents (2018) from Internal Medicine, Family Practice, Neurology, Dermatology, Ophthalmology, Physical Medicine and Rehabilitation, and Maternal-Fetal Medicine spent elective rotations in one of our three teaching sites, St. Paul’s, Vancouver General, Royal Columbian, as well as private practices in Metro Vancouver. The Division offered our weeklong “Basic Skills Course for New Rheumatology Fellows” for our 17th and 18th consecutive years. This course continues to be the only course of its extent in Canada and provides new rheumatology residents with a solid background in the basic skills required in the academic and clinical practice of rheumatology.

Dr. Rhonda Shuckett remains in charge of the Rheumatology Undergraduate Committee and co-chairs the musculoskeletal undergraduate block. She designed the excellent 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 approximately 10 medical student rotations in 2017.

PATIENT CARE
The Mary Pack Arthritis Program is a provincial program administered through the Vancouver Coastal Health Authority. Services and programs include advanced therapeutic clinics, quaternary rheumatic disease clinics, a young adult transition program, vasculitis clinic, and an advanced therapeutics clinic with infusion services for biologic medications, and an inpatient service in the G.F. Strong Rehabilitation centre.

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 physician services for the Mary Pack Program is through the Ministry of Health APP program.

FUTURE DIRECTIONS
The Division looks forward to entering the Competency By Design modality in 2019, and working with the faculty to embrace this new educational style.