





THE UNIVERSITY OF BRITISH COLUMBIA





Pathology Magazine











CONTENTS

PATHOLOGY MAGAZINE

- 03 Departmental Reflections
- 04 Celebrating Together Pathday 2012
- 08 Welcome New Faculty Members
- 12 The Wellington Laboratory
- 14 Karsan Lab Updates
- 15 Research Profile: Applied Metagenomics of The Watershed Microbiome
- 16 Bachelor of Medical Laboratory Science (BMLSc)Program
- 18 Graduate Studies
- 21 Residency Training Program
- 22 Pathology Student Interest Group (PSIG)
- 23 Art of Science
- 24 Some Notable Accomplishments
- 26 Meet Our Faculty
- 28 Meet Our Associate Members
- 35 From the Pathology Education Centre

DEPARTMENTAL REFLECTIONS

MICHAEL F. ALLARD



The Department of Pathology and Laboratory Medicine at UBC is a hybrid, clinically and academically intensive Department within the UBC Faculty of Medicine whose activities span a broad spectrum of

clinical, teaching and research fields of pathology and laboratory medicine as well as other aspects of biomedical science and medical practice. These activities are distributed across the vast expanse of the province, the size of which is greater than the total area of Washington, Oregon, and California, and occur in a diversity of settings. As a consequence, a very significant challenge facing our department is how we stay connected with one another to learn about collective and individual activities, challenges, and successes. *Pathology News*, the departmental newsletter, is one critical means by which we can connect and learn about the department, its programs, and, most importantly, its people.

This issue of the newsletter, like others before it, not only provides snapshots of existing programs and how they are developing but also highlights important events, provides insights into selected

laboratories, welcomes new members, and wishes well those who are moving on. The success, growth and evolution of these departmental activities and programs depend entirely on the faculty, staff, students, and trainees that populate, participate in, promote, and lead them and who serve as the foundational piece that enables them wherever they may occur. Given the significant roles they play in the academic mission of the department, it is vitally important for us as a community to learn about our colleagues and the unique aspects of their educational and scholarly pursuits as well as acknowledge their participation and accomplishments.

Because we live and work in a complex environment where opportunities to interact directly with and learn about others in the department are necessarily limited, the breadth of talent in the community of scholars, educators, and clinicians represented by our department and their accomplishments may not be readily apparent. So, please read on and take advantage of *Pathology News* to gain an appreciation of the diversity and quality of activities and programs made possible by the extremely talented and committed faculty, staff, students, and trainees of our geographically dispersed department.

SOME NOTABLE ACCOMPLISHMENTS



JULY 2012
We are pleased to announce that **Dr. Bruce McManus** is the recipient of the third annual **Aubrey J. Tingle Prize**.



JULY 2012

Dr. Christian Steidl: 2012 Career
Investigator Award, Scholar

"Understanding tumor
microenvironment interactions
in lymphoid cancers: Translation into
improved treatment outcome
prediction and development of
personalized therapies"

CELEBRATING TOGETHER PATHDAY 2012

JACQUELINE QUANDT & MIKE NIMMO



This year, Pathology Day took place at the Paetzold Education Centre at Vancouver General Hospital and was followed by a reception at the Shaughnessy Restaurant at Van Dusen Botanical Gardens. Dr. Mike Allard introduced the day and our **James Hogg**

Lecturer, Dr. Katerina Dorovini-Zis, provided new insights into the pathology and microvasculature changes associated with malaria "*Cerebral Malaria in Children: A Neurovascular Disorder*".

Science Bytes were a new introduction to Pathology Day this year—a 45 second opportunity for students, residents, fellows and other departmental members to show a single slide and highlight the posters they would present later that day. Over 60 abstracts were submitted highlighting the breadth of research topics throughout the department; from these several were

selected for presentation in either the Resident or Graduate Student Oral Platform Sessions that took place concurrently. More than 150 departmental members participated in these sessions, demonstrating once again that Pathology Day is truly a terrific occasion to experience the energy and diversity of research taking place throughout our department. All trainees value this opportunity to exchange with each other and especially with faculty members.

The Keynote Address "Decoding Cancers" by Dr. Marco Marra brought all attendees together again to wind up the scientific program. Dr. Marra gave an enlightening and entertaining overview of the rapidly developing field of cancer genomics and some of the major recent breakthroughs including "next generation" sequencing approaches to characterize the genetic changes that drive cancer progression.

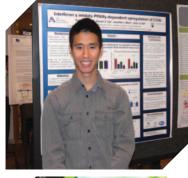
In addition to **Clara Westwell-Roper**, who received the **Dukovitch Graduate Student Seminar Award** for the best Graduate Student Seminar presentation as judged by her peers, the following trainees were recognized for their excellent presentations at Pathology Day this year:

THE SCIENCE BYTES SESSION				
People's Choice Award selected by all attendees:	Hayley Spencer Hiebert			
Science Bytes' Honorable Mention Recipients:	Daven Tai, Stefanie Cheah and Deanna Zanet			
RESIDENT ORAL PLATFORM PRESENTATIONS				
1st Place:	Jason Morin			
2nd place:	Patrick Wong			
3rd place:	Ananta Gurung			
GRADUATE STUDENT ORAL PLATFORM PRESENTATIONS				
1st Place:	Ashish Marwaha			
2nd place:	Alon Hendel			
3rd place:	Yu Chi (Kevin) Yang			









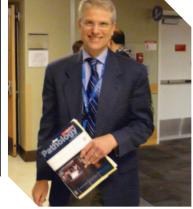














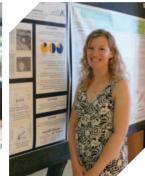












POSTER PRESENTATION AWARD WINNERS	
1st Place:	Jaques Courtade
2nd place:	Sophie Stukas
3rd place:	Alistair Chenery

At the reception at the Shaughnessy Restaurant, around 100 of us got the chance to mingle and walk through the Van Dusen Botanical Gardens, enjoying both lovely weather and the company of colleagues we may rarely see given the geographic diversity of our members. The following faculty and staff were recognized with awards for their respective contributions to our department:

FACULTY RECOGNITION AWARDS					
Most Valuable Player:	Dr. Jason Ford				
David Hardwick Lifetime Achievement:	Dr. Katerina Dorovini-Zis				
Excellence in Research and Discovery:	Dr. Randy Gascoyne				
Excellence in Education:	Dr. Deborah Griswold				
Excellence in Service:	Dr. Malcolm Hayes				
Staff Service Award in the Technologist/Technician Category:	Ms. Angela Tsang				
Staff Service Award in the Administration Category:	Ms. Jennifer Xenakis				

Once again, the success of the day was largely attributed to the participation offered by faculty, staff and trainees. We look forward to both increased faculty attendance and new opportunities to showcase the expertise and successes of our departmental members for Pathology Day 2013. Mark your calendars for May 2013!

Jacqueline Quandt & Mike Nimmo



CTLT has clickers to loan out for events. If you have a training session or would like to use clickers for a bigger event, please contact *clicker.support@ubc.ca*. Currently, they have

CTLT HAS CLICKERS TO LOAN FOR EVENTS

about 80 that can be out at any given time. For more iClicker/iGrader info please visit http://www.elearning.ubc.ca/toolkit/clickers/.

DEPARTMENT SOCIAL HOUR

Our first Administrative Staff Office Retreat - June 29, 2012

















Ladies are still talking about the retreat - what a wonderful time we had!















At the end of June, the staff had their first Administrative Staff Office Retreat at Granville Island. They were treated to a lunch cruise, a tour of Granville Island Brewery and a dinner on the patio at Dockside. The staff got to know each other a little better on a personal level while enjoying the breathtaking view of Vancouver.



What's New in Microsoft Office 13?

Word can now import, edit, and save PDF documents.

You can also embed online images and videos into Word documents, and a reader can play embedded videos.

Office 13 will support third-party apps for the first time. One such app allows you to plot a Bing map in an email message, which could be helpful when trying to arrange a meeting.

Social networks are integrated into Office 13. You can connect LinkedIn, Facebook, and Twitter, and share Office documents to your contacts or your pages on those services. You can also share documents in live-collaboration or presentation modes.

Only Windows 7 and 8 will support Office 13; users of earlier Windows versions will have to stick with older versions of Office or upgrade to one of these operating systems.

You can read all about it here: http://www.microsoft.com/office/preview/en





MASOMEH ALIMAGHAM Honourary Lecturer; Surrey Memorial Hospital

Dr. Alimagham is an Associate Professor of Infectious Diseases. She received her MD in 1982 and her specialty in 1987 from Shahid Beheshti University of Medical Science, Tehran, Iran. She has twenty-two years of experience in clinical practice, training students and residents, doing research, and peer review of medical journals and in parallel with research and teaching at the Education Development Center as a member of the Faculty Training Committee. She has attended numerous international congresses including ECCMIDS, and has published several articles on various topics including tuberculosis, infection in renal transplant recipients, ureaplasma urealyticum, and abortion. Currently she is a researcher at the Surrey Memorial Hospital. She is very excited about this opportunity and believes it will be rewarding both personally and professionally. Her interests include teaching medical students and residents and she loves spending time with family and friends. Her hobbies include reading, gardening and travelling.



BRIAN K CHUNG

Postdoctoral Fellow; CFRI Translational Research Institute Supervisor: Dr. Rusung Tan

Dr. Chung received his PhD from the University of British Columbia, Department of Pathology & Laboratory Medicine in 2012. During his graduate studies, Brian discovered that the expression of SLAM-associated protein is required for the development of a unique subset of immune cells known as natural killer T cells. Brian demonstrated that these cells are important for recognition of early viral infection and these findings have improved our understanding of how the immune system reacts to and regulates viral replication. Brian will continue working as a Postdoctoral Fellow with Dr. Rusung Tan at the Child & Family Research Institute to further characterize the role of natural killer T cells using a novel humanized mouse model of infection.



KARTHIKEYAN RAJAMANI

Postdoctoral Fellow; James Hogg Research iCAPTURE Centre, St. Paul's Hospital Supervisor: Dr. Bruce McManus

Dr. Rajamani completed his post-graduate education in Human Genetics at Sri Ramachandra University, India.

Thereafter he worked for one year at the Child Trust Hospital as a Cytogeneticist. Upon completing his PhD in Marine Biotechnology at Annamalai University, he isolated novel phenolic compounds from algae and analyzed their potential against renal cell carcinoma. The isolated phenolic compound from the algae is the first of its kind to be reported to be associated with anti-angiogenesis and anti-cancer potential. He worked as a Project Assistant in Clinical Trial Projects at the Indian Cardiovascular Research and Advocacy Group (ICRAG) Ovations Chronic Disease Initiative which was coordinated by St. John's Medical College, Bangalore Population Health Research Institute, PHRI, McMaster University, Canada in Rajah Muthiah Medical College, Annamalai University. Presently he is working as a Postdoctoral Fellow in Dr. Bruce McManus' Lab on allograft vasculopathy and viral myocarditis. His areas of interest include targeting endothelial cells, smooth muscle cells and immune responses in the prevention of organ failure and the genetic diversity of pathogenic evolution. He enjoys sports and likes to spend time listening to music.



MAKOTO ENDO

Postdoctoral Fellow; Genetic Pathology Evaluation Centre Supervisor: Dr. Torsten Nielsen

Dr. Endo is a Physician Scientist who graduated from medical school in 2000 at Kyushu University, Japan. After residency training in orthopaedic surgery/oncology, he completed his PhD in the Department of Anatomic Pathology in 2011 at the same university. His special interest is translational sarcoma research and he is currently doing a sarcoma pathology research fellowship in Dr. Torsten Nielsen's laboratory. He is very happy to be a part of cutting edge research and to have the ability to work with wonderful colleagues here. His fellowship is only for 1 year but he will do his best to enjoy Vancouver to the fullest during his short stay here. Yoroshiku onegai shimasu. (That means "Sincerely yours" in Japanese.)

WELCOME NEW FACULTY MEMBERS (CONT'D)



MITRA ESHGHPOUR Honourary Lecturer; VGH - Microbiology and Infection Control

Dr. Eshghpour finished medical school and obtained her MD degree from the National University of Iran in Tehran, and went on to pursue a residency in Infectious Diseases and Tropical Medicine at the University of Tehran in 1979. While working on her thesis, she continued her education and received a Masters Certificate from the Institute of Public Health at Tehran University in 1983. She started her career at the University of Shahid Beheshti as a Clinical Assistant Professor in the Department of Infectious Diseases. After seventeen years she decided to quit her job as an Associate Clinical Professor and immigrated to Canada in 1999. In January 2012, she was appointed an Honourary Lecturer in the Department of Pathology and Laboratory Medicine at the University of British Columbia. She enjoys reading medical texts, watching movies, cooking, and spending time with her family.



WILLIAM HSIAO Clinical Assistant Professor; BCCDC Public Health Microbiology & Reference Laboratory

Dr. Hsiao completed his PhD from Simon Fraser University in the laboratory of Dr. Fiona Brinkman in 2007 and a Postdoctoral Fellowship in the laboratory of Dr. Claire Fraser at the Institute for Genome Sciences in 2011. He joined BCCDC Public Health Microbiology & Reference Laboratory in September 2011 as the in-house Bioinformatician to lead the effort of applying microbial genomics and bioinformatics in public health setting. He uses whole genome sequencing and comparative genomic analyses to study pathogens. He also conducts research in the new field of metagenomics to study microbial-host interactions. The human microbiota are microbes that live in and on us and are critical to our health and well-being. He plans to use high throughput sequencing technologies and bioinformatics to study the pathogens that make us sick and the microbiota that keep us healthy. He is an avid photographer in my spare time.



MIGUEL IMPERIAL Clinical Instructor; BCCDC, Public Health & Microbiology Lab

Dr. Imperial completed medical school, a Masters of Health Science (Epidemiology) and Medical Microbiology Residency all at UBC. His interests are in public health in the developing world, parasitology and in tropical medicine. He obtained additional training in clinical tropical medicine and public health at the Bloomberg School of Public Health at Johns Hopkins University in Baltimore, Maryland. He continues to maintain an active clinical practice seeing consultations while filling in at BCCDC and being an Associate Microbiologist at BC Biomedical Labs. His involvement with the UBC Medical School has given him the opportunity to lecture and serve as a week chair in the HDI block. Together with his lovely wife, they have three energetic young sons who keep them otherwise occupied. While he doesn't want his boys to grow up just yet, he looks forward to future summer travels around the world doing development work.



DAISUKE KINOSEPostdoctoral Fellow; James Hogg Research iCAPTURE Centre, St. Paul's Hospital Supervisor: Dr. James Hogg

After graduation from Kyoto University in 2000, Dr. Kinose worked as a Resident of Internal Medicine and then as a Respiratory Physician in Kobe for five years. He started his research career in Kyoto University in 2005. His research was to evaluate the association of innate immune receptors with COPD and one of his works was to evaluate the gene expression of pattern-recognition receptors in COPD airway using laser-capture microdissection (LCM) technique. He finished his PhD in 2012 and joined the iCapture Centre this February as a Postdoctoral Fellow in Dr. Hogg's lab. His goal is to take over and expand Masa Suzuki's work which was to evaluate the structure and gene expression in diseased lung. He is very happy and excited to work here.



WELCOME NEW FACULTY MEMBERS (CONT'D)



NIK (NIKITA) MAKRETSOV Clinical Assistant Professor; St. Paul's Hospital

Dr. Makretsov joined the Anatomical Pathology Group at St.Paul's Hospital in March 2011, after several years of intense subspecialty practice in breast surgical pathology in Memorial University of Newfoundland; a Fellowship in breast cancer at Cancer Research UK and the University of Cambridge (2007-2008); and an earlier residency in Anatomical Pathology at Memorial University of Newfoundland (2004-2007). He is probably one of the oldest alumni of the Genetic Pathology Evaluation Center (GPEC) at the University of British Columbia, where he spent three prolific years (2001-2004) under the supervision of Drs. B. Gilks, D. Huntsman and T. Nielsen. He developed a taste for clinical research of breast cancer and other human malignancies and developed skills with tissue microarrays, immunohistochemistry and data analysis. He spent several intense months researching the molecular pathology of pediatric malignancies with Dr. Poul Sorensen's team in 2001. Poul was brave enough to invite a young doctor/cancer researcher from turbulent Russia. This event had long-term benefits for Nik's career. Practical surgical pathology occupies his mind and soul more than 100%; however he continues his education part-time working on the evidence-based medicine degree program at the University of Oxford, UK. He continues to work on a project of development of evidence-based quality monitoring diagnostic immunohistochemistry with Dr. Blake Gilks, Dr. John Garatt and Canadian Immunohistochemistry Quality Control. He loves Canada from the East-to-West Coasts and waits for any moment to explore their hidden gems. Jokes apart I abbreviated my name to nick-name Nik from the longer Nikita in an attempt (fail!!) to put an and to a cultural gender mismatch associated with my name caused by Elton John's song.



AVI OSTRY Clinical Associate Professor; St. Paul's Hospital

Dr. Ostry has worked at St. Paul's Hospital practicing general anatomic pathology with a subspecialty interest in cardiac pathology for the last three years. He started his career as a family physician before returning to complete a residency in general pathology at UBC. Following training, he spent just over eight years in Nova Scotia, in both Cape Breton and Halifax, before returning to Vancouver. It was in Halifax that he developed expertise in cardiac pathology which has been beneficial at St. Paul's. Although he has participated in a variety of research projects, his academic interest is primarily teaching. In addition to medical and post graduate teaching, he is site director for residency training.

Outside of work he likes to ride, run, read and relax, perhaps not in that order.



DAVID SCHAEFFER

Clinical Assistant Professor; VGH, Anat Path/Gastrointestinal Pathology

Dr. Schaeffer obtained his medical degree from the Johannes Gutenberg University of Mainz, Germany. He immigrated to Canada in 2004. After two years as a Postdoctoral Fellow in the Division of Gastroenterology at UBC, he undertook a Residency Program in Anatomical Pathology in Vancouver and completed his Gastrointestinal Pathology Fellowship with Dr. Robert Riddell at Mount Sinai Hospital in Toronto. In August, he was excited to join the Division of Anatomical Pathology at Vancouver General Hospital, where he will be specializing in gastrointestinal and liver Pathology, with a particular focus on translational research in pancreatic cancer.



DRAGOS M. VASILESCU

Postdoctoral Fellow; James Hogg Research Centre at the Heart + Lung Institute, St. Paul's Hospital; Supervisor: Dr. James Hogg

Dr. Vasilescu was born in Romania. During his childhood his family moved to Germany. After high school, he decided to start a newly offered college program in Medical Computer Science during which he performed a six month internship at the University of Iowa. He returned to Iowa during his PhD while enrolled as a PhD student at the Philipps University Marburg in Germany. His PhD focused on providing new insights into the morphometry of the healthy lung. He recently joined the James Hogg Research Institute to work as a Postdoctoral Fellow under the supervision of Dr. Hogg. Our research focuses on the study of lung pathology by utilizing high resolution imaging techniques such as micro CT. He loves the mountains and the water and the offer to move to Vancouver was an easy choice. The amazing geographical location and cultural diversity makes Vancouver a unique place to live.



YEMIN WANG

Postdoctoral Fellow; VGH, Robert H.N. Ho Research Centre Supervisor: Dr. David Huntsman

Dr. Wang completed his PhD in Experimental Medicine at UBC in 2009. He received Postdoctoral Training at the Fred Hutchinson Cancer Research Centre, where he studied the roles of microRNAs in DNA damage response and their therapeutic potential in cancer treatment. In January 2012, he returned to UBC and joined Dr. David Huntsman's Research Team to continue his work to explore the role of microRNAs in ovarian cancer development, which will eventually provide tools for early cancer diagnosis and better treatment. He is currently a Research Fellow supported by Canadian Institute of Health Research and Michael Smith Foundation for Health Research. In addition to my research activities, he enjoys reading and spending time with his family.



LUFANG YANGClinical Assistant Professor; VIHA

Dr. Yang is currently a Clinical Chemist with the Vancouver Island Health Authority. She obtained her MD from the Jiangxi Medical University (now part of Nanchang University) in 1984, with her Residency in Internal Medicine and Cardiology. She received her PhD in Clinical Pharmacology from Shanghai Medical University (now part of Fudan University) in 1995. After her Postdoctoral Training in Clinical Chemistry at McMaster University in 2007, she joined the Capital District Health Authority as a Clinical Chemist and Dalhousie University as an Assistant Professor. In addition to her routine work as a Clinical Chemist at Capital Health, she is also involved in teaching in Dalhousie's Biochemistry Program, MD Program, and General Pathology Residency Training Program. Her interests include clinical chemistry, clinical toxicology and therapeutic drug monitoring. She enjoys gardening and trying to teach her sons how to farm.

BARBRA ALLEN BRADSHAW

Clinical Instructor; Vernon Jubilee Hospital

ANDREA BRUECKS

Clinical Associate Professor; Royal Jubilee Hospital

JIAMIN CHEN

Postdoctoral Fellow; BC Cancer Agency Supervisor: Dr. David Huntsman

GERBEN DUNS

Postdoctoral Fellow; BC Cancer Research Centre Supervisor: Dr. Aly Karsan

STEVEN RASMUSSEN

Clinical Assistant Professor; VGH

DWAYNE WENZEL

Clinical Instructor; Kelowna General Hospital

CHERYL WELLINGTON

Whenever I'm formally asked to describe the research interests of my lab, I rattle off the usual suspects Alzheimer's Disease, apolipoprotein E, lipid metabolism and now traumatic brain injury. Although accurate, this rather dry list of topics cannot possibly give justice to the sense of excitement and purpose that makes life as a researcher so fulfilling. Having an opportunity to outline the entirely non-linear trajectory of my laboratory's development may offer more vivid insights into why I still think being an academic professor is the world's best career.

My position as an Assistant Professor began after three postdoctoral positions that spanned the fields of immediate early gene regulation, mRNA stability, and Huntington Disease. During these years it became obvious that some fields are immediately and compellingly attractive to me whereas others failed to capture any genuine interest. Indeed, the maxim to follow your passion is absolutely necessary for success and fulfillment in research. For me, the fire began to blaze in the overall area of neurodegeneration.

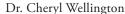
I give much credit to the patients and caregivers I have met along the way. As a non-clinician, I do not have daily access to the people who are affected by the conditions I study, and it's all too easy for basic scientists to forget that there are real people who are valiantly pressing on as they support our research efforts. A pivotal experience was meeting a grandmother whose husband was afflicted by a neurodegenerative disease, whose son is also afflicted, and whose grandchild is at risk. At one point she simply asked me "And what exactly did you do today that will make a difference?" This unforgettable moment still motivates my laboratory to be driven by clinical relevance and to make every experiment count.

Establishing a research laboratory with no direct experience in the field of Alzheimer's Disease, no relevant publications, and few reagents raised obvious challenges to obtaining the first crucial operating grant. Indeed, it took four cycles to receive funding. There were three crucial components to success at that time -support from the Department and UBC to help

> At one point she simply asked me "And what exactly did you do today that will make a difference?"

me through this phase, building relationships with senior investigators in the Alzheimer's world, and personal perseverance. Now as an established investigator, these pillars still offer me many opportunities to continue to pursue new and compelling ideas







and, further, to help create the very opportunities necessary to proceed.

I cannot emphasize enough how the intrinsic character of many investigators I met along the way have shaped me and the members of my laboratory. There were many who offered to share reagents and protocols without excessive administrative complications or demands for recognition. For







Brady, Jen, Vero and James



George, Cheryl, Brady, Kate, Gavin, Vero, Jon, Jen and Anna

example, one scientist flew a graduate student to my laboratory at his expense to teach us a particular technique expected by the field. By now, I have innumerable stories of how most of the excellent scientists are similarly willing to help the field as a whole. The lesson I learned then and continue to practice now is not to be timid about sharing ideas with the best in the field. In most

cases, leaders will already be so busy with their own projects that they will be only too happy to help polish a different one and, if they are convinced that a new idea or programme is sound, they will likely be motivated to help. Yes, there will always be potential conflicts and competitions in science, but there are usually enough variations in study design, particular techniques, or results

to enable publication even when one may feel potentially "scooped".

My laboratory is now once again branching out into an unfamiliar territory. The discovery that the neuropathology and genetic risk factors for Traumatic Brain Injury overlap with Alzheimer's Disease is a compelling new area for my group. With continued support from UBC and the Department of Pathology and Laboratory Medicine, we are once again engaging in conversations with the best in the Traumatic Brain Injury field to strategize on what we at UBC can provide to this growing area. This time around, the process is even more exciting as it will involve establishing the clinical foundation to do the translational work I wish to do and thereby begin to meet the very large unmet needs of these patients.

A career on the cusp of opportunity is a privilege. Progress depends on the practical and personal integrity of those that engage in research. The path is hardly linear, but rather resembles a constant spiral of building on the accomplishment of others and giving our best in return.



New Hires:

Gerben Duns, Postdoctoral Fellow Tatjana Miletic, Project Manager at GSC

Leaving:

- Alex Chang (grad student here since 2007), now has both a PhD and a new baby girl, and has accepted a Postdoctoral position at Stanford
- Angela Hussainkhel (grad student), recently defended her Master's thesis
- Martin Jadersten (Post-doc fellow) returned to his Clinician-Researcher position in Sweden

Grants:

We received funding as part of a Team Grant with several TFL labs: "The Terry Fox New Frontiers Program Project in Core Pathogenic Pathways in Human Leukemia".

Megan Fuller (Technician) received a TRA Professional Development Award

Publications:

Long-time lab member Linda Chang (now a Postdoctoral Fellow) published a big piece of her PhD work in PNAS, and got the cover:

Chang L, Noseda M, Higginson M, Ly M, Patenaude A, Fuller M, Kyle AH, Minchinton AI, Puri MC, Dumont DJ, Karsan A. Differentiation of vascular smooth muscle cells from local precursors during embryonic and adult arteriogenesis requires Notch signaling. Proc Natl Acad Sci U S A. 2012 May 1;109(18):6993-8. Epub 2012 Apr 16. http://www.pnas.org/content/109/18/6993.long Cover:: http://www.pnas.org/content/109/18.cover-expansion

Former Postdoctoral Fellow Nelson Wong has now got his work accepted: Wong NKY, Fuller M, Sung S, Wong F & Karsan A. Heterogeneity of breast cancer stem cells as evidenced with Notch-dependent and Notch-independent populations. Cancer Medicine, 2012. (accepted)

RESEARCH PROFILE: APPLIED METAGENOMICS OF THE WATERSHED MICROBIOME







Department of Pathology and Laboratory Medicine Members receive \$3.2 million to pursue development of novel markers of water quality.

Benjamin Franklin once said that an ounce of prevention is worth a pound of cure. This adage rings equally true when we speak of public health – particularly for drinking water.

Canada's watersheds are amongst our most important natural resources, providing drinking water for people as well as for agricultural, industrial and recreational uses. The pressures of industry, population growth, environmental degradation, and changing land uses are threatening our watersheds; however, our current reactive model of water quality monitoring and assessment is neither effective nor sustainable.

Recognizing this, scientists, policy makers and stakeholders are adopting a new model of watershed stewardship called "source protection", in which a variety of strategies are used to proactively ensure that Canadian watersheds remain healthy and pollution-free within a wider "Source-to-Tap" framework.

Current laboratory tools to assess microbial water quality are unsatisfactory — current testing approaches rely on methods developed at the turn of 20th century. These culture-dependent approaches are slow, non-specific and poorly represent the range of microbial contaminants that may be present in a contaminated watershed. Department of Pathology and Laboratory Medicine members Drs. Judith Isaac-Renton, Patrick Tang, Natalie Prystajecky, Miguel Uyagari-Diaz and William Hsiao, along with researchers from UBC, SFU and across Canada, received \$3.2 million in funding from Genome Canada, Genome BC, Simon Fraser University Community Trust and Public Health Agency of Canada. This project will use genomics and metagenomics to develop novel tools to assess water quality.

Our interdisciplinary research team (microbiologists, environmental scientists, bioinformaticians and social scientists) are studying watersheds across British Columbia using these tools. Studying watersheds of differing land-use types, this approach promises to identify microbial profiles associated with "healthy"









Our new genomics-based approach to characterizing microbial water quality will improve water quality and ultimately, public health practice. Our ultimate goal is safe and clean water for all.

water quality and "unhealthy" water quality and to identify microbial profiles associated with specific types of pollution. Signatures will be used to develop two quantitative polymerase chain reaction (qPCR) assays. The first assay, Watershed Health Profile, will measure the ratio of microbial targets associated with healthy and unhealthy watersheds, to provide an overall assessment of water quality. The second assay, Microbial Pollution Profile, will be able to identify the source of microbial pollution based on the characteristics of microorganisms found in fecal material and in the polluted water site.

Our new genomics-based approach to characterizing microbial water quality will improve water quality and ultimately, public health practice. Our ultimate goal is safe and clean water for all.

BACHELOR OF MEDICAL LABORATORY SCIENCE (BMLSc) PROGRAM

CAROL PARK AND JOANNE WOUTERSE



2012 Graduates

This year twenty students received their BMLSc degrees in May, bringing the total number of program graduates to 452. At the BMLSc Awards Tea, held on May 22nd the following students were recognized for their outstanding academic achievements:

Tina Chiang achieved the highest overall average of the graduating class and was awarded the Professor C.F.A. Culling Bachelor of Medical Laboratory Science Prize. She also received the Donald M. McLean Prize in Medical Microbiology.

Jill Lin received the B.J. Twaites Prize which is awarded to the student with the highest standing in Laboratory Administration. Following graduation, Jill moved to Ontario where she is currently pursuing a Master of Biotechnology degree at the University of Toronto.

The Eugenie Phyllis and Philip Edward Reid Prize in Morphological Sciences for academic excellence in histology, histochemistry and microscopy was awarded to **Deborah Chen**. Deb has been accepted as a graduate student in our department and will be carrying out research under the supervision of Dr. Dana Devine.

Magnolia Flores and **Sharndeep Purewal** were jointly awarded the Prize for Best Presentation in the Pathology 405 Seminar Course.













Graduates' Choice for Teaching Excellence Awards

The graduates recognized the following instructors, who each received a BMLSc Graduates' Choice for Teaching Excellence Award: Drs. Morris Pudek, Dan Holmes and Mark Scott.

The Reid Memorial Cup

This award recognizes a Faculty or Staff member who has made an outstanding contribution to the educational experience of the BMLSc students. This year's recipient is Dr. Carol Park.





Congratulations to our 2012 BMLSc Graduates and award recipients!







GRADUATE STUDIES

HAYDN PRITCHARD – PROGRAM DIRECTOR













Our program has had another good year with 23 new students and nearly an equal number expected for next year. We now have 81 students in the program (4 MD/PhD, 42 PhD and 35 MSc).

Highlights and Achievements

This year several of our students have received highly competitive stipend support awards. This not only reflects the excellent qualifications of our students and their research environments, but the money that these awards bring in releases funds and increases opportunities for new incoming students.

Whilst we recognize and congratulate

all these successful students (see table), I would like to highlight the success of **Dr. Jacob Rozmus**. He has continued the Department's huge prior successes in winning the most prestigious Vanier scholarship. Jacob is one of a number of medically trained students who have interrupted their clinical careers to formalize his research training by enrolling

in our PhD program. Jacob received his MD degree from the University of Alberta in 2005 and completed his Residency training in Pediatrics at the University of British Columbia in 2008. After 2 years as a Fellow in Pediatric Oncology and Hematology, he entered our PhD program under the research supervision of Dr. Kirk Schultz. Jacob's research studies are concerned with the role of B Cells in the Pathophysiology of Chronic Graft-Versus-Host Disease. In addition to the Vanier award, Jacob also received a CIHR Fellowship for Health Professionals (as did Dr. Robert Kridel working with Randy Gascoyne) and the Canadian Child Health Clinician Scientist Program (CCHCSP) Predoctoral Award. This is indeed a remarkable achievement and attests to the high standards set by our best students. Furthermore, Jacob has shown that entering the PhD program even after clinical fellowship years is possible, and brings the highest opportunities for success - surely an asset when negotiating for faculty positions in the years to come!























Achieve your career goals. It all starts here..







Acknowledgement

On a more functional level, I would like to acknowledge Dr. Hélène Côté, who has led our Graduate Studies Curriculum Committee again this year. Under her stewardship we are conducting a complete review of our formal educational program, with a view to providing the students with the best and most appropriate course material to support their research studies. Dr. Côté has been successful in recruiting

some excellent new blood to help teach our program next year, and we welcome Drs. Kevin Bennewith, Christian Steidl, and Sohrab Shah to our graduate student teaching community. As with all programs, there is always great opportunity to improve and change - feel free to email at hpritchard@pathology.ubc.ca or call me with you ideas and how you can help us get even better!



Student		Supervisor	Agency	Award Title	Research Project	Award
Ada Leung	PhD	Marcel Bally	CIHR	Frederick Banting and Charles Best Canada Graduate Scholarships - Master's Award	3'-phosphoadenosine 5-phosphosulfate Synthase (PAPSS) — A Potential Therapeutic Target for Non- Small Cell Lung Cancer	\$17,500
Alon Hendel	PhD	David Granville	CIHR	Vanier Canada Graduate Scholarship	The Role of Proteinase Inhibitor 9 in Atherosclerotic Plaque Stability	\$50,000
Anna Meredith	PhD	Bruce McManus	NSERC	Alexander Graham Bell Canada Graduate Scholarship	Molecular Markers of Heart Failure Presence and Progression	\$21,000
Ashish Marwaha	PhD	Rusung Tan	MSFHR	2011 Research Trainee Award, Post-Doctoral Fellow	The Role of interleukin 17 in type 1 diabetes	\$40,000
Ashish Marwaha	PhD	Rusung Tan	Univ. of Oxford	Radcliffe Travelling Fellowship	The Role of interleukin 17 in type 1 diabetes	\$75,000
Behi Mohajer	PhD	Mark Scott	Canadian Blood Services	Graduate Student Fellowship	Immunosuppressive Effects of Chronic Transfusion Therapy: The Role of Iron Accumulation	\$21,000
Clara Westwell- Roper	PhD	Bruce Verchere	CIHR	Vanier Canada Graduate Scholarship	Mechanisms of human islet amyloid polypeptide- induced pancreatic islet inflammation	\$50,000
Dana Kyluik	PhD	Mark Scott	Canadian Blood Services	Graduate Student Fellowship	The Effect of Immunocamouflage on Allorecognition of Cellular Blood Products	\$21,000

GRADUATE STUDIES CONT'D

GNADUF	\	STUDILS	CONTD			
DeAnna Zanet	MSc	Hélène Côté	CIHR	Frederick Banting and Charles Best Canada Graduate Scholarships - Master's Award - Priority Announcement: HIV Research (Longitudinal telomere shortening rates in HIV-infected (HIV+) and HIV-exposed uninfected (HEU) children exposed to antiretroviral drugs in utero	\$17,500
Emily Vucic	PhD	Wan Lam	CIHR	Frederick Banting and Charles Best Canada Graduate Scholarships - Doctoral Award	Molecular mechanisms of lung cancer development in former smokers	\$35,000
Jacob Rozmus	MD/ PhD	Kirk Schultz	CIHR	CIHR Fellowship for Health Professionals	The Role of B Cells in the Pathophysiology of Chronic Graft-Versus-Host Disease	\$50,000
Jacob Rozmus	MD/ PhD	Kirk Schultz	Canadian Child Health Clinician Scientist Program	Predoctoral Award	The Role of B Cells in the Pathophysiology of Chronic Graft-Versus-Host Disease	\$50,000
Jacob Rozmus	MD/ PhD	Kirk Schultz	CIHR	Vanier Canada Graduate Scholarship	The Role of B Cells in the Pathophysiology of Chronic Graft-Versus-Host Disease	\$50,000
Jasmine Hamilton	PhD	Jay Kizhakkedathu	Canadian Blood Services	Graduate Student Fellowship	Novel Macromolecular Iron Chelators for the Treatment of Secondary Iron Overload	\$21,000
Lisa Ang	PhD	David Granville	CIHR	Frederick Banting and Charles Best Canada Graduate Scholarships - Doctoral Award	Extracellular role of granzyme B in abdominal aortic aneurysm	\$35,000
Melissa McConechy	PhD	David Huntsman	CIHR	Frederick Banting and Charles Best Canada Graduate Scholarships - Master's Award	Mutation Based Classification of Endometrial Carcinomas for Improved Targeted Therapeutics	\$17,500
Momir Bosiljcic	MSc	Kevin Bennewith	CIHR	Frederick Banting and Charles Best Canada Graduate Scholarships - Master's Award	Targeting hypoxic tumour cells to modulate myeloid- derived suppressor cell mobilization and metastatic tumour growth	\$17,500
Robert Kridel	PhD	Randy Gascoyne	CIHR	CIHR Fellowship	The pathogenic role of tumor-associated macrophages in Hodgkin lymphoma	\$40,000
Sarah Neil	MSc	Jacqueline Quandt	Multiple Sclerosis Society of Canada	Masters Studentship Award	Characterizing the anti-inflammatory effects of TEMPOL in an animal model of Multiple Sclerosis	\$18,000
Sigrid Alvarez	MSc	Bruce Verchere	CIHR	Transplant Research Training Award	Mechanisms of CCL22-mediated protection of islet grafts	\$11,000
Sophie Stukas	PhD	Cheryl Wellington	CIHR	Vanier Canada Graduate Scholarship	Development of reconstituted high density lipoprotein particles as potential therapeutics for Alzheimer's Disease	\$50,000
Zsuzsanna Hollander	PhD	Bruce McManus	CIHR	Frederick Banting and Charles Best Canada Graduate Scholarships - Doctoral Award	Novel Targeted Strategies for Biomarker Discovery and Development	\$35,000

Current Four-Year Doctoral Fellowship (4YF) Holders: Ada Leung Alon Hendel Anna Meredith Chansonette Harvard Clara Westwell-Roper

Corinne Krentz Emily Vucic Jacob Rozmus Jaswinder Khattra Lisa Ang Melissa Glier Melissa McConechy Naniye Cetinbas Paul Hiebert Robert Kridel Seti Boroomand Sophie Stukas Xin Ye Zsuzsanna Hollander

KRISTA MARCON & TYLER HICKEY, PSIG CO-CHAIRS, UBC MEDICINE CLASS OF 2013

THE PATHOLOGY
STUDENT
INTEREST GROUP
(PSIG)



Left to Right - Lawrence Lee, Tyler Hickey, Diana Diao, Krista Marcon

The Pathology Student Interest Group (PSIG), with support from the Department of Pathology & Laboratory Medicine as well as the Medical Undergraduate Society, completed its second successful year of promoting the different medical specialties within Pathology. During the 2011-12 academic year, PSIG hosted two open events at the Medical Student Alumni Centre (MSAC) that were each teleconferenced to the distributed sites of the UBC Medical Program.

Pathology Revealed

Our Fall 2011 event, "Pathology Revealed", included guest speakers Dr. Mike Nimmo (General Pathology), Dr. Jason Ford (Hematopathology) and Dr. Mike Allard (Anatomic Pathology) who each discussed their career paths and answered questions about their respective areas of medicine. Additionally Dr. Dan Holmes provided an information session on the Summer Student Research Program in Pathology.

Forensic Pathology & Medical Biochemistry

In Spring 2012, we hosted a "Forensic Pathology & Medical Biochemistry" information night. Our guest presenters

included Dr. Carol Lee (Forensic Pathology) and Dr. Andre Mattman (Medical Biochemistry). Both presenters provided excellent presentations that offered insight into their interesting fields of medical investigation.

Shadowing Experience

An ongoing project of PSIG is creating a list of Pathologists who would be willing to have undergraduate medical students shadow them to further their interest in Pathology. If you wish to contribute your name to the PSIG list or have any suggestions, please feel free to email us at pathology.ubc@gmail.com.

Acknowledgements

Lastly, we would like to thank Dr. Mike Allard for his enthusiasm and ongoing support of the group in addition to acknowledging the efforts of PSIG founding members Dr. Lawrence Lee and Dr. Diana Diao; wishing them both good luck in their respective residency programs of Anatomic Pathology and Dermatology.

MICHAEL NIMMO

GRADUATION DINNER

The 2012 ceremony and dinner for our pathology graduates was held at the Vancouver Royal Yacht Club on Jericho Beach. For the 4th year residents, faculty and staff were celebrated in style, with a west coast seafood buffet and some heartfelt toasting of the grads.

2012 GRADUATES

Anatomical Pathology



Anna Lee

 Undergrad at UBC - Microbiology and Immunology, Graduated 1999 MD

- PhD program at McGill University 2005
- MDCM obtained 2007
- Internship Royal Columbian Hospital 2007-2008
- UBC Anatomical Pathology, 2008-2012
- Accepted to Fellowship in Pediatric Pathology at Children's Hospital of Philadelphia, 2012-2013

Future plans: Come back to Canada to become an academic Pediatric Pathologist **Outside interests**: Hiking, kayaking, the outdoors



Tony Ng

- Completed Bachelor's degree at Simon Fraser University
- MD from UBC in 2004
- 2 years of residency
- 4.5 years to do CIP program and PhD with Dr. Poul Sorensen at the BC Cancer Research Centre
- 1.5 years back to complete residency and exam

Future plans: Surgical Pathology fellowship at Stanford Hopes to come back to a job in Vancouver (or become a stay home dad if jobs don't look promising!)

General Pathology



- MD (Kerman University, Iran) and General Pathology Board Certification (Iran Medical University, Tehran) 1999
- General Pathologist (Iran) 1993-2003
- Graduate studies Molecular biology and biochemistry (Simon Fraser University) 2004-2007

Majid Zolein.

- General Pathology Resident (Department of Pathology, UBC Faculty of Medicine) 2008-2012
- Successful at the Royal College of Physicians (Canada) General Pathology Examination 2012

Future plans: Currently pursuing possible employment as General Pathologist with Interior Health (Penticton)

Hematopathology



Svetlana Dmitrienko

- Graduated from the Kiev Medical University in Ukraine in Pediatrics
- After graduation worked as a Pediatrician, Immunologist and Nephrologist in Germany and Ukraine
- Obtained a PhD degree in Immunogenetics under the supervision of Dr. Paul Keown at UBC
- Dmitrienko · Commenced Hematopathology Residency in 2007

Future plans: Will be clear after the Royal College Examination



Dmitry Turbin

- Residency, Anatomical Pathology UBC 2007-2012
- Postdoctoral Fellowship Genetic Pathology Evaluation Centre, UBC 2003-2006
- PhD (Oncology, Pathology) N.N. Blokhin Russian Cancer Research Center of Russian Academy of Medical Sciences 1995–2000
- Residency in Pathology, Moscow 1991-1993
- Internship in Pathology, Moscow 1990-1991
- MD Moscow Medical Stomatology Institute 1984–1990

Future plans: Working as an Anatomical Pathologist in Canada

Medical Biochemistry



Vincent Fung

Medical Microbiology



Titus Wong



Anatomical Pathology

Lawrence Lee, University of British Columbia Eric Bol, University of Western Ontario Maziar Riazy, International Medical School Tehran, Iran

General Pathology

Pawel Martinka, University of British Columbia

Hematopathology

Audi Setiadi, McMaster University

Medical Microbiology

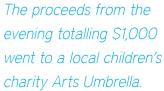
Shazia Masud, International Medical School, Rawalpindi, Pakistan

THE ART OF SCIENCE GALA











In June 2012, the Art of Science Gala returned to the annual schedule of events. The evening was an overwhelming success with over 100 attendees, 20

exhibitors and a programme of performing artists that displayed a diversity of artistic talent within the department.

This year's show was opened by a surprise flash mob of 'Don't Stop Believing' involving the talented organizing committee, who worked tirelessly to put the evening together.

Ash Marwaha returned to the stage for the third year with some musical theatre, Kevin Tsai and Amy Cheng treated to the audience to concert level performances on the piano and this year principal investigator Cheryl Wellington and David Ng displayed their talents on stage. The proceeds from the evening totalling just under \$1000 went to a local children's charity Arts Umbrella.

















follow us on twitter #ubcpathology



Pathology Social Media

Did you know we're on Facebook and Twitter?

In an effort to build more communication channels in the department, particularly with current and potential students, Pathology has now joined Facebook. To get daily updates and news, follow us by simply logging-in and click on the 'like' button.



SOME RECENT SPIRES OF EXCELLENCE AND NOTABLE ACCOMPLISHMENTS

Three members of the Pathology Department were recognized for distinguished service at the conjoint meeting of the **Association of Medical Microbiology and Infectious Disease (AMMI) Canada** and **the Canadian Association for Clinical Microbiology and Infectious Diseases (CACMID)** held in Vancouver May 3-5, 2012.



Canadian College of Microbiologists Distinguished Service Award Dr. Martin Petric, Professor Emeritus

Dr. Martin Petric is the recipient of the Canadian College of Microbiologists Distinguished Service Award. This award is given to members of the Canadian College of Microbiologists in recognition of outstanding professional contributions to the field of Microbiology in Canada in the areas of research, teaching and involvement in the Canadian College of Microbiologists.



2011 AMMI Canada Distinguished Service Award

Dr. Diane Roscoe, Clinical Professor

Dr. Diane Roscoe of Vancouver General Hospital was presented with the 2011 AMMI Canada Distinguished Service Award in recognition of her many years of devoted service to AMMI Canada, the Canadian Association of Medical Microbiologists before that, and the field of medical microbiology in general.



John G. Fitzgerald – CACMID Outstanding Microbiologist Award Dr. Judith Isaac-Renton, Professor

Dr. Isaac-Renton is the inaugural recipient of the John G. Fitzgerald-CACMID Outstanding Microbiologist Award. Dr Isaac-Renton is a medical microbiologist who has dedicated her career to the advancement of public health. She was presented with this award for her leadership in public health microbiology, her administrative accomplishments as a director of a very successful public public health laboratory.



VIC-PREDICT Biospecimens available for cancer researchers

The VIC-PREDICT Project, a centre-wide project at the BC Cancer Agency's Vancouver Island Centre, has almost completed its sixth year of biospecimen collection.

What does this mean? We have over 7000 biospecimens collected before Radiation Therapy and Chemotherapy available for research.

What do we have? Buffy Coat, Serum, Plasma, and potential access to clinical data.

How do you apply? Complete the form below: http://www.bccrc.ca/dept/predict/PREDICT%20 Materials%20Access%20Application.pdf

Please contact us for further details by email: predict@bccancer.bc.ca or visit our website: http://www.bccrc.ca/dept/predict

RESEARCH FUNDING AWARD

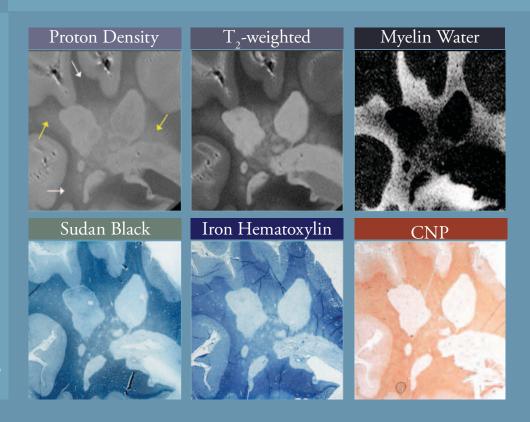
In March 2012, Dr. Wayne Moore received a 3 year operating grant from the MS Society of Canada (The Pathologic Basis of Magnetic Resonance Imaging in Multiple Sclerosis, \$283,607.40). Congratulations!



Dr. Wayne Moore Clinical Professor Dept of Pathology and Laboratory Medicine

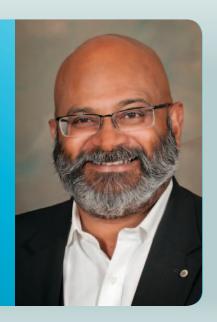
This project seeks to determine the changes in the brain responsible for the findings seen with magnetic resonance imaging (MRI) of multiple sclerosis (MS), a disease characterized by loss of myelin in the brain and spinal cord. MRI changes consist of focal regions of damage termed plaques, which histologically show loss of myelin and some loss of axons. Some regions outside plaques appear normal on routine MRI scans, and are therefore termed normal-appearing white matter (NAWM), but do show abnormalities with sophisticated non-conventional MRI techniques. Other non-plaque regions show subtle abnormalities on routine MRI imaging, which are referred to as diffusely-abnormal white matter (DAWM). The presence of DAWM may play an important role in MS progression. Our studies have shown that there is an abnormality of lipid compounds but relatively normal proteins in the myelin sheath in DAWM and this is associated with some degree of axonal loss. We intend to further characterize these DAWM abnormalities and to determine their possible causes. These studies should lead to significant insights into how myelin and axons are lost in MS.

Example of diffusely abnormal white matter (DAWM) on 7 Tesla MRI (Proton Density, T2 weighted, Myelin Water) and corresponding histological stain for myelin lipids (Sudan Black and Iron Hematoxylin) and myelin protein (2',3'-cyclic nucleotide 3'-phosphohydrolase (CNP)). Visual inspection reveals reduction in lipid staining in DAWM areas (yellow arrows), while protein levels are similar to normal appearing white matter (NAWM, white arrows). Quantitative myelin water fraction and optical density analysis of 2 DAWM regions finds greatly reduced myelin water (-50%), sudan black (-55%) and iron hematoxylin (-44%) with far less involvement of CNP (-7.7%) relative to NAWM.



Meet Our Faculty

Samuel Abraham, PhD (Genetics)
Vice President Research, BC Cancer Agency
Vice President Strategic Relationships, BC Cancer Agency
Executive Lead, Business and Intellectual Property Development,
Provincial Health Services Authority



VP Strategic Relationships and VP Research

As VP Strategic Relationships and VP Research, Dr Abraham works to enable high quality discovery research and to create linkages between the BC Cancer Agency (BCCA) and both the public and private sectors that will help the BCCA to achieve its mandate of cancer control for the province of British Columbia. Both sets of responsibilities are involved in the development of intellectual property arising from research activities at the BCCA and its partner institutions, and the translation of those discoveries into clinical practices or products that will benefit patients. Dr. Abraham works closely with senior scientific, clinical and administrative staff to provide both scientific, business and policy expertise in supporting targeted, high-value research and determining patient-focused development strategies.

Executive Lead Business and Intellectual Property Development

BCCA is a branch of the Provincial Health Services Authority, where Dr. Abraham has an additional role as Executive Lead, Business and Intellectual Property Development. In this expanded role, he is instrumental in advising branches of the PHSA on issues related to IP development and commercialization for technologies resulting from research programs at member agencies. These agencies include the BC Cancer Agency, BC Centre for Disease Control, BC Children's and Women's Hospitals, Mental Health & Addiction, Renal, Transplant and Cardiac Services.

Dr. Abraham received his PhD in Genetics from the University of British Columbia. He joined Inflazyme Pharmaceuticals as a Senior Scientist in 1996, and later became Project Leader for the Transplant Program, as well as Division Leader for Cell and Molecular Biology. He has been with the BC Cancer Agency since 2000 and also serves as a member of the Scientific Advisory Board of Quest Pharma. Dr. Abraham has been VP Strategic Relationships for the BCCA since 2007 and was appointed Executive Lead, Business and Intellectual Property Development for PHSA in 2010 and Interim VP Research in 2011.

10 Things You Probably Didn't Know About Samuel Abraham

- 1. WHAT IS SOMETHING THAT NOT A LOT OF PEOPLE KNOW ABOUT YOU BUT YOU WISH MORE PEOPLE COULD KNOW? That I enjoy singing.
- 2. WHAT KEEPS YOU COMING TO WORK BESIDES THE PAYCHECK?

The knowledge that better outcomes will result from the implementation of better methods of "viewing" / diagnosing cancer patients.

- 3. WHAT IS ONE OF YOUR FAVORITE QUOTES? "Handsome is as handsome does".
- 4. WHAT CHORE DO YOU ABSOLUTELY HATE DOING? Filling in endless surveys.
- 5. WHAT IS YOUR FAVORITE FORM OF EXERCISE? Hiking and gardening.

- 6. IF YOU COULD CHOOSE TO STAY A CERTAIN AGE FOREVER, WHAT AGE WOULD IT BE? 50.
- 7. IF YOU COULD WITNESS ANY EVENT PAST, PRESENT OR FUTURE, WHAT WOULD IT BE?
 The events that led to the formation of the universe.
- 8. IF YOU COULD LEARN TO DO ANYTHING, WHAT WOULD IT BE?

A solid woodworker.

- 9. IF YOU COULD KNOW THE ANSWER TO ANY QUESTION, BESIDES "WHAT IS THE MEANING OF LIFE?", WHAT WOULD IT BE? What / who will my children grow up to be.
- 10. WHAT'S THE HARDEST THING YOU'VE EVER DONE? Watch as someone close dies.



Virtual Desktops - Are you ready to join the cloud?

The VDI service has been deployed to a growing number of departments and faculties throughout UBC. Are you ready to join the cloud?

Virtual Desktop Interface (VDI) allows the user to have a computer where the operating system, all applications, and data are kept on a central server instead of a local desktop. This Virtual Desktop allows users to access their work anywhere via the Internet and with new devices such as smartphones and tablets. Virtual desktops are updated and backed up automatically, which saves energy usage and lowers IT Administration costs. More information can be found here: http://www.it.ubc.ca/service_catalogue/computers_printers/vdi.html.



ZENG, HAISHAN
Dermatology & Skin
Science - DERM
British Columbia Cancer
Research Center

Dr. Zeng is a Distinguished Scientist with the Integrative Oncology Department (Imaging Unit) of British Columbia Cancer Agency Research Centre, Vancouver, Canada, an Associate Professor of Dermatology and Skin Science at the University of British Columbia (UBC), and Associate Member of UBC Physics and Pathology. Dr. Zeng received a BSc degree on Electronic Physics from Peking (Beijing) University, a MSc degree on Electronic Physics and devices from the Chinese Academy of Sciences, and a PhD degree on Biophysics from the University of British Columbia. For over 20 years, Dr. Zeng's research has been focused on developing various optical imaging and spectroscopy techniques for improving early cancer detection. He has published over 92 referred journal papers and has 19 granted patents related to optical diagnosis and therapy. Three medical devices derived from these patents, fluorescence endoscopy (ONCO-LIFE™), VELscope® (fluorescence visualization device), and Verisante AuraTM (Raman spectroscopy device) have passed regulatory approvals and are currently in clinical uses around the world.



JIA, WILLIAM Surgery - SURG Brain Research Centre

Dr. Jia graduated from Fudan University, Shanghai and had his PhD in 1991 at University of British Columbia (UBC) in Molecular Neurosciences. He has been an Associate Professor since 1999 at UBC and an Associate Scientist of BC Cancer Research Centre. Dr. Jia was the first in Canada and the first few scientists in the world using human herpes simplex virus to treat cancer, which pioneered the field of oncolytic virotherapy for cancer treatment. The other research activity of Dr. Jia's laboratory at UBC is to study natural products for their anti-cancer and neuroprotective effects. They have recently discovered that a compound extracted from plants not only possesses strong tumor inhibitory effect but also can dramatically enhance the efficacy of conventional anti-tumor drugs on multidrug resistant tumor cells. The third area Dr. Jia has been working on is to apply peptide array to study protein-protein interaction. Using this technique, he has discovered many peptides that can block various proteins from binding to their normal partners. Some of the peptides are potential



SCHRADER, JOHN
Medicine - MEDI
The Biomedical Research
Centre

Dr. Schrader, founded The Biomedical Research Center (BRC) at the University of British Columbia in 1986. Prior to joining UBC, Dr. Schrader served as an Assistant Professor at The Rockefeller University, and Head of the Immunoregulation Laboratory at WEHI. He is a pioneer in the field of cytokines, small hormone -like proteins (such as TNF) that orchestrate the immune system and are key targets in novel therapies for inflammatory diseases like arthritis. He serves as Director of The Biomedical Research Center (BRC) and also serves as a Member of the Scientific Advisory Board of Inflammatory Diseases at Xceed Molecular, Inc. His contributions to the field include the characterization of the first cytokine known to act on adult stem cells, interleukin -3, and the finding that interferon gamma, that was thought to be mainly involved with defence against viruses, was an intrinsic regulator of the immune system. He serves as Secretary of the International Cytokine Society and Chair of the IUIS Interleukin Nomenclature Sub-committee. Dr. Schrader served as President of both the Australian Society for Immunology, and the Canadian Society for Immunology. His current research interest is in novel antibody-based therapies for arthritis and in the biochemical signals that control cells of the immune system. After completing his clinical training, Dr. Schrader holds a PhD in cellular immunology at The Walter and Eliza Hall Institute (WEHI) in Melbourne Australia under Sir Gustav Nossal and did his Postdoctoral training at The Rockefeller University.



INNIS, SHEILA
Pediatrics - PAED
Children's Hospital

Dr. Innis completed a PhD in Nutritional Sciences at the University of Toronto, Faculty of Medicine, following an MSc at the University of Alberta. She joined the Department of Paediatrics as an MRC scholar in 1983, and is currently Professor and Director of the Nutrition and Metabolism research cluster at the Child and Family Research Institute. Her research interest focuses on metabolism, addressing how diet components, such as fatty acids, other lipids and methyl metabolites impact growth and development. Their research centers on analytical biochemistry unraveling nutrient metabolism, diet-gene and diet-disease interactions. A major focus of the research is translation to improve dietary guidelines and clinical nutrition to improve outcomes in at risk populations.



KAST, JUERGEN
Chemistry
The Biomedical Research
Centre

Dr. Kast is a trained chemist, holding a PhD from the University of Konstanz in Germany. Following a Postdoctoral stay at the European Molecular Biology Laboratory in Heidelberg, Germany, he joined the University of British Columbia as Assistant Professor in 2001. He is currently appointed as Professor in the Department of Chemistry and The Biomedical Research Centre. He is also a Member of the Centre for Blood Research and the Brain Research Centre. His research involves the development and use of proteomic techniques for the discovery of proteins and mechanisms underlying pathological cellular processes. The current focus is on cardiovascular disease, particular atherosclerosis, and cancer. In 2009-11, D. Kast served as Scientific Director of the MSFHR-funded British Columbia Proteomics Network. Starting in July 2011, he has taken a leave of absence from the university in order to work at Oxford BioTherapeutics Ltd, a company in the UK that is developing targeted antibody therapies for cancer.



SCHULTZ, KIRK
Pediatrics - PAED
Children's Hospital

Dr. Schultz is a Professor of Pediatrics at the University of British Columbia and a Pediatric Hematologist/ Oncologist. He is Director of the Childhood Cancer and Blood Research Program at the Child and Family Research Institute, BC Children's Hospital. Schultz' research focuses on improving hematopoietic stem cell transplantation as a therapy for cancer and other pediatric nonmalignant diseases an on immune therapy of cancers. Dr. Schultz has also been very active in the development, performance, leadership of a number of large multinational clinical trials focused on treatment of childhood leukemia and hematopoietic stem cell transplantation (HSCT). Dr. Schultz' research group is internationally known for its work on development of biomarkers for chronic Graftversus-Host Disease, the rejection process after HSCT, that causes significant risk of morbidity and mortality and on development of new targeted immune and chemotherapies in acute lymphoblastic leukemia, currently being evaluated worldwide.



LIM, CHINTEN (JAMES) Pediatrics - PAED Children's Hospital

Dr. Lim, as an undergraduate majoring in Biochemistry at Simon Fraser University, had an opportunity to experience biomedical research as part of SFU's Coop educational program. Conducting experiments and being involved in research was addictive, this led to a stint as a technician conducting zebrafish genetics work upon graduating SFU. Before long, he knew he wanted to ask his own research questions, thus he enrolled in the graduate program at UBC's department of Microbiology and Immunology studying the function of Ras GTPases in the cellular slime mold, dictyostelium. The highly motile nature of 'dicty' cells spurred his interest in cell adhesion and migration.

Upon completing his doctorate, he 'migrated' to San Diego, California for a Postdoctoral stint under the mentorship of Mark Ginsberg, a renowned integrin biologist. In mid 2009, Dr. Lim established his lab at the Child and Family Research Institute with the Childhood Cancer and Blood Research Program. Current lab investigation focus on understanding the role of integrin mediated signaling in cell adhesion, migration and survival, particularly in the context of development of chemoresistance in pediatric leukemias. At the lab, he tries to unwind by 'playing' with his prized microscope, which is configured for various live cell imaging techniques such as TIRF and FRET. Away from work, he enjoys home repairs and remodeling projects, as well as the activities in the great outdoors BC has to offer including biking and hiking.



DEVLIN, ANGELA Pediatrics - PAED Children's Hospital

Dr. Devlin is an Assistant Professor in the Department of Pediatrics (Division of Endocrinology), at the University of British Columbia and a Research Scientist at the Child and Family Research Institute. Her research program investigates the role of prenatal and early postnatal dietary factors on gene regulation and susceptibility to cardiovascular disease (CVD). A particular focus of her research is on development of CVD risk factors in childhood. Dr. Devlin has received a New Investigator award and the McDonald scholarship from the Heart and Stroke Foundation of Canada for her research program. Her research is funded by the Heart and Stroke Foundation, CIHR, and NSERC. She has established a Nutritional Epigenomics Facility with funding from the Canada Foundation for Innovation, British Columbia Knowledge Development Fund and the British Columbia Children's Hospital Foundation.



PALLEN, CATHERINE Pediatrics - PAED Children's Hospital

Acting Deputy Director, Child & Family Research Institute; Professor, Department of Pediatrics, UBC

Dr. Pallen obtained her undergraduate training in Honours Zoology at the University of Western Ontario, and continued her education at the University of Calgary, receiving her PhD in Medical Biochemistry in 1986. She carried out her Postdoctoral training as a Medical Research Council of Canada Fellow at the Imperial Cancer Research Fund and the Ludwig Institute for Cancer Research, both in London, UK. Dr. Pallen is a member of the Childhood Cancer and Blood Research Program at the Child & Family Research Institute (CFRI) and a Professor in the Department of Pediatrics, UBC. Earlier this year, she became Acting Deputy Director of CFRI. Her research focuses on protein tyrosine phosphatases (PTPs) and the roles and regulation of these molecules in cellular signaling pertaining to cancer (molecular mechanisms of metastasis, pediatric malignancies) and neurobiology (myelination).



WEBBER, ERIC Pediatrics - PAED **SURGERY** Children's Hospital

Associate Professor and Head, Division of Pediatric Surgery, Department of Surgery, UBC

Prior to his appointment at UBC Dr. Webber received clinical training in general surgery and pediatric surgery, and he completed a research fellowship in the laboratory of Dr. Nelson Fausto, Professor and Chair of the Department of Pathology and Laboratory Medicine at the University of Washington where he studied liver growth control and liver regeneration.

Initially at UBC Dr. Webber was involved in collaborative studies with Dr. Poul Sorensen looking at the cytogenetics of pediatric liver tumours. Since then his focus has been on clinical pediatric surgery and postgraduate medical education. He served as Residency Program Director for General Surgery for nine years and has worked in the Postgraduate Medical Education Office for four further years.



COULTER-MACKIE, MARION Pediatrics - PAED Children's Hospital

Associate Professor, Department of Pediatrics, UBC; Associate member: Departments of Pathology & Laboratory Medicine and Medical Genetics UBC; Senior Scholar, Child and Family Research Institute

Dr. Coulter-Mackie completed a BSc (Hon.) in Biochemistry at UBC and a PhD in Biochemistry at University of Alberta in Edmonton. She went to University of Western Ontario in London as a Postdoctoral Fellow and stayed on as a faculty member in Pediatrics. She returned to Vancouver and UBC in 1994 to take a position in Pediatrics based at BC Children's Hospital. Her current area of interest is in using in vitro expression systems to study molecular and biochemical aspects of inherited metabolic diseases. In particular she has been interested in primary hyperoxaluria type 1, an inherited kidney disease, and pyridoxine dependent epilepsy, a genetic epilepsy. When she is not in the lab, she enjoys classical music, reading, knitting, and gardening.



SPEERT, DAVID Pediatrics - PAED Children's Hospital

Dr. Speert is a Sauder Family Professor of Pediatrics, UBC. He is the founding head of the Centre for Understanding and Preventing Infection in Children, a Canada Foundation for Innovation-funded programs at BC Children's Hospital, built on the concept that there is an identifiable reason for all childhood illnesses, and finding the causes will lead to enhanced therapy and prevention. Research in Dr. Speert's laboratory is directed at gaining a clearer understanding of the causes and therapies of lung infections, especially in patients with CF. Since his arrival at UBC in 1980, he has studied pseudomonas aeruginosa and burkholderia cepacia complex bacteria in an attempt to determine why they cause serious lung infections in CF. His laboratory has focused on both bacterial determinants of disease and the essential components of the lung's immune response to interfere with infections. His laboratory is home to the Canadian B. cepacia complex research and referral repository, which receives bacterial strains from patients across Canada. Studies of these bacteria have helped to better understand the factors that lead to spread of some bacteria between and among patients with CF. Based on this research, new infection control guidelines have been adopted to prevent acquisition of B. cepacia infections in Canada. Research in Dr. Speert's laboratory is supported with grants from Cystic Fibrosis Canada, the Canadian Institutes for Health Research, the BC Lung Association, the BC Children's Hospital Foundation, the Martha Piper Fund (UBC) and the Peter Wall Institute for Advanced Studies.

MEET OUR ASSOCIATE MEMBERS cont'd



KOLLMANN, TOBIAS Pediatrics - PAED Children's Hospital

Dr. Kollmann, Clinician Scientist at Vancouver's Child & Family Research Institute, Associate Professor, Department of Pediatrics, Division of Infectious & Immunological Diseases, Vaccine Evaluation Centre; University of British Columbia.

Dr. Kollmann directs the Vancouver Immune and Vaccine Analysis Research Center (VIVArc) and the flow cytometry core at CFRI. He has received numerous awards, including the Michael Smith Foundation for Health Research Career Investigator Award, Canadian Child Health Clinician Scientist Career Development Award, and the Burroughs Wellcome Career Award in the Biomedical Sciences. His work focuses on the development of the immune system, with the special focus on vaccines for early life. Millions of newborns and infants die each year from infectious diseases. Many of these deaths are preventable. Analysis of the immune development of children is the necessary first step to identify paths for medical intervention such as vaccines to save their lives. Specifically, Dr. Kollmann's research team is conducting the first direct comparison of immune development in cohorts of children from different countries around the world. This project compares the immune development of children born in Vancouver to those born in South Africa, Mozambique, Ecuador, China and Belgium. Preliminary research has found striking qualitative and quantitative differences in the children's immune development that appear to be directly related to their genetic make-up as well as the particular environment to which they are exposed. Dr. Kollmann's team is dissecting the molecular causeeffect relationship for the role of host genetics and studying the environmental factors that direct the developmental path of the innate and adaptive immune responses. Analysis of these genetic and environmental factors will reveal pathways that direct future efforts to treat and prevent infectious diseases. Dr. Kollmann's team also is developing a platform that will help deliver targeted vaccinations to protect the newborn and infant. Using genetically altered strains of Listeria monocytogenes, the vaccine induces a desired immune response only in specific cells and then disappears without harming the child. Preliminary data suggest this goal is within reach, and Dr. Kollmann's team is working in partnership with industry to design and test a Listeria-based vaccination for newborns. Through this work, safe yet effective methods will be identified to prevent millions of newborn and infant deaths due to infectious diseases.



TURVEY, STUART
Pediatrics - PAED
Children's Hospital

Director Of Clinical Research, Associate Professor, BC Children's Hospital And Child & Family Research Institute, University Of British Columbia, Vancouver, Canada

Dr. Turvey is Director of Clinical Research at the Child & Family Research Institute and Associate Professor of Pediatrics at the University of British Columbia based at BC Children's Hospital. Prior to coming to Canada, he completed both his Pediatric Residency and Allergy/Immunology Fellowship at Children's Hospital, Harvard Medical School, Boston. He holds both a medical degree (MB BS) from the University of Sydney, Australia and a doctorate (DPhil) in Immunology from Oxford University where he was a Rhodes Scholar. Dr. Turvey is a Fellow of the Royal College of Physicians and Surgeons of Canada and a Diplomate of the American Board of Pediatrics.

He provides clinical care in the specialties of Pediatric Clinical Immunology and Rheumatology, while his translational research program focuses on pediatric infectious and inflammatory diseases. Specifically, he is interested in the role of the innate immunity in protecting infants and young children from infectious agents, and how abnormalities of the innate immune system contribute to inflammatory diseases of childhood. He has one simple long-term career goal to substantially improve the health of children. He believes this goal will be best achieved through the academic health sciences centre model in which there is a partnership between universities, research institutes and healthcare providers with a commitment to integrate clinical services, research, education and training.



LANSDORP, PETER
Medicine - MEDI
British Columbia Cancer
Research Center

Scientific Director, European Research Institute for the Biology of Ageing, University Medical Center Groningen, Antonius Deusinglaan; Distinguished Scientist, BC Cancer Agency; Professor Department of Medicine, University of British Columbia

Dr. Lansdorp is a pioneer in studies of blood-forming stem cells, telomere biology and the biology of ageing. He has developed novel hypotheses, ideas and approaches to address scientific questions in these areas. As such, Dr. Lansdorp has made valuable contributions to multiple, apparently distinct research fields. He has published 354 papers, which on average were cited 57 times each. He recently accepted a position as Scientific Director of the European Institute for the Biology of Ageing (ERIBA) at the University of Groningen in the Netherlands. ERIBA will focus on the molecular mechanisms involved in ageing.

This new venture has given Dr. Lansdorp experience with setting up a new Institute, recruiting new Faculty and setting out research strategies. As a graduate student Peter Lansdorp discovered tetrameric antibody complexes. This discovery has found numerous applications (commercialized by www.stemcelltechnologies.com). For his research he subsequently developed assays, monoclonal antibodies (such as anti-CD34 and anti-CD90), cell culture media and cell separation techniques that are still in widespread use. His lab found that the length of telomere repeats in hematopoietic cells decreases with proliferation in vitro and with age in vivo. He subsequently developed quantitative fluorescence in situ hybridization (Q-FISH) techniques using directly labeled peptide nucleic acid (PNA) probes to measure the length of telomere repeats in chromosomes and cells.

Most laboratories involved in telomere research use PNA probes according to the methods developed by the Lansdorp laboratory. Such measurements are performed for clinical purposes by Repeat Diagnostics, a Vancouver based company (www.repeatdiagnostics. com). A current interest in his laboratories in Vancouver and Groningen is related to the possibility that gene expression and cell fate is regulated in part by chromatin differences between sister chromatids. In order to test the "silent sister" hypothesis he has developed novel FISH and single cells DNA strand sequencing methods illustrating yet another productive change in research fields.



PARÉ, PETER Medicine - MEDI James Hogg Research Centre, Institute for Heart + Lung Health

Dr. Paré's research expertise is in the study of the physiological assessment, pathophysiology and more latterly the genetics of asthma and chronic obstructive pulmonary disease. He earned his medical degree from McGill University in Montreal in 1969. His residency training was done at the Royal Victoria Hospital and the University of Nairobi before completing a two year postdoctoral fellowship at the Meakins Christie Laboratories. Dr. Peter D. Paré is currently Professor of Medicine and Pathology in the Faculty of Medicine at the University of British Columbia. He was the Division Head and Training Program Director of the UBC respiratory division between 1983 and 1994. He was Director of the The James Hogg iCAPTURE Centre for Cardiovascular and Pulmonary Research at St. Paul's Hospital (1998-2005) and Program Director of the Clinical Investigators Program for the Faculty of Medicine at UBC. He was President of the Canadian Thoracic Society and for 5 years was Chairman of the Canadian Thoracic Society's National Grant review committee. He is the recipient of the Jacob Churg Distinguished Researcher award and a Michael Smith Distinguished Scholar, Michael Smith Foundation for Health Research. Dr. Paré has published over 320 peer reviewed papers. His research focuses on the mechanisms of airway narrowing in asthma and COPD, the bronchial microcirculation, the use of CT scanning to assess lung structure and the genetics of lung disease. Dr Paré has trained more than 40 clinical and basic science faculty members. In addition to his original research and training Dr. Paré is one of the four co-authors of the Diagnosis of Diseases of the Chest a widely used four volume text on the diagnosis lung

In his spare time he and his wife Lisa Baile, also a lung researcher built a log home on Pender Island in the Gulf of Georgia between Vancouver and Victoria. He and Lisa also, hike, ski and kayak.



HOGGE, DONNA Medicine - MEDI Terry Fox Laboratory

Member, Leukemia Bone Marrow Transplant Program of BC; Clinical Professor, Medicine, University of British Columbia (UBC); Member, Genetics, University of British Columbia (UBC); Member, Experimental Medicine, University of British Columbia (UBC); Associate Member, Pathology & Laboratory Medicine, University of British Columbia (UBC)



OGER, JOEL Medicine - MEDI Jim Pattison Pavilion North

Dr. Oger was trained in Neurology in the University of Rennes, France where he received his MD degree and his Neurology Specialty. After his residency he did a Research Fellowship at Harvard Medical School (Dr. RD Adams/ Dr. BGW Arnason). Back in France he became Assistant Professor at the Université of Rennes. He then took a tenured position in research as Chargé de Recherche in the French Institute of Medical Research (INSERM) before joining Barry Arnason and Jack Antel as a Research Associate at the University of Chicago where he was on the Faculty for 5 years. He moved to the University of British Columbia in 1983 as Associate Professor in Don Paty's team.

Dr. Oger is now a Professor of Neurology and has been associated with the Multiple Sclerosis Clinic at UBC since its inception. He has been the MS clinic Director until 2006. He has directed the MS Clinical Trial Group from 1996 to 2006. He created the Myasthenia Gravis clinic in 1989. Dr. Oger works both in the clinic and in the laboratory. He has described T-cell abnormalities in multiple sclerosis and worked on suppressor cells in MS (now called T regulatory cells). Since moving to Vancouver he has focused on antibody secretion in vitro using both myasthenia gravis and M.S as models. His laboratory is the Canadian reference for the measure of antibodies to the acetylcholine receptor an has now developed assays to measure antibodies to interferon in treated M.S. The Luciferase assay has just been made available to all neurologists across Canada.

Dr. Oger has participated in the design of the original trials of Betaseron® and Rebif®. Since then he has been PI in numerous MS trials and chaired the DSMB on the world-wide Cellcept trial in MG. Dr. Oger is a consultant for Bayer and Novartis and sits on the Scientific board of the Myasthenia Gravis Association of America. Dr. Oger has co-authored over 180 papers essentially on Multiple Sclerosis, Myasthenia Gravis and has developed more recently an interest in HTLV-l associated myelopathy. Of note is the fact that he is coauthor of the recent TTA assessment of Neutralizing antibodies for the American Academy of Neurology. He also sits on the European Committee for the study of Neutralizing Antibodies in MS. Dr. Oger just authored a booklet on Myasthenia Gravis which can be found at < www.myastheniagravisbooklet.com>.



KEOWN, PAUL Medicine - MEDI Jim Pattison Pavilion North

Dr. Keown received his training in medicine, immunobiology and transplantation at the Universities of Manchester, Paris and Western Ontario and received his research doctorates in medicine and science from the University of Manchester, and his MBA from Simon Fraser University. He is Professor of Medicine at the University of British Columbia and Director of the Immunology Laboratory. His research interests focus particularly on the immune response in transplantation and autoimmune disease, and extend from molecular genetics to healthcare economics. He has served as Executive Director of the BC Transplantation Program, Head of the Division of Nephrology, President of the Canadian Transplantation Society, Member of Council and President of the XXIII International Congress of the Transplantation Society.



SIN, DONALD Medicine - MEDI James Hogg Research Centre, Institute for Heart + Lung Health

Dr. Sin is a Professor of Medicine at the University of British Columbia (UBC), a Canada Research Chair in Chronic Obstructive Pulmonary Disease (COPD) and the Site Head of Respiratory Medicine at St. Paul's Hospital in Vancouver. He received a Bachelor's Degree in Medical Sciences (1989) and Medical Degree (1991) at University of Alberta. He completed a residency in general internal medicine (1993) and fellowship in respiratory medicine also at University of Alberta (1996). He received a Master's Degree in Public Health at Harvard University (1997) and completed a research fellowship at University of Toronto. He has authored more than 200 peer-reviewed articles and trained numerous graduate and post-graduate students. He is s a current member of the international Global initiative for chronic Obstructive Lung Disease (GOLD) scientific committee. His main research focus is to discover novel biomarkers to improve the care and diagnosis of patients with chronic obstructive pulmonary disease (COPD) and to better understand how lung inflammation leads to cardiovascular diseases and lung cancer in men and women. He enjoys hiking and jogging and spending time with his family and friends and serving his local church.



NELSON, COLLEEN
Urologic Sciences - URLG
The Prostate Centre at
VGH

Associate Professor, Dept. of Urologic Sciences, UBC; Senior Research Scientist & Co-Director, Microarray Facility at the Vancouver Prostate Centre

Dr. Nelson is a PhD Research Scientist whose work is centered on understanding the role of aberrant gene expression in the progression of prostate cancer, with emphasis on the mechanism of androgen-specific gene regulation and the progression to androgen independence. Her lab also studies the effect of dietary and environmental factors on the possible cause, development and progression of prostate cancer.



RENNIE, PAUL
Urologic Sciences - URLG
The Prostate Centre at
VGH

Dr. Rennie received a BSc in Honours Biochemistry from the University of Western Ontario and a PhD in Biochemistry from the University of Alberta. This was followed by a two-year Postdoctoral as an MRC Fellow at the ICRF in London, England. He was an NCIC Scholar and Assistant then Associate Professor of Medicine at the University of Alberta before joining the BC Cancer Agency and the Department of Surgery at UBC in 1979. He was promoted to Full Professor in 1986 and is currently a Professor in Urologic Sciences at UBC. He became the first Director of Research at the BC Cancer Agency in 1992, and an Associate Member of Pathology and Lab Medicine in 1996.

He co-founded the Vancouver Prostate Centre and has served there as the Director of Laboratory Research since 1998. Dr. Rennie has more than 30 years' experience in studying the molecular endocrinology of prostate cancer and has over 160 peer-reviewed, publications in this area. His current research interests include oncolytic viruses, siRNA delivery and the development of small molecule inhibitors of the androgen receptor. His hobbies include photography, canoeing & kayaking, and playing with his granddaughters.

BELZBERG, ALLAN Radiology - RADI Jim Pattison Pavilion North

Dr. Allan Belzberg, BSc, MD (Alta.), FRCPC Clinical Professor, Department of Radiology, UBC



POH, CATHERINE
Dentistry
John B. Macdonald
Building

Following her PhD training and residency program in Oral Pathology at the University of British Columbia (UBC), Dr. Poh has been committed to improve oral cancer outcomes through identification of at-risk oral lesion at an early stage and effective managemnt. She is an Associate Professor in the Faculty of Dentistry at the UBC and a Clinician Scientist of the British Columbia Oral Cancer Prevention Program (BC OCPP) at the BC Cancer Agency. She is also one of the two practicing Oral Maxillofacial Pathologists in BC and an active staff member of the Oral Oncology Department (BC Cancer Agency) and the Oral Mucosal Disease Program (Vancouver General Hospital). Dr. Poh is a CIHR Clinician Scientist (2007-2010) and a scholar of the Michael Smith Foundation for Health Research (2007-2013). Her research interest focuses around developing processes by which new research information can be transferred into dental communities; developing application of molecular and imaging tools for community screening, early detection, and management of cancerous and precancerous oral lesions; and investigating the impact of oral cancer screening in marginalized, underserved communities. Currently she is the PI of a Terry Fox Research Institute-funded, pan-Canadian multicentre phase III randomized controlled surgical trial to investigate the efficacy of using an optical device to control the local recurrence of early-stage oral cancer.



CONWAY, BRIAN
Anesthesiology,
Pharmacology &
Therapeutics - ANAE
Medical Sciences Block C

Dr. Conway is the Medical Director of the Vancouver Infectious Diseases Research & Care Centre, a non-profit corporation dedicated to innovation in the field of infectious diseases with an emphasis on HIV and HCV infections. He is also an Infectious Diseases Consultant with the Vancouver Coastal Health Authority, which serves the inner city population on the infamous "Downtown East Side".

Dr. Conway is a member of several professional organizations and has been the Co-chair on the Ministerial Council for the federal initiative on HIV/ AIDS since 2008, working with and reporting directly to Health Minister Leona Aglukkak. He is the President of the Société Santé en français, a federal group charged with the development of health care services for francophones living in the 9 provinces and 3 territories outside Quebec. He is the past president of the Canadian Association for HIV Research

(2007-2009) and was the co-chair of the 19th Annual Conference in May 2010 in Saskatoon. He has recently been appointed to the Scientific Steering Committee of the CIHR Canadian HIV Trials Network.

In addition to supervising several dozen undergraduate, graduate and post-doctoral students over the past 18 years since his arrival in Vancouver, Dr. Conway is deeply involved in a range of HIV and HCV-related research and clinical practice efforts. Over the past 5 years, he has played a leadership role in the development of novel strategies for the delivery of multidisciplinary care for HIV and HCV in the inner city. These strategies have emphasized the simplification of therapeutic options and integration of medical, addiction and psychological aspects of care. He holds significant research funding to develop a model for the treatment of HCV & HIV infection within a directly observed therapy (DOT) program, focusing on the treatment of intravenous drug users. His programs have received a number of awards for their innovation and success, including the Health Employers Association of British Columbia Award of Excellence in 2008. He was the Francophone of The Year in British Columbia in 2007, for his work in the development of culturally and linguistically optimized systems of care for minority populations. He is a reviewer for 13 medical journals and the primary or senior author of more than 120 peerreviewed publications. He has been an invited speaker at many regional, national & international conferences and meetings dealing with HIV and HCV.

Dr. Conway received his medical education at McGill University, from which he graduated in 1982 before completing his internship and residency at Queen Elizabeth Hospital and Royal Victoria Hospital, respectively. He completed a specialty fellowship in infectious diseases at the University of Manitoba in 1988, and a post-doctoral fellowship in HIV/AIDS at Harvard University in 1990. His first staff appointment was as an Assistant Professor at the University of Ottawa in 1990. He moved to the University of British Columbia in 1994, where he is now a Full Professor.



BRUNHAM, ROBERT
Medicine - MEDI
Diamond Health Care
Centre

Dr. Brunham is the Provincial Executive Director of the BC Centre for Disease Control. He is a Professor in the Department of Medicine Division of Infectious Disease at UBC. His research involves the epidemiology and immunology of infectious diseases. He is a world expert on diseases due to chlamydia trachomatis and has studied the impact on this infection on the reproductive health of women. He is currently developing a molecular vaccine to prevent C trachomatis infection. His work is funded by the NIH. He recently received the Order of BC for excellence in medical research.



BARTLETT, KAREN
School of Population and
Public Health - SPPH
School of Population and
Public Health Bldg

Professor and MScOEH Graduate Program Director; School of Population and Public Health

Dr. Bartlett is a Professor in the School of Population and Public Health and the Director of the Masters of Science Program in Occupational and Environmental Hygiene. She is the recent recipient of a Killam Graduate Teaching Award (Medicine 2011), and is an enthusiastic supporter of the UBC SEEDS program (Social Ecological Economic Development Studies). Her first Alma Mater was the University of Victoria, followed by graduate degrees at the University of British Columbia. She was a Postdoctoral Fellow at the University of Iowa in Inhalation Toxicology. Her research interest is exposure to airborne biologic agents. In pursuit of this research she has described a wide range of exposures in the workplace and community environments. Examples of her research are: description of the ecologic niche of an emerging infectious disease agent on Vancouver Island, Cryptococcus gattii, discharge of organic dust from poultry barns, exposure to microbiologic agents in municipal composting, and with former Path and Lab Med graduate student Ron Do, organic dust exposure in grain elevators. When not in the lab, she can be found with her nose in a good book, or catching a film on the big screen.



EAVES, CONSTANCE
Medical Genetics MEDG
Terry Fox Laboratory

Distinguished Scientist, Terry Fox Laboratory Professor, Medical Genetics, UBC Associate Member, Medicine, UBC Associate Member, Pathology & Laboratory Medicine, UBC

Dr. Eaves earned her BA and MSc in genetics from Queen's University, Kingston, Ontario and her PhD at the University of Manchester, United Kingdom in 1969. She began work at the Ontario Cancer Institute in Toronto, but was soon recruited to the British Columbia Cancer Institute. She teaches at the University of British Columbia's Department of Medical Genetics. In 1980 she co-founded the Terry Fox Laboratory in British Columbia where she was Deputy Director from 1986 until 2000, when she became Director.

Her work has been recognized internationally in hematopoietic-stem cell biology. She has published hundreds of articles, papers, conference proceedings and book chapters. Dr. Eaves is an active member of numerous national and international scientific societies including as President of the International Society of Experimental Hematology. She is the proud mother of four children.



MACLEOD, PATRICK Medical Genetics MEDG Vancouver Island Health Authority

Adjunct Professor, Biology Department; Clinical Geneticist and Pediatrician, Vancouver Island Health Authority

As a Medical Doctor and Clinical Investigator, Dr. Patrick MacLeod is a vital link between molecular researchers at the Centre for Biomedical Research and patients in Greater Victoria.

He recently stepped down as Medical Director of the Medical Genetics Program at the Victoria General Hospital. He now divides his time between teaching in UVic's Biology Department, clinical work with the Vancouver Island Health Authority and collaborating on numerous research projects. MacLeod's specialty is tracking and diagnosing genetic disorders. He is currently excited by two projects: finding a genetic cure for Rett syndrome, and developing prenatal screening for Spinal Cerebular Ataxia type 2 (SCA2) with collaborators in Cuba.



If you do not have prior teaching experience or require support

UBC offers FREE support to new faculty members: http://ctlt.ubc.ca/programs/faculty-programs/

CTLT Summer Institute, August 20 to 24

The CTLT Summer Institute focuses on fundamental teaching and learning issues, and provides UBC faculty and staff with a number of practical ideas that they can implement in their teaching. Workshops range from refining a syllabus to incorporating active learning for different learning environments. http://events.ctlt.ubc.ca/series/view/185

Consultation Services for Faculty

Members of the Faculty Programs Team at CTLT will be available to review your course materials, including but not limited to course syllabus, learning activities and assessment strategies. http://www.events.ctlt.ubc.ca/series/view/187



A CTLT workshop will be held especially for us in Pathology, "**Developing Skills as a Peer Reviewer**" on Thursday, August 30, from 1PM to 5PM. (Location TBD - but be prepared, it will be on UBC campus!)

This will be excellent, Pathology-adapted training that will provide you with insight into the "how"s and "why"s of peer review, how it is done and how it will be done unto you as you plan your path to promotion. This workshop can go into your teaching dossier as a part of your commitment to education.and it might actually be interesting and fun! (treats will be available:-)

Please join us and learn with us: send us an email and we will then send you the location and reminders as we near the date.

Hope to see you there!

Amanda Bradley <abradley@pathology.ubc.ca> Maria Issa <missa@mail.ubc.ca>

2012 CTLT SUMMER INSTITUTE

CTLT Summer Institute, August 20 to 24

The 2012 CTLT Summer Institute will be held August 20-24, 2012, in the Irving K. Barber Learning Centre. The CTLT Summer Institute is a week-long event that includes a day-long Orientation to Teaching for faculty members new to teaching at UBC and a series of interactive sessions for the entire UBC teaching community.

Teaching Consultation Services for Faculty

Members of the Faculty Programs Team at CTLT will be available to review your course materials, including but not limited to course syllabus, learning activities, assessment strategies, with you during our one-on-one consultation sessions on August 27 and 28.

Sign-up for a session and bring your questions! Sign-up here: http://www.events.ctlt.ubc.ca/series/view/187

Please note that on-going consultation service is available throughout the year. Please contact Judy Chan <judy.chan@ubc.ca>. Depending on the nature of your needs, Judy will connect you with one of the educational developers or educational technology specialists at CTLT.

Visit < http://events.ctlt.ubc.ca/series/view/185> for complete session descriptions and to register.

FROM THE PATHOLOGY **EDUCATION CENTRE**

MARIA I.C. GYONGYOSSY-ISSA

The Convent was my high school. It went by as some sort of blur, maybe I was just on another planet. The only things that stood out were English Lit and Mother Mac. We worked in her class: read, discussed, and because the school's motto was "dare to be true", we were expected to have a point of view.

UBC Science was another blur. Not much stood out: Physics 110 with tiny teachers down at the front of Hebb theatre and me sleeping in the balcony seats. Wakefulness came with a 4th year honours project with Dr. Kilburn. I had to design experiments, do background reading, get my teeth into the subject. Tuum est acquired a certain reality.

PhD was better: real thinking, real doing, real results; my thoughts, my disasters, my successes. A surprising discovery: cogito, ergo sum.

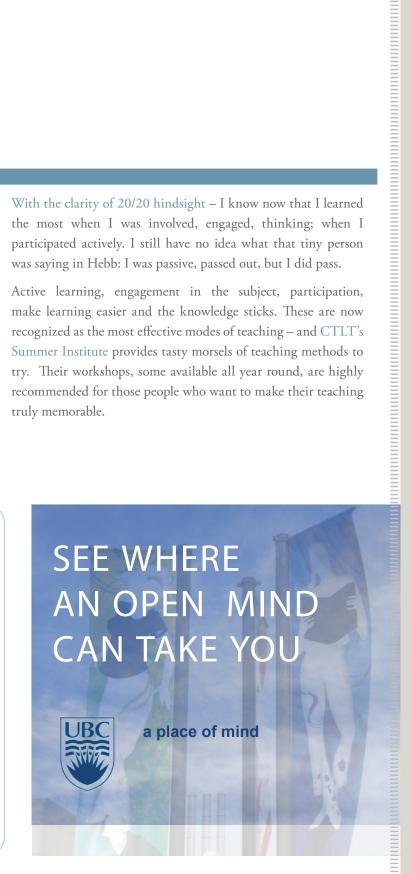
With the clarity of 20/20 hindsight – I know now that I learned the most when I was involved, engaged, thinking; when I participated actively. I still have no idea what that tiny person was saying in Hebb: I was passive, passed out, but I did pass.

Active learning, engagement in the subject, participation, make learning easier and the knowledge sticks. These are now recognized as the most effective modes of teaching – and CTLT's Summer Institute provides tasty morsels of teaching methods to try. Their workshops, some available all year round, are highly recommended for those people who want to make their teaching truly memorable.

***TEACHING COUNTDOWN FOR TERM 1

This is about 6 weeks before first day of Term 1. If you have not done so, we encourage you to start thinking about the following topics and perhaps explore further on-line resources:

- Draft your learning objectives: http://wiki.ubc.ca/Learning Objectives#Online Resources
- Check for copyright compliance: http://copyright.ubc.ca
- Learn about your students http://www.cmu.edu/teaching/ designteach/design/yourstudents.html
- How students learn: http://www.cmu.edu/teaching/principles/ learning.html
- Support undergraduate success: http://wiki.ubc.ca/ Documentation:Guide to Teaching for New Faculty at UBC/Supporting Undergraduate Student Success





UNIVERSITY OF BRITISH COLUMBIA

Faculty of Medicine
Department of Pathology

G227 - 2211 Wesbrook Mall Vancouver, BC V6T 2B5

Next Issue - January 2013



The Pathology Newsletter is published bi-annually. Suggestions from readers are both encouraged and welcome at any time.

Editors:

Maureen Barfoot Debbie Bertanjoli

Publisher: Debbie Bertanjoli

Email: dbertanjoli@pathology.ubc.ca

Current and back issues of all Newsletters can be found on the Departmental Website: