

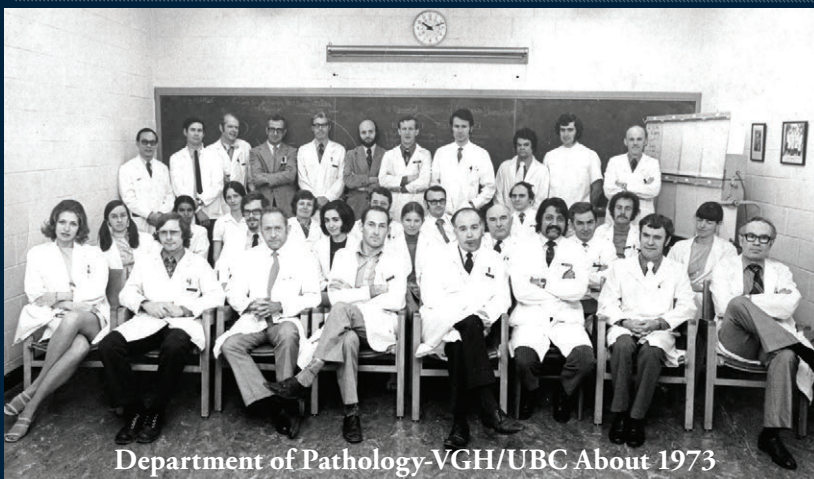
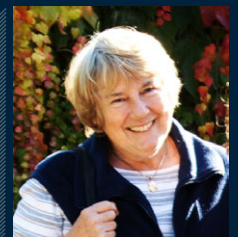
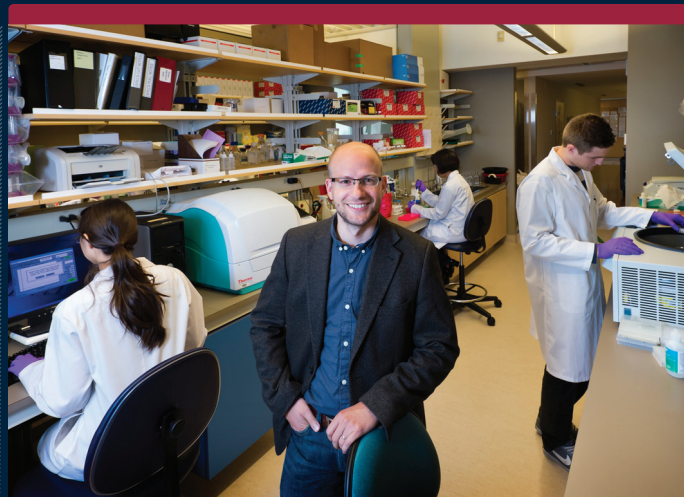
News

Fall/Winter 2013/14

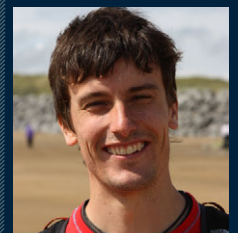
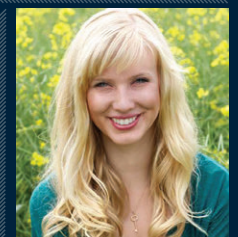
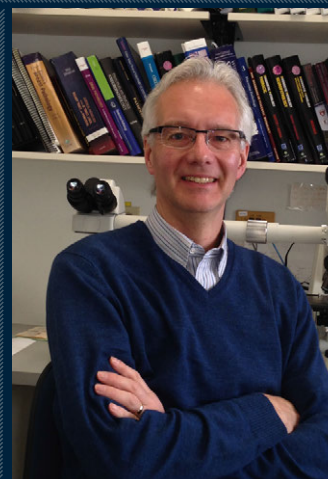
Pathology

The University of British Columbia

www.pathology.ubc.ca



Department of Pathology-VGH/UBC About 1973



a place of mind

THE UNIVERSITY OF
BRITISH COLUMBIA

pathology
laboratory medicine

MAY 23, 2014

PATHOLOGY DAY

We are pleased to announce the Annual Pathology Day Conference which will be held on Friday May 23, 2014 at the Paetzold Education Centre for oral presentations and guest speakers, and the Medical Student Alumni Centre for the poster session and awards reception. This important event provides faculty, students, residents, fellows and departmental members/associates with the opportunity to showcase their clinical, basic, or translational research efforts and allow them to learn more about the diverse ongoing research in our department. Please visit our website to register for the day and cocktail awards reception at <http://pathology.ubc.ca/news-and-events/pathology-day/>.



1 Keynote Speaker



Randall C Thompson, MD

Associate Professor of Medicine, University of Missouri School of Medicine – Kansas City
Cardiologist, Saint Luke's Hospital of Kansas City

2 James Hogg Lecture



Jiri Frohlich, MD, FRCPC

Professor, Pathology and Laboratory Medicine, UBC; Academic Director, St. Paul's Hospital Healthy Heart Program; Director, St. Paul's Hospital Lipid Clinic

3 Guest Speakers



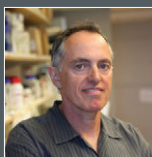
Dana Devine, BA, MA, PhD

Professor, Pathology and Laboratory Medicine, UBC; Vice President, Medical, Scientific & Research Affairs, Canadian Blood Services; Associate Member, Biochemistry and Molecular Biology, Medicine



Bruce Verchere, MSc, PhD

Professor, Pathology & Laboratory Medicine and Surgery; Head of the Diabetes Research Program at the Child & Family Research Institute (CFRI); Irving K Barber Chair in Diabetes Research



Poul Sorensen, MD, PhD, FRCPC

Professor, Pathology & Laboratory Medicine; The Johal Chair in Childhood Cancer Research at UBC; Senior Scientist at the BCCA Research Centre Scientist at the CFRI

PATHOLOGY

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Dr. Robert A. McGuinness

Dr. Don Brooks

Dr. Michael Noble

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Laboratory Medicine

Publisher: PacBlue Printing

Editors: Debbie Bertanjoli, Mary Liu, Michael Allard,
Adeline Chan, & Maria Issa

Designer: Debbie Bertanjoli

Changes at the Head Office

An announcement from our Director

I'm excited to join the Department of Pathology and Laboratory Medicine as the Interim Director of HR and Administration. I have a diverse HR background and have been with UBC for over five years, starting at UBC as an HR Associate for UBC HR with the Faculty of Medicine being my main portfolio. Prior to joining the Department of Pathology and Laboratory Medicine, I was the HR Manager for the Department of Medicine. Before UBC, for over three years I was a Payroll Coordinator, Recruiter, and HR Coordinator for a private HR Solutions firm. I look forward to bringing my experience to this role as Interim Director of HR and Administration.

In my spare time, I enjoy travelling, cheering on my favourite sports teams, and trying new types of food - sometimes all at once! I've travelled to many parts of the United States to sample local cuisine and food truck plates while watching sporting events such as the Fiesta Bowl, the Rose Bowl, the Pro Bowl, and the US Open. I've also gone on road trips to watch the Vancouver Canucks including going to San Jose to watch game 4 of the Western Conference finals in 2011.

Again, I'm excited to be part of the Department of Pathology and Laboratory Medicine and please feel free to contact me if you have any questions, concerns, or need any assistance.

Warm Regards,
Mary Liu



Mary Liu
Interim Director, HR & Administration
G105 – 2211 Wesbrook Mall
Vancouver, BC Canada V6T 2B5

Contact Number: +604 822 7101
Email: interim.director@pathology.ubc.ca
www.pathology.ubc.ca

Sandy Liu's maternity leave

Please meet little Avery who joined our lives on October 29, 2013. Even though he was only 5lbs and 7oz, all the doctors and nurses said he had a huge set of lungs when he greeted the world with his presence. Parenthood has definitely been a roller-coaster and no amount of prenatal classes and books could have prepared me for the impact this little man would make to our lives. I am enjoying every ever-changing moment of it (minus the sleep deprivation) and I can't wait to bring Avery to visit the office soon!



News from the PROOF Centre...

JERRIE LYNN MORRISON

PROOF Centre of Excellence



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www.proofcentre.ca



PROOF Centre begins clinical validation of heart transplant test

- The Centre of Excellence for the Prevention of Organ Failure (PROOF Centre) and HTG Molecular Diagnostics are collaborating on clinical validation of a biomarker blood test that will provide early indication of organ rejection by heart transplant patients. The first clinical validation study of this kind in Canada, the blood test will allow doctors to better monitor and treat patients post transplant.
- Biomarkers for this blood test were identified by microarrays, a platform generally not suitable for a clinical setting. During the clinical validation phase, these biomarkers will be tested on the HTG Edge System, an automated RNA analysis platform for use in the clinical laboratory, to make sure the heart transplant rejection blood test gives the correct diagnosis of a large number of patients.
- Two abstracts detailing portions of the work leading up to clinical validation will be presented at the International Society for Heart and Lung Transplantation 34th Annual Meeting and Scientific Sessions, April 10-13, 2014 in San Diego.
- Dr. Mustafa Toma will present "Plasma Protein Biosignatures for Detection of Cardiac Allograft Vasculopathy", and Dr. Zsuzsanna Hollander will present, "Blood Test to Monitor for the Absence of Acute Cardiac Rejection: From Discovery to Clinical Implementation."

UBC researchers receive \$7.2 million to develop a test for COPD exacerbation

- BC researchers have combined forces to develop a blood test that will identify patients at high risk for Chronic Obstructive Pulmonary Disease (COPD) exacerbation, also known as 'lung attacks'. This much-needed test will help medical professionals provide better treatment and ultimately lead to patients having fewer attacks, reduced hospitalization and fewer emergency visits.
- By the end of the four-year, \$7.2 million research project, funded in part by Genome BC, the team led by Drs. Don Sin and Raymond Ng, and involving other PROOF Centre scientists, hopes to have the blood test ready to identify patients at high risk for lung attacks. In addition, they hope the test will be able to differentiate these attacks from other conditions.

RESEARCH NEWS

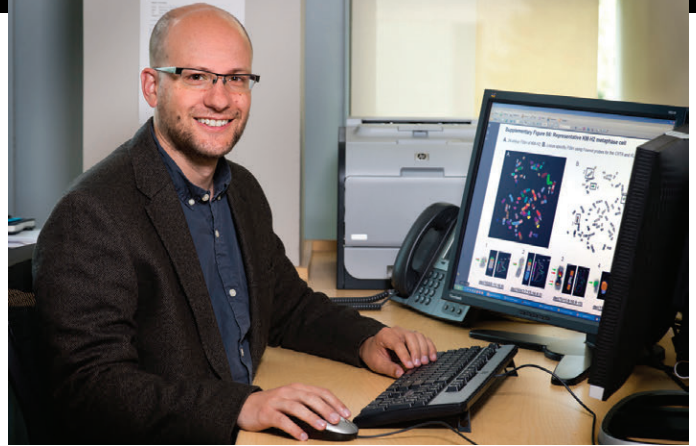


Members of Dr. Steidl's lab

Over \$1,500,000 in Operating Funds

The Steidl lab (<http://steidllab.med.ubc.ca/>), currently comprised of 14 members including 3 technologists, 1 staff computational biologist, 1 undergraduate, 4 graduate students and 5 postdoctoral fellows, is located in the British Columbia Cancer Research Centre (675 W 10th Avenue).

Dr. Christian Steidl: A New Investigator in the Department of Pathology



Dr. Steidl is a new investigator in the Department of Pathology (University of British Columbia) and Experimental Therapeutics (BC Cancer Agency) leading a translational lymphoma research program. He is a physician scientist, having obtained his MD degree from the University of Muenster, Germany, Internal Medicine and Hematology training at the University of Goettingen, and his PhD equivalent degree from the University of Witten-Herdecke, Germany. He received postdoctoral training at the Centre for Lymphoid Cancer at the BC Cancer Agency. Dr. Steidl has expertise in clinical malignant hematology, cytogenetics, molecular genetics, functional genomics and B cell lymphoma pathogenesis. His discoveries include novel somatic gene mutations including gene fusions in Hodgkin lymphoma and primary mediastinal B cell lymphoma using next generation sequencing, and identification of tumor-associated macrophages in the microenvironment of Hodgkin's lymphoma as novel biomarkers for outcome prediction.

Dr. Steidl has published 47 peer-reviewed scientific articles, including 13 publications as first author and 6 publications as senior author. Dr. Steidl is a scientific abstract reviewer and scientific committee member for the American Society of Hematology, editorial consultant for a number of hematology and cancer journals and member of the Lymphoma Research Foundation's Panel of Scientific Advisors.

Dr. Steidl is also a Member of the CIHR "Cancer Progression and Therapeutics" review panel and the "Fellowships – Post-PhD" committee.

■ RESEARCH

Dr. Steidl's research program focuses on the identification of genetic changes and molecular pathways that are translatable into biomarkers or can be used as targets for new therapies for lymphoid malignancies. Specifically, the lab's focus is on the pathogenesis of Hodgkin and Non-Hodgkin lymphomas, the underlying genetic changes of immune privilege in cancer cells and the clinical translation of genetic findings. On the basis of novel discoveries by next generation sequencing, Dr. Steidl seeks to develop better biomarkers for risk stratification of lymphoma patients with the goal to improve clinical decision making. Moreover, he currently conducts research aimed at the identification of "targetable phenotypes" that are linked to genomic findings, thus ultimately addressing the current roadblock associated with the translation of next generation sequencing data into clinically meaningful knowledge gain. Dr. Steidl is also involved in a large-scale, Genome Canada-funded, lymphoma project evaluating genomics as a clinical tool for personalized medicine for the province of British Columbia.

After his faculty appointment in October 2011, Dr. Steidl capitalized on his start-up research support by being

awarded a number of competitive grants and salary awards as the principal investigator, securing over \$1,500,000 from the Canadian Institutes of Health Research (Operating grant and New Investigator Award), the Terry Fox Research Institute (Team Grant), the BC Cancer Foundation, Genome Canada, Michael-Smith Foundation for Health Research (Career Investigator), Leukemia and Lymphoma Society of Canada, the Canadian Hematology Society, Children's Oncology Group and the Canadian Cancer Society Research Institute (CCSRI).

■ TEACHING

Dr. Steidl teaches for UBC in graduate and undergraduate courses, including PATH500, ONCO502, MEDG421, the Pathology Genomics/Bioinformatics core course and for the BCCA Medical Oncology Residency Training Program. Starting this year, Dr. Steidl, together with his departmental colleague, Dr. Bennewith, are course organizers of PATH500, part 2. The Steidl lab (<http://steidllab.med.ubc.ca/>), currently comprised of 14 members including 3 technologists, 1 staff computational biologist, 1 undergraduate, 4 graduate students and 5 postdoctoral fellows, is located in the British Columbia Cancer Research Centre (675 W 10th Avenue). Dr. Steidl is a member of the Centre for Lymphoid Cancer (CLC) that provides central resources including tissue banking, a computerized lymphoma database and statistical support.



Pancreas Centre BC: A New Research Initiative

DAN RENOUF AND DAVID F. SCHAEFFER CO-DIRECTORS, PANCREAS CENTRE BC

There is new hope for pancreatic cancer patients in BC with the recent launch of Pancreas Centre BC, a unique, interdisciplinary partnership between the BC Cancer Agency, Vancouver Coastal Health and the University of British Columbia. Supported by the VGH/UBC Hospital and BC Cancer Foundations, our multidisciplinary team is striving to make research discoveries and to gain novel insights for improved approaches to pancreatic cancer treatment.

Pancreatic cancer is a devastating disease with a dismal prognosis. This is largely due to vague symptomatology leading to delays of diagnosis, the propensity of pancreatic cancer for early local and distant spread and resistance to established chemotherapy. 4,300 Canadians died from this disease in 2012 making it the 4th leading cause of death from cancer today. A key challenge lies in the inability to detect this cancer at an early stage and unfortunately most patients have a very advanced disease by the time they are diagnosed and few are cured. Among its key goals, Pancreas Centre BC is conducting research into methods to detect this cancer earlier, since this approach may represent our best chance yet of winning the war against this deadly disease.

By collaborating with various established scientists within British Columbia, Pancreas Centre BC is undertaking team driven translational research to enhance our understanding into the development of pancreatic cancer, determine effective screening methods for high risk patients and to develop individualized treatment strategies and novel therapies for patients afflicted by pancreatic cancer.

“Our centre strongly believes that by understanding the tumor microenvironment we will be able to not only detect this deadly disease earlier but also target important steps in cancer development.”

Despite significant advances in our knowledge regarding the molecular biology of pancreatic cancer cells over the past decades, the success of treatment options is disappointing, with little improvement in the outlook for patients. Our centre strongly believes that by understanding the tumor microenvironment we will be able to not only detect this deadly disease earlier but also target important steps in cancer development. Recent early results in examining the epithelial mesenchymal transformation (EMT) of pancreatic ductal adenocarcinoma have encouraged us that we are on the right path.

Many biomarkers have been tested in the past but none have proven to be specific and sensitive enough to allow for reliable detection of pancreatic cancer. There is a growing interest in investigating tumour-derived DNA in blood as a non-invasive biomarker in different types of cancer. Our preliminary data have been very encouraging and the hope is that this test will not only inform clinical decision-making but also allow for more accurate and earlier diagnoses of patients.

Given our province's strong track record of translating oncogenomic research into successful clinical trials, our centre is involved in multiple projects to test a number of potential therapeutic strategies to improve the survival of pancreatic cancer patients.

Since its inception, the centre has developed several critical platforms to support research activities and to collaborate with other researchers interested in studying pancreatic cancer.

Taking advantage of the high number of pancreatic surgeries performed at Vancouver General Hospital, we have created a prospective pancreas specific Biobank, collecting tissues and blood from consented patients. These samples are linked to the patient's treatment regimen and outcome data; to date we have collected over two hundred samples and are distributing selected ones to ethically approved research programs throughout BC. To supplement these prospectively collected tissue samples, we built a retrospective tissue microarray containing tissues from over five hundred pancreatic cancer patients. Lastly, we formed a clinical trials unit specifically for pancreatic cancer patients and are collaborating with national and international groups, as well as industry partners to gain access to the most innovative and promising drugs in development to target pancreatic cancer.

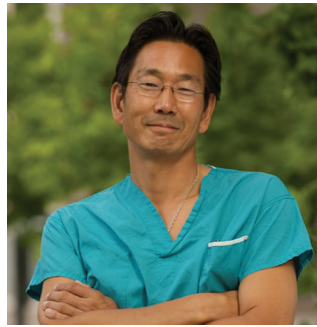
Pancreas Centre BC is excited to support British Columbia-based researchers engaged in pancreatic cancer research for pilot projects. The pilot project funding is one-time only, non-renewable seed funding for ideas that have promising potential, and may result in further national and international funding opportunities. For more information, please visit the Pancreas Centre website.



Contact Pancreas Centre BC
To learn more about Pancreas Centre BC or become involved please visit <http://pancreascentrebcc.ca/>



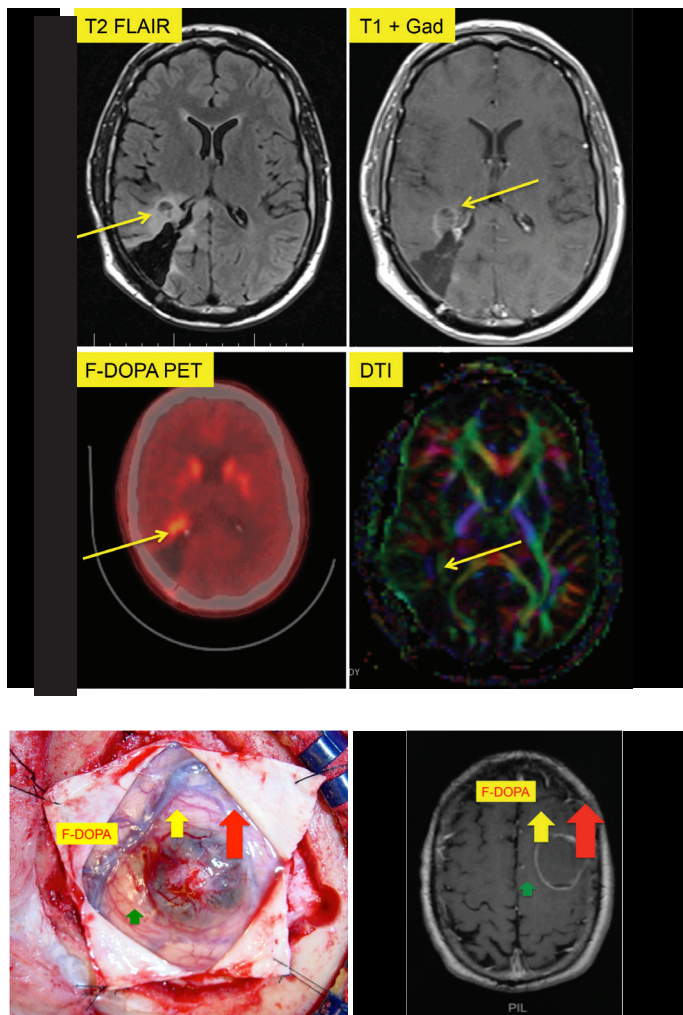
Stephen Yip



Brian Toyota

Defining Intratumoral Heterogeneity of Glioma by Deep Molecular Profiling of PET-Guided Biopsies

STEPHEN YIP, BRIAN TOYOTA



Gliomas arise from malignant transformation of endogenous cellular constituents of the central nervous system. Glioblastoma or GBM, the most aggressive form of glioma, is also the most common type of glioma and primarily affects patients in their 50s. GBM is characterized by diverse histology even from different regions of the same tumour. We believe this morphological diversity reflects underlying genomic and epigenomic heterogeneity representing a complex tumour ecosystem that contributes to challenges in the effective management of GBM. One of the key challenges in understanding the molecular pathogenesis of glioma is the precise delineation of tumour cells and identification of genetically and functionally unique malignant clones that dictate and drive clinical responses. Tumor recurrence is inevitable and frequently occurs in proximity of the resection bed. Understanding the genetic diversity of glioma cells provides invaluable information for the prediction of tumor behaviour and helps to identify pathway(s) for intervention. Recent incorporation of advanced magnetic resonance imaging (MRI) techniques provided significantly more information on the tumour than traditional MRI. Moreover, the use of positron emission tomography (PET) has introduced another dimension to imaging brain tumours. For example, [18F]-Fluorodeoxyglucose FDG-PET has shown some utility in distinguishing between recurrent glioma and radiation necrosis. However, recent development of molecularly specific radionuclide tracers represents the forefront of cancer functional imaging. These novel tracer compounds often include ligands and metabolic precursors of receptors and biological pathways often aberrantly represented in cancer cells and epitomize a new wave of molecular targeted imaging of cancer that provide not only spatial but also

functional information of the malignant cells and the adjacent microenvironment. The next frontier is to combine imaging and histopathology of glioma and integrating these with deep-interrogation of the tumour genetic makeup. Earlier studies have attempted to correlate MRI imaging profiles with gene expression of glioblastoma. However, these were done in an era without the benefits of advanced functional/metabolic imaging and in the absence of massively parallel high resolution sequencing technology. We plan to examine different regions of glioma with unique imaging and PET correlates and to integrate these findings with histopathology of the tumour and most importantly the genomic and gene expression profiles. It is the hope of this study to identify PET and other advanced imaging signatures with unique genetic profiles with clinical and outcome significance.

Thus far, we have collected tumour samples from six fully consenting patients with newly diagnosed malignant glioma. All patients had MR and [18F]- DOPA imaging of their tumours. This ligand has demonstrated its utility in brain tumour functional imaging. All the patients were treated by the same neurosurgeon (Dr. Brian Toyota) who also performed the pre-operative MRI/PET image fusion. Intraoperative guidance based on functional metabolic signatures and MRI images permits selective sampling of regions of the tumour. For example, tumour foci showing high and low FDOPA-PET uptakes are sampled as are regions with T1-GAD enhancement consistent with defective blood brain barrier. The patients then underwent standard debulking surgery. On average, four different tissue specimens were selectively biopsied per patient and peripheral blood for matched normal control was also collected. This approach to delineating and identifying imaging signatures correlating with tumour genetics also carries significant potential in recurrent glioma. Most importantly, these patients are being followed temporally and region(s) of loco-recurrence are correlated with previous imaging(s) and the genetic signatures are then used as a discovery set for potential aberrations related to tumour recurrence. It is the hope of this project to identify genomic and gene expression biomarkers that correlates with functional imaging signatures and predictive of tumour behaviour. Preliminary gene expression data using a customized panel on the Nanostring nCounter platform has demonstrated regional variations.

The plan is to include genome-wide copy number analysis on these samples and to extend to whole transcriptome profiling. Also, the possibility of coupling the above data with bespoke PET ligands such as EGF, PDGF, and SDF1 for guided biopsy samples will make this a tremendously powerful technique.

Dr. Nigel Ball, Clinical Professor in the Departments of Pathology and Dermatology served as President of the American Society of Dermatopathology in 2013.



Dr. Nigel Ball and his lovely wife Val host guests at the President's Private Reception held during the ASDP's 50th Annual Meeting in Washington DC, October, 2013.

During this year, which saw tumultuous changes in the landscape of American medicine, Dr. Ball spearheaded a number of memoranda to political action committees so that changes looming over the practice of dermatopathology do not adversely affect patient outcomes. He also presided over the 50th Annual meeting of the Society which is the premier educational forum for dermatopathologists in the US and Canada. This year's meeting was as intense as usual, and saw the exhibition of 441 high quality posters, the highest ever in 50 years. There were 60 oral presentations, four courses, numerous consultation slide sessions, along with a Self Assessment course, Board Review course, Evening Slide Symposium, and a Basic Science course to satisfy the educational needs of every dermatopathologist.

Dr. Ball was the first Canadian president of the Society. Asked what the most significant part of his experience was in this role, Dr. Ball replied: *"working with the leaders in our field to position the American Society of Dermatopathology as the hub of professional knowledge in the practice of dermatopathology"*.

EDUCATION NEWS

What's New in Graduate Studies

HAYDN PRITCHARD

We would like to introduce you all to our newest intake of students into our Graduate Program. Fifteen students commenced either their MSc, PhD, or combined MD/PhD degrees during the 2013 calendar year. Most MSc students will transfer to the PhD program during their second year, and we anticipate that this group will become the cornerstone of the program over the next 4-5 years. The students are dispersed over the 4 geographic sites, yet they are strongly bound by our departmental ties and community.

Please join us in welcoming them to our department and feel free to contact them through their information that can be found on the Department of Pathology and Laboratory Medicine – Graduate Studies website: http://www.pathology.ubc.ca/pathology/Graduate_Student_Portfolio.html.



Aleya Abdulla, Graduate Studies Program Assistant, was the official co-host for last year's Annual Pathology Arts Gala.

UBC Department of Pathology and Laboratory Medicine Presents:

2014 Pathology Arts Gala

Arts *in* Science

Friday, June 27, 2014

6:30PM-8:30PM

Doors open at 6:00PM

UBC Medical Student Alumni Centre

2750 Heather Street

All proceeds will be donated to Arts Umbrella

For ticket information, please contact ktsai@cfri.ca

Ticket Prices: \$5 Students
\$7 Faculty
\$10 At the door
Appetizers and 2 complimentary drink tickets included



Graduate Students Short Bios

THE OFFICE OF GRADUATE STUDIES WELCOMES ALL NEW GRADUATE STUDENTS [ENTRY DATE: SEPTEMBER 2013 - JANUARY 2014]



ABHINAV AJAY KUMAR

Program: MSc

Supervisor: Hélène Côté

- My name is Abhinav, and currently I am pursuing a Masters in Pathology and Laboratory Medicine at UBC. I work in the Dr. Hélène Côté Lab. Our lab investigates the effects of HIV infection and antiretroviral therapy (ART) on the markers of cellular aging. I am currently working on a project entitled "*The effects of maternal HIV plasma viral load and exposure to antiretroviral drugs during pregnancy on infant leukocyte telomere length*". I completed my B.Tech in Biotechnology from VIT University, India. As part of my undergraduate study, I completed my final year's thesis at the University of Auckland, New Zealand, where I worked on a project entitled "*The maturation of Retroviruses*". I intend to pursue a PhD after my Masters and continue in the field of academics.

"All work and no play makes Jack a dull boy!!" And there's no way I can be a "Jack". I have a huge passion for cricket and soccer. I am a trained swimmer and I also hit the gym at least 4 times a week! :) UBC with its rich history, state-of-the-art infrastructure, and diverse and multi-cultural population of students and faculty, offers countless opportunities to learn and grow! Vancouver is one of the most beautiful cities I have been to and is always such a happening place that I'm sure anyone would fall in love with it!



HANI BAGHERI

Program: PhD

Supervisor: Evica Rajcan-Separovic

- I received my BSc in Medical Genetics from the University of Leicester, UK. I then went to the University of Oxford to do my MSc in clinical embryology. After graduating from Oxford, I moved to beautiful Vancouver to start the next chapter of my life by pursuing a PhD in Pathology and Laboratory Medicine. My PhD research involves investigation of small changes in the DNA,

known as gains or losses of DNA or copy number variants (CNVs) that cannot be detected by microscopy. Our lab uses high-resolution microarrays to detect these cryptic CNVs in miscarriage samples and patients with mental disorders. My study aims to understand how these small CNVs can cause miscarriage and after-birth developmental abnormalities by looking at the characteristics of genes that they contain.

Vancouver is the right place for hikers. I like hiking, playing football, badminton, and swimming. Travelling is also a big part of my life. UBC is one of the best universities worldwide with cutting-edge technologies utilized by world-renowned scientists. Also, as a PhD student I could not think of a better place to spend the next 5 years of my life than Vancouver.



SALEHA BANAEM

Program: MSc

Supervisor: Chun Seow

- I am a graduate student in the Master of Science Program in Pathology and Laboratory Medicine (MSc). My research is about mechanical manifestation of myosin light chain (MLC20) phosphorylation in smooth muscle. When I studied microbiology in my undergraduate studies, I became fascinated by questions of how organisms work. When I studied microbes, I did presentations on a microbe involved in food poisoning and another one involved in heart problems. Both of these presentations received top marks because my research had been thorough, my presentations had effectively engaged my fellow students' interest and I was able to maintain that interest while answering their questions. When I did a semester's worth of laboratory training, I took to it like a duck to water, scoring 98%; an almost unprecedented mark in that course. It motivated me to look deeper into several issues and ultimately crystallized my decision to pursue a medical career such as pathology.

The reason why I chose UBC for my Master's degree is that there are not many medical schools in Saudi Arabia and their standards are not as high as their Canadian counterparts, nor do they have the emphasis on research based practice that marks North American medical education. Because of that I see that a Master's of Science in Pathology and Laboratory Medicine (MSc) will provide me with the research, education and practical skills that I will need to serve in the field of my dreams.





AMANDA DANCOSK
Program: MD/PhD
Supervisor: Torsten Nielsen

■ I am a combined MD/PhD student currently working through my first year of medicine. My research focus is on molecularly-targeted experimental therapeutics for treatment of synovial sarcoma, a rare but devastating cancer that affects mostly adolescents and young adults. Born and raised a prairie girl in Regina, Saskatchewan, I completed my Bachelor of Science in Biochemistry at the University of Regina, with an honours focus on microbiology and pathogen-host interactions. My goal is to work some day as a clinician-scientist, possibly with a focus on paediatric oncology. This would allow me to split my time between delivering care to these little ones and researching new cures for them.

I am a hobby ballerina, baker, and fancy-maker, as well as a loving Auntie to three darling nephews. I also enjoy skiing, hiking, and taking in live local music, theatre, and dance. I chose UBC for the friendly people, the excellent collaborative research opportunities, and the chance to hit either the slopes or the beach every single weekend of the year!

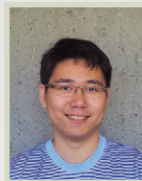


HAOYU DENG
Program: PhD
Supervisor: Honglin Luo

■ Hi everyone. My name is Eric Deng and I am a PhD student from St. Paul's Hospital. My supervisor is Dr. Honglin Luo. My former major was surgery. I had been a surgical resident for over three years in Shanghai. I will be working here for at least four years.

The reason why I chose UBC for my PhD career is because UBC is a world renowned university. The medical science of UBC has become one of its priority fields which is making great contributions to the medical development. I believe that I will be an all round talent with the guidance of Honglin. My current project is about the functional role of Gab1 in heart disease, especially looking at the mechanisms involved in the role of Gab1 in molecular signaling pathways when cardiomyocytes are infected by CVB3.

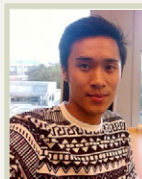
Vancouver is one of the most suitable places for people to live in. The landscape is so fascinating while the environment is very clean. In my spare time, I enjoy a lot of activities such as swimming, playing badminton and cooking food. I am looking forward to making friends with you. Thank you!



ANTHONY HSIEH
Program: MSc
Supervisor: H  l  ne C  t  

I work in Dr. H  l  ne C  t  's lab, and I study the relationship between HIV and cellular aging of the immune system. The modern antiretroviral strategy against HIV is largely successful in preventing the transition to AIDS. However, people living with HIV still experience age-related diseases earlier in life, such as cardiovascular diseases, liver diseases, and non-AIDS related cancers. Our team uses cell-sorting technology to separate immune cells by type and observe the aging effect associated with HIV of these individual immune cell subtypes. We hope to gain insight into the mechanism by which HIV induces accelerated aging and determine what other environmental or behavioural risk factors exacerbate this effect. I earned my BSc in the UBC-BCIT Biotechnology program. In my undergrad, I had the opportunity to work for Dr. Kiran Soma, Dr. Ann Rose, Dr. Connie Eaves, and Dr. Marc Horwitz. I currently work as a grad student for Dr. H  l  ne C  t  , at the UBC Hospital.

My extra-curricular passions include singing, playing the piano, badminton, and amateur astronomy. I chose UBC because Vancouver is a wonderful city, the campus is scenic, the weather is temperate, and my family and friends also live here.



JACKY LEUNG
Program: MSc
Supervisor: Marianne Sadar

■ I am currently working in Dr. Marianne Sadar's lab at the BC Cancer Agency. The major focus of our lab is to develop therapies that target the N-terminal domain of the androgen receptor which can prevent or delay the progression of lethal, castration-resistant prostate cancer. My current research is aimed towards coactivators that act on the N-terminal domain. I am particularly interested in proteins that are able to induce conformational changes within the N-terminal domain and thus are essential for its activity. I spent the last four years in Montreal, where I graduated from McGill University with a Bachelor of Science in Anatomy and Cell Biology, with a minor in Italian Language and Literature. My previous research experience was focused on developmental biology with emphasis on the regulation of epigenetic events during meiosis. Being born and raised in Vancouver, I knew immediately after graduation that I wanted to carry on with graduate studies at the University of British Columbia. I am deeply inspired by the naturally picturesque landscapes of British Columbia.

Aside from science, my other passions include Italian film, opera, and cooking for my friends.

**BRYAN LIN**

Program: MSc

Supervisor: Ed Pryzdial

- My research focuses on the interactions between the ubiquitous herpes simplex virus and human blood clotting proteins. I graduated from the University of British Columbia with a Bachelor of Science degree in Microbiology and Immunology. Furthermore, I was in the Co-operative education program where I completed two work terms for both Stemcell Technologies and the Vancouver Prostate Centre.

I love racquet sports such as tennis and table tennis. As a Taekwon-do practitioner, I am involved in my local club for which our demonstration team has performed throughout the lower mainland many times. I enjoy watching action movies especially those that include martial arts or spectacular stunts. I like to engage in patient care hence my volunteer experience as a first responder; say hi if you see me in uniform at Roger's Arena (not as a hockey player though!).

I chose UBC because I like Vancouver and have commitments that I do not want to drop by going elsewhere. The fact that my parents are here and my mom makes great food are added incentives. To be fair, I hate the rain.

**JESSICA MORRICE**

Program: MSc

Supervisor: Christopher Shaw

- I graduated from SFU with a BSc in Health Science and have previously worked in an immunology lab. I am excited to study the role of autoimmunity in neurodegeneration and am very interested in pursuing a PhD in this field.

I spend my spare time running or hiking with my dog and am determined to see and experience every corner of our earth. I love art, cheese and anything that makes me laugh. I chose UBC because it's a world-class university and I found a great Supervisor.

**JONATHON OBST**

Program: MSc

Supervisor: Marianne Sadar

- I am incredibly privileged to be working on developing a small molecule drug to be used against late stage prostate cancer under Dr. Marianne Sadar at the BC Cancer Research Centre. Specifically, my project is to determine whether or not resistance develops over repeated exposure to our drug, and if so, to explore possible mechanisms. I graduated from the University of Victoria in 2012 with an Honours degree in Biology. During that time I focused heavily on cellular signalling with an emphasis in oncology and DNA mutation/repair. My honours project was completed under Dr. Perry Howard where I looked at the applicability of rewiring a pro-growth signal into a death response; essentially hi-jacking cellular signalling in breast cancer cells.

I enjoy staying active and try to get out snowboarding or surfing as much as possible! My plans for the future are simple: take advantage of every opportunity afforded to me and be flexible for wherever life takes me. I chose UBC because I fell in love with the West Coast and wasn't ready to leave just yet.

**LINETTE OCARIZA**

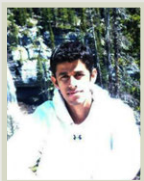
Program: MSc

Supervisor: Ed Conway

- My current research area deals with regulation of the complement system. In particular, I am investigating the role of a molecule called polyphosphate and its potential as a novel therapeutic in complement-related diseases such as age-related macular degeneration. I graduated from the BMLSc program here in UBC, a great program that emphasized the relevance of lab-work to real-life problems and medical practices. It also gave me my first experience in independent research as a Directed Studies student. After graduating, I worked with Dr. William Schreiber and the Cytogenetics lab at VGH to develop an educational iPad app for Cytogenetics. I eventually missed doing lab-work and research so I decided to pursue a graduate degree in the same department because I loved the UBC environment, the personal-based learning, and the helpfulness of the faculty and staff.

When I'm not pipetting in the lab, you will most likely find me leading a youth group, playing music, or coaching elementary school kids' basketball, where I am often confused for one of the players.



**MEHUL SHARMA**

Program: MSc
Supervisor: David Granville

- I am Mehul Sharma. I work in Dr. Granville's lab at St. Paul's hospital. My research here is involved with exploring the functionality of Granzyme K found extracellularly. I will be looking at its non-immune roles, especially its potential role in initiating vascular dysfunction. Before starting graduate school, I finished my BSc in microbiology and immunology at UBC. Proceeding backwards in time, I completed high school here in Vancouver and completed my elementary school in India.

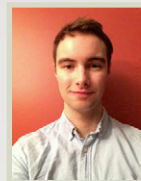
My interests apart from academics mainly revolved around playing basketball and ball hockey. However a recent spur of injuries has resulted in my sticking to activities such as fantasy hockey and watching Sunday NFL games (49ers gonna win!). I am very approachable and I love to talk about any range of topics, from science to movies to economics. So please say hi. But beware, I have an identical evil twin brother out there!!

**ARASH SAMIEI**

Program: MSc
Supervisor: Poul Sorensen

- While studying Cell Biology and Genetics at UBC, I realized that I wanted to continue my career in the research world. I had fallen in love with cell biology and genetics concepts, and when the opportunity to study these concepts further came knocking on my door while working in an amazing lab at BCCRC I had to take it. I decided to continue my studies at UBC because I was able to do research on topics that I truly found interesting while being at an institution that was very supportive of the research being done by its students. At the same time I get to stay close to all the beautiful mountains and lakes that BC has to offer. My research revolves around nutrient deprivation in cancer cells, and the role of eEF2 kinase while the cells are experiencing nutrient deprivation.

Aside from academia I spend a lot of time watching movies that were made more than half a decade ago, hiking during the summer, baking during the winter, and eating all assortments of delicious foods and desserts throughout the year as often as I can.

**NICHOLAS SWYNGEDOUW**

Program: MSc
Supervisor: Chun Seow

- Hi everyone! My name is Nick and I am excited to join the Department of Pathology and Laboratory Medicine as a new graduate student this month under the supervision of Dr. Chun Seow. The research that I will be conducting will concern the biochemistry and structure of the smooth muscle contractile apparatus.

I am originally from Alberta where I recently completed my BSc degree in Biochemistry at the University of Calgary. In Calgary, I previously worked as a research assistant where I investigated the lipid biophysics of the tear film polar lipid monolayer related to Dry Eye Syndrome. I chose to come here to UBC for its excellent reputation of world-class research in life sciences, the interesting research approach of my project in Dr. Seow's lab, and also because of the location: Vancouver!

In my free time, my interests include playing guitar, soccer, fitness and exploring BC. I am looking forward to meeting many of you, so if you see me around feel free to say hello.

**XINING (LINDA) YANG**

Program: MSc
Supervisor: Mark Scott

- Hi I am Linda, but my official name is put as a really long one – Xining (Linda) Yang. I am a first-year international graduate student, one of the numerous Chinese flooding into Vancouver. I am working under the supervision of Professor Mark Scott at Centre for Blood Research, UBC. We are focusing on novel miRNA-based therapeutics against tumors. It is anticipated that a complex mixture of miRNAs generated in our lab is capable of enhancing the anti-tumor inflammatory response, resulting in the inhibition of tumor growth and metastatic spread. I hold a Bachelor's of Science degree from Central South University, China. As a medical school student majoring in Biological Science, I grasp an understanding in human health and basic skills in cell and molecular biology research.

UBC has long been famous for its medical education and I gained a chance to visit as an intern in 2012. I was motivated by the interesting research and beautiful summer days, and desired to continue a graduate study here.

Outdoor adventure is what I enjoy. Vancouver specifically offers the resources for both summer climbing and winter skiing – it is the place that I enjoy!

WHAT'S NEW IN THE RESIDENCY PROGRAMS

- Please join us in offering a warm welcome to Ms. J.J. Sun as our new Residency Program Finance Assistant.

Pathology & Laboratory Medicine
VGH, Pathology Residency Program
3204 – 910 West 10th Avenue
Vancouver, BC V5Z 4E3
Tel. (604) 875-4111 ext 68709
Fax. (604) 875-4988
jieji.sun@pathology.ubc.ca

- Dr. Tanya Petraszko, a new UBC Transfusion Medicine Program Director

As of January 1, 2014, Dr. Tanya Petraszko Tanya.Petraszko@blood.ca has become the UBC Transfusion Medicine Program Director, with Dr. Nick Au nau2@cw.bc.ca as her Associate Director.

The program will run much as it has, with Tanya directing the Canadian Blood Services portion and Nick, the clinical rotations.

Recently Published Book

Dr. Jim Hudson recently published a book for the general reader entitled: **The Viruses and Microbes Within Our Bodies: Why We Need Them and How They Control Our Lives**

JAMES B. HUDSON 2013



Jim Hudson, Professor Emeritus

Hudson Book - Annotation

We live in an age of paranoia. The media bombard us daily about the dangers of imminent pandemics of infectious microbes and viruses that threaten our very existence. The pharmaceutical and biotech industrial complex, aided by many scientists, insist that we are in a continuous state of war with our own microbes, and consequently we have to protect ourselves against these potentially dangerous “pathogens.” But is this really true? Do we really need weapons of microbial destruction? Professor James Hudson, who has studied numerous viruses and microbes for over 50 years, explains, in a non-technical manner, why this is not true and why we should stop thinking about eradicating our microbes. Instead we should try to live with them.

Recent research, with the aid of sophisticated gene – sequencing technology and improved methods of laboratory cultivation, has revealed that each of our bodies is teeming with trillions of microbes and viruses. Many of them are normal lifetime residents that do us no harm, and in fact some of them are essential to our normal health. They provide us with essential nutrients and other benefits. In addition the human

genome itself contains sequences of numerous ancestral viral genes, although we don't understand the significance of this. When we do encounter potentially dangerous microbes or viruses, through our air, water and food, they are usually taken care of by our multifunctional defense system, which surveys incoming organisms chemically to determine if they are compatible or not. Those that are unacceptable are subjected to a barrage of antimicrobial and antiviral cells and molecules, including immune responses. However if our state of health is compromised, and our microbial flora become unbalanced as a result of stress, antibiotics, or environmental influences, or the occasional over-reaction on the part of our defense system leading to inflammation, we can think about turning to “alternative” medicine, such as herbal preparations, for help. Unfortunately very few of these alternative therapies have been evaluated scientifically, although promising research in these areas is expanding.

Professor Hudson attempts to present these research developments in a context suitable for the general reader, with some illustration by specific viral and microbial anecdotes.



JANET K. CHANTLER, BSc, PhD
Professor, Pathology and
Laboratory Medicine, UBC;
Scientist Level 3, CFRI

DEPARTMENT OF PATHOLOGY
AND LABORATORY MEDICINE
HONOURS RETIRING FACULTY
MEMBERS DR. JANET
CHANTLER, DR. JIRI FROHLICH
AND DR. JOSEPH TAI

In June 2014, our Department, the University of British Columbia and the Child & Family Research Institute will lose the services of the last classically trained research virologist in British Columbia. That is when, Janet (Jaki) Chantler brings formal closure to a professional career that has spanned over 40 years, and began at the famed University of Glasgow school of virology where she published her doctoral dissertation on histone-like proteins induced by pseudorabies virus. Since then, she has contributed widely to the virology literature, and to the supervision and teaching of students at UBC.

Jaki was born and raised on the West Coast of Scotland, in a village called Bridge of Weir, near Glasgow. Her undergraduate degree was from the Department of Biochemistry at St. Andrew's University, where as a member of Queens College, she met her once and future husband Adrian. They were married in 1973 in Tighnabruaich, which in 2002, was voted "the prettiest village in Argyll, Lomond and Stirlingshire."

After moving to Vancouver, Jaki was offered a position as a lecturer at UBC in Jim Hudson's laboratory to work on murine CMV. This led to her own laboratory at Vancouver General Hospital in the Division of Medical Microbiology, and an Assistant Professorship where over the years she developed many collaborations with like-minded scientists and physicians, including Shirley Gillam and Aubrey Tingle. With Aubrey, and in collaboration with a number of clinical rheumatologists, Jaki published many papers chronicling the role of rubella virus in joint arthropathies, including a NEJM article describing the

isolation of rubella viruses from the joints of children with chronic inflammatory arthritides. In 1997, Jaki moved her laboratory to the newly built research institute beside BC Children's Hospital, where she continued her studies on joint inflammation, and in collaboration with diabetes researchers, turned her interest to the role of coxsackieviruses in type 1 diabetes successfully creating a novel coxsackie-virus induced mouse model of disease.

Beyond her research accomplishments, Jaki was a model citizen in the Department, sitting on 83 graduate student committees (for example, acting as PhD comprehensive examiner for David Walker in 1984), and developing, leading and teaching a variety of courses, including the long-running, oversubscribed and extremely popular Pathology 437 course, "Viral Infections in Humans." Jaki reviewed for a multitude of journals in the field and contributed to several books on the topic of rubella, including a chapter in the bible of the discipline, "Field's Virology".

Jaki is most proud however, of her labradoodle, Ceili, her husband, Adrian and her two sons, Rob (a computer expert) and Neil (a lawyer). She has three grandchildren and will now spend more time than ever at their stunning property on Saltspring Island. We will miss her curiosity, enthusiasm and her enduring positive attitude towards research and teaching.

Dr. Eva Thomas & Dr. Ru Tan
January 2014

Congratulations on your retirement!



JIRI FROHLICH, MD, FRCPC
Professor Emeritus, Pathology
and Laboratory Medicine,
University of British Columbia
Director of Clinical Trials,
Healthy Heart Program
Prevention Clinic



JOSEPH TAI, BSc, MSc, PhD
Associate Professor, Pathology
and Laboratory Medicine,
UBC; Scientist Level 2, CFRI

In January, Jiri Frohlich joined the ranks of one of the greatest assets of our Department – our Emeriti Professors. Congratulations JF! (as we refer to him.)

This achievement crowns a wonderful career at UBC, and its teaching hospitals, but this note is not intended to review his CV. Instead, I would like to thank him for the manner in which he has helped so many of us survive and thrive in both academia and clinical practice. Through his research focus on the relationship between lipoprotein metabolism and cardiovascular disease, he has trained numerous graduate students and clinical fellows who have themselves all gone on to successful and illustrious careers; he published over 300 peer-reviewed papers. Having started the first Lipid Clinic in BC at the old Shaughnessy Hospital in 1985, he rapidly became a national and international opinion leader on the value of regulating lipoprotein metabolism to control the risk of cardiovascular events. Accordingly, he led the development of a highly successful clinical trial program that made landmark discoveries of the benefit of statins and other lipid modifying agents.

But what does his advancement to Emeritus mean? The Wikipedia definition reads: *“having served one’s time”* or *“having merited one’s discharge by service”*. I prefer the definition provided to me by the recently retired David Walker, i.e. *“they who work for nothing”*. I suspect that JF will adopt the latter description and will continue to welcome all comers to his office – and he will educate and entertain accordingly. This trait has been the hallmark of his leadership style for the patients, students, faculty and hospital staff whom he has nurtured.

Jiri: we thank you for your support, kindness, tolerance, insight, loyalty and - most of all - humour.

Jiri: thanks for helping us all achieve despite ourselves – and enjoy your free UBC parking with our other Emeriti. You have earned it!

Dr. Haydn Pritchard
January 2014

The Bachelor of Medical Laboratory Sciences (BMLSc) Program is indebted to Dr. Joseph Tai for his longstanding commitment and leadership to the Program and, in particular, to Pathology 415 – the Immunopathology course. Dr. Tai’s dedication and resiliency as the PATH 415 course coordinator spans thirty years, from 1983 until 2013! A combination of BMLSc students, Doctor of Pharmacy students, and other Graduate students take this course. For many years the course was also offered by correspondence. Students taking that option were primarily medical laboratory technologists.

Dr. Tai always ran the course with great integrity. Over thirty years, many changes have occurred in the field of immunology, in education, and in classroom dynamics. Joe was responsive to changes, keeping the course fresh and up-to-date. He was always respectful of our students and at the same time maintained transparent high expectations – a motivating combination.

It has always been obvious to Joe’s colleagues and to his students alike that Joe truly cares about educating the next generations. He has done so in our Department diligently, inspiring thirty cohorts of students.

On a personal note, I wish to thank Joe for giving me my first teaching opportunity here at UBC. In addition to “opening a door for me”, Joe is one of my role models not only because of his dedication to learning and teaching but also because he is such a fine, encouraging, genuine academic and human being.

Dr. Amanda J. Bradley
January 2014



Department of Pathology - VGH/UBC about 1973. I would be at the back and second one on the Left.

Dr. Robert A. McGuinness, Dept of Pathology, Prince George Regional Hospital

"The faculty in the Department of Pathology were outstanding. They included: Dr. W. L. Dunn, Dr. David Hardwick, Dr. Philip Vassar and Dr. Bill Chase. They did an excellent job in presenting and teaching pathology and provided all of us with a sound basis in medicine."

BRIEF LIFE HISTORY

I was born in St. Paul's Hospital in Vancouver and grew up on the west side of Vancouver between Dunbar Street and the UBC Endowment Lands (Pacific Spirit Park). I went to Vancouver College high school before attending UBC. After three years in the Faculty of Science, I entered UBC medical school. There were only 60 students in our class and the vast majority of students were male. Pathology was taught in second year and it played a dominant part of the medical curriculum. The faculty in the Department of Pathology were outstanding. They included: Dr. W. L. Dunn, Dr. David Hardwick, Dr. Philip Vassar and Dr. Bill Chase. They did an excellent job in presenting and teaching pathology and provided all of us with a sound basis in medicine.

With Dr. Dunn's encouragement I decided, then and there, in second year medicine, to pursue a career in pathology. Everyone in our medical school class knew of my intentions and, in fact, 10% of that class eventually entered pathology

or one of its subspecialties. I graduated from medical school in 1972.

I chose pathology because to me it was the most interesting and challenging career in medicine and, furthermore, I liked the lifestyle associated with a career in pathology. I took my residency training in General Pathology predominantly in Vancouver, although I spent one year in Calgary. In Vancouver the training was mainly at VGH but with some training at St. Paul's Hospital. VGH at that time was about 1800 beds and contained both Women's and Pediatric Pavilions.

There was no BC Children's Hospital or BC Women's Hospital & Health Center. The residency training in General Pathology in Vancouver during my day and probably still today was the best in the country. The main reason for this was the training in clinical pathology. The staff were excellent and supportive and the work was so interesting and relevant. I thoroughly enjoyed my residency training in Vancouver.



Carol and I in Vancouver and one month prior to our wedding, 1974



Dr. Fraser, Dr. Law and myself - Prince George, August 1990

I met my wife in Vancouver. She was born and grew up in Halifax. We were married in 1974 and spent our honeymoon during that summer hiking, canoeing and exploring the Yukon. We celebrate our 40th wedding anniversary and wonderful relationship this year. I worked for Dr. Don Rix at Metro McNair Clinical Laboratories in Vancouver for a short period of time after my residency. We were living in White Rock at the time and our first child, Laura, was born there. Laura attended UBC and obtained a law degree from U of T. She is presently living in London, England, with her husband and four children.

In July, 1978, we moved to Prince George where I joined Dr. V.M. Fraser and associates. Dr. Fraser and this partnership had an excellent reputation. I was very fortunate to work with him. Dr. Fraser was not only a skilled pathologist but also set excellent leadership standards and had the ability to get along well with anyone, including hospital administration. I worked as a

general pathologist sub specializing in laboratory hematology. The support I received from laboratory hematologists in Vancouver was always very helpful and constructive and important to me. I would like to single out specifically, Dr. Sheldon Naiman, Dr. Gerry Growe, Dr. Noel Buskard and Dr. Louis Wadsworth. Our son, Stephen, was born in Prince George three years after our arrival there and our daughter, Victoria, was born 10 years after our arrival. Stephen attended UBC and graduated from Harvard Law School. He is presently living with his wife in Florida. Victoria attended U of A, where she obtained a commerce degree with a minor in music. She currently lives in Calgary. She is getting married in Banff next summer in the Catholic church built over 60 years before, by her second great uncle, Father Robert James McGuinness.

I became Laboratory Director and Managing Partner in 1993 and continued in this role until I retired. I enjoyed this work and although, I had

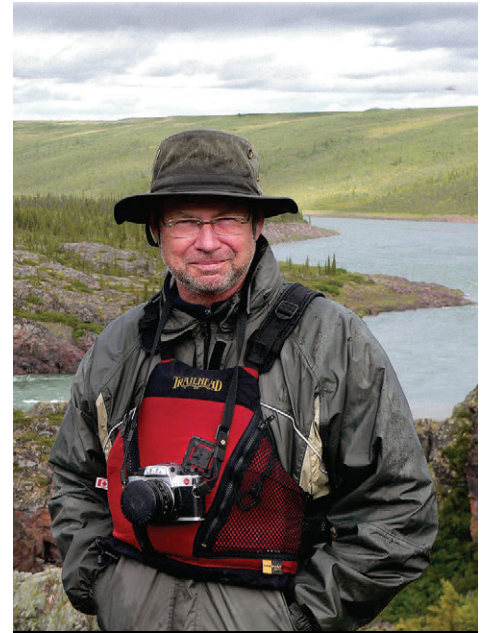
quite a different personality, I always tried to follow the honorable standards, set by my predecessor, Dr. Fraser. Dr. Tom Cooney, Managing Partner of C. J. Coady and Associates at the time was outstanding and extremely helpful to me and always very supportive of our pathology group and others throughout the province. I became involved in a number of local medical committees and political associations and got to work with key medical and non-medical personnel throughout northern BC. I also became involved in a number of provincial committees both within the BCMA (SSPS and BCALP) and College, including Chair of the Clinical Pathology Division of the Diagnostic Accreditation Program of BC (DAP) for five years. This allowed me to get to know pathologists and laboratory operations throughout the province quite well.

I loved working in Prince George and northern British Columbia. The practice of Pathology and Laboratory





At the beach near Prince Rupert during Easter weekend, 1992 (Victoria, Stephen, myself and Laura)



Me on a canoeing trip on Coppermine River in Northwest Territories about 50 to 100 miles south of the Arctic Ocean

Medicine was demanding but extremely interesting and satisfying. The medical staff were excellent and very cooperative and produced a collegial atmosphere that was second to none. I was very fortunate in that the pathologists that I worked with throughout my 30 year career were great and very supportive, particularly during my tenure as Laboratory Director and Managing Partner. We also got along very well together and were able to function as a single independent partnership unit. We were assisted by a very talented group of laboratory technologists.

Prince George and the northern communities not only provided a wonderful environment in which to live and raise a family, but were very supportive of the medical community and were key in the establishment of the Northern Medical Program and UNBC itself. I retired in 2008. In April of last year, I was honored by my medical

"In April of last year, I was honored by my medical colleagues at the 9th Annual Dr. Bob Ewert Memorial Lecture and Dinner, where I was inducted into the Northern Medical Society Hall of Fame."

colleagues at the 9th Annual Dr. Bob Ewert Memorial Lecture and Dinner, where I was inducted into the Northern Medical Society Hall of Fame.

We decided to remain in Prince George after retirement. We enjoy living on our property on Cranbrook Hill and travelling. Our children are located all over the world, so we need to travel just

to visit with them. In retirement, I have had the privilege to lead all pathology labs here within the Northern Medical Program. I enjoy teaching these very talented individuals and actually look forward to my teaching sessions in the spring and fall.

... Little known fact:

During my first year medicine, my brother Patrick was diagnosed with a Pinealoma. He was treated by Dr. Joe Cluff at VGH. Patrick was cured of the tumour but ended up legally blind and in a wheelchair. I presented his case as a CPC to my first year classmates. Patrick was best man at our wedding and did a wonderful job of it. Patrick is still alive today. He lives at home now in Edmonton and is looked after by our (91 year old) mother.



Dr. Edward Van Iderstine, UBC forensic pathology resident, Dr. Grant Roden, Dr. Justin Lo and myself - PGRH (UHNBC), September 2006



Antarctica, February 2010

... JUST FOR FUN

ONE THING THAT MAKES YOU UNIQUE ?

I enjoyed the medical practice of pathology but at the same time I loved the business and politics of pathology and I believe I did a reasonable job of all three.

WHAT IS ONE QUALITY YOU ADMIRE MOST IN OTHERS?

Honesty.

WHAT IS THE ONE CAUSE THAT YOU FEEL MOST PASSIONATE ABOUT?

Pathology. I believe that pathology should play a key role in the medical school curriculum. It is a core medical specialty and should be promoted as such both by medical schools and medical associations. Medical students should be encouraged to consider a career in pathology. William Osler stated that *"As goes your pathology, so goes your medicine."*

WHAT IS YOUR BIGGEST SUCCESS UP UNTIL NOW?

A 30 year career in pathology in Prince George and northern British Columbia followed by a part time teaching position in pathology within the Northern Medical Program.

IF YOU WEREN'T A PATHOLOGIST, WHAT WOULD YOU BE AND WHY?

If I did not go into pathology or one of its subspecialties, I would probably have done General Practice. I worked closely with family physicians throughout my entire career and got to appreciate even more their talents and understand the central role they play in medicine. They are the best and most important patient advocates. Given my personality, I could never have gone into internal medicine or psychiatry.

WHAT SHOULD BE TAUGHT IN SCHOOL THAT ISN'T ALREADY?

Reading, writing, spelling and arithmetic.

WHAT IS ONE OF YOUR FAVORITE QUOTES?

"Capitalism is the unequal distribution of wealth; Socialism is the equal distribution of poverty; Communism is nothing but socialism, with a gun at your head."

- Winston S. Churchill

WHAT IS THE MOST ADVENTUROUS THING YOU HAVE EVER DONE?

Hiking Chilkoot Pass and then immediately thereafter canoeing 450 miles on the Yukon River from Whitehorse to Dawson and all during our honeymoon!

IF YOU COULD WITNESS ANY EVENT PAST, PRESENT OR FUTURE, WHAT WOULD IT BE?

Exploring the universe on the spaceship, Enterprise.

WHAT IS THE ONE THING THAT MOST PEOPLE LIKELY DON'T KNOW ABOUT YOU?

I have made it a point to see, discover and photograph as much as possible of this beautiful country. I have visited all its major cities and all provinces and territories. This includes trips to unusual locations with different modes of travel such as canoeing 250 miles along the Coppermine River to the Arctic Ocean and exploring the Labrador Coast by ship.

ARTS AND LEISURE

CONFESSIONS OF AN OENOPHILE DON BROOKS

**“There is not the hundredth part
of the wine consumed in this
kingdom that there ought to be.
Our foggy climate wants help.”**

- Jane Austen

Wine has engaged humans for about 7,000 years. I haven't been involved that long but since I was a graduate student and particularly after a couple of wet years in Cambridge as a Post-doctoral Fellow on the Canadian taxpayers' dollar I have been an unabashed fan, consumer and collector of wine. I came to realize in Cambridge, for instance at the Fellows table in College as the port wagon rolled around, how many of the interesting conversations I'd enjoyed had a glass of wine in the vicinity, so I practiced hard. When I returned to Vancouver and UBC, life intervened somewhat in the form of a young family, three mortgages and a desire to gain tenure so my habit lay fallow for a period but gradually things in my life settled down, Dana and I got hooked up and in the early 1990s I began to more seriously build a wine collection ("collection" is just a polite term that recognizes the mania of buying at a rate that exceeds one's consumption). Two other signal events, linked as far as I was concerned, sealed my engagement with things vinous: the BC fine wine industry got kick started in 1989 by free trade and a \$27M government investment in replanting plonk grapes with vinifera varieties in the Okanagan, and in 1993 UBC opened Green College, a graduate college modelled after the colleges of Oxford and Cambridge.



The life changing event associated with BC wines was a visit to a restaurant in West Vancouver with my mother and Dana in early 1993 when I tasted, at the sommelier's suggestion, a bottle of 1992 Blue Mountain Pinot Blanc, their first release. It was an engaging, serious wine and I couldn't believe it came from BC as my background had been as a pure Euro wine snob up until then. I contacted the winery soon thereafter, met the Mavety family and became a good and now life-long customer of their outstanding products.

They in turn introduced me to some of the other pioneer boutique wineries in the valley: Nichol Vineyard, Poplar Grove and Kettle Valley in particular, all of whose owners became my good friends over the next decades, and all of whose wines I bought annually (until ownership changed in some cases). I still have examples from those early vintages in my cellar and most are still drinking well, particularly the special 1991 Blue Mountain Pinot Noir and the early Syrahs from Nichol (Alex Nichol introduced the grape to Canada; nobody thought it could ripen in Naramata...).

“Richard was an outstanding hire for UBC and a great leader for the College but I soon discovered he had a fatal flaw that somehow escaped the hiring committee’s notice – he was a beer drinker!”

By 1993 I was long a tenured Professor looking for mischief so I contacted Richard Ericson, the new Principal of Green College and was invited to join the College as a faculty member (they didn’t support the Fellows concept to reduce formality between the students and faculty member). Richard was an outstanding hire for UBC and a great leader for the College but I soon discovered he had a fatal flaw that somehow escaped the hiring committee’s notice – he was a beer drinker! It took some doing (and beer) to convince him that G.C. had to have a wine cellar but I managed it and talked him out of a budget to buy BC wines for the enlightenment of the members and guests. G.C. had its own kitchen and chef so it wasn’t long before we started to put on wine tasting events for the locals, first just wines but soon wines with food in various settings, from grazing to formal sit down dinners. I always had a theme and would talk a bit about the wines, take votes on favourites and each year include one or more BC wine tastings in the mix.

I think we held 63 events of this type over the years, many with the great help of Cedric Carter, until the wines we wanted to serve got too expensive for student budgets. They were a lot of fun, engendered much interest in local and international wines, and most importantly generated lots of energetic discussion of topics of all flavours from those involved – which is what got me started on this exercise in the first place.

More recently I’ve succumbed to my affection for the pinot noir grape and become a member and recently the Cellérier of the Vancouver chapter of the Confrérie des Chevaliers du Tastevin, a thinly disguised international marketing ploy for burgundy originating from the Chateau Vougeot in the Côte de Nuits in France. I have the responsibility of maintaining the large burgundy collection we have amassed and choosing wines for the six dinners we put on annually; all great fun for someone with the disease.



I guess I can’t write a column about wine without making some suggestions for good wines available in the local market. Some personal favourites (some need to be ordered from the winery) include:

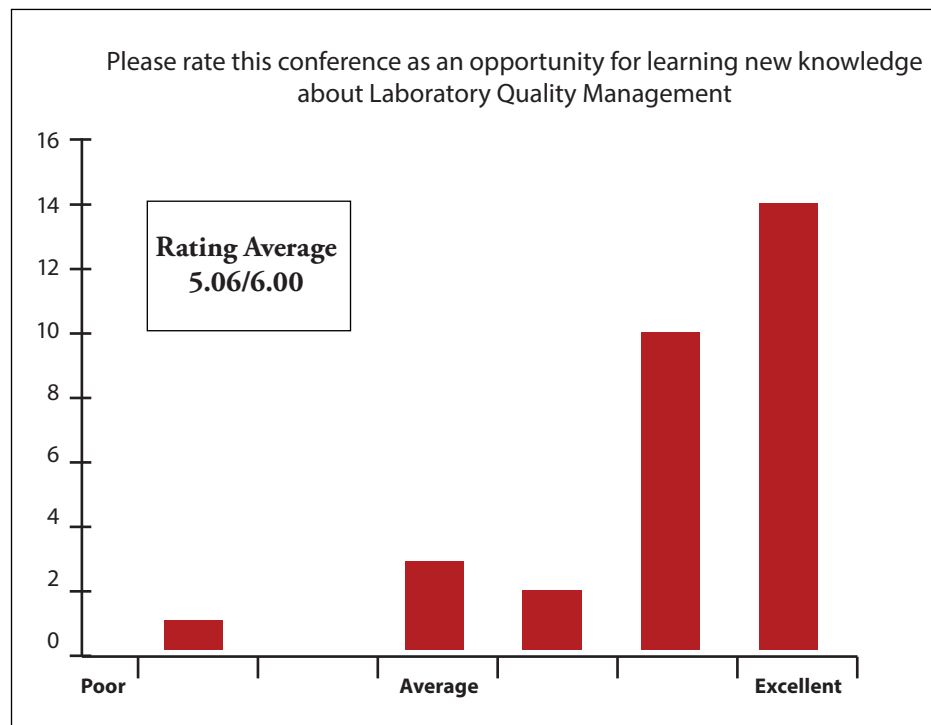
- ☒ All **Blue Mountain** still wines, particularly the 2011 & ’12 whites and all the Pinot and Gamay Noirs; their sparklers are also outstanding deals for the price and compare with many NV champagnes; order from www.bluemountainwinery.com
- ☒ Virtually any wine from **Kettle Valley, LaFrenz** or **Laughing Stock**; order via their web sites
- ☒ **Burgundy**: anything red made by **Meo-Camuzet** (BC Liquor); any **Chablis** from Wm Fevre (BC Liquor), older the better but 2010 & 2011 wines are all rated very highly; the odd reds Marquis Wine Cellars are selling from **L. Boillot, Mugnier, H. Gouge, Rossignol-Trapet** and **D. Laurent**; whites at Marquis from **LeFlaive, H. Boillot**
- ☒ New Zealand Pinot Noirs, particularly from Central Otago like **Felton Road** (Kitsilano Wine Cellar or Dundarave)
- ☒ Australian Shiraz from wineries in Barossa or McLaren Vale like **Elderton, d’Arenberg, Glaetzer** or **Mollydooker** (BC Liquor)



A Successful Medical Laboratory Quality Conference

MICHAEL NOBLE

The UBC Program Office for Laboratory Quality Medicine (POLQM) hosted the Quality Management Conference for Medical Laboratories in Vancouver at the Renaissance Hotel during October 16-18, 2013. This was the fourth meeting hosted by POLQM since 2008. By review of the evaluations the meeting was considered successful at sharing valuable information relevant to quality improvement for medical laboratories.



Michael Noble, a Professor in the Department of Pathology & Laboratory Medicine, received the 2014 BC Quality Award in the Leadership in Quality category from the BC Patient Safety & Quality Council (BCPSQC).

The meeting was attended by approximately 130 people from across British Columbia and Canada as well as the United States, Australia, and the Middle East and the meeting was partnered with the Standards Council of Canada and the BC Society of Laboratory Science. The meeting was opened with greetings from Dr. Allard. Over the two-and-a-half day symposium, nineteen presentations and five panel discussions kept the audience well informed. The depth and breadth of the meeting was extensive and

included discussions on Errors in the Pathology Laboratory, the 20/20 Future of Quality, Stress in the Work Place, The State of Quality Education for Medical Laboratory Residents, Measuring Competency, and the status of many national and international standards and their application to Canadian medical laboratories, and much more. Presenters were national and international. Departmental presenters included David Secombe, Judy Isaac-Renton, Debbie Griswold, Medical Microbiology resident Michael Payne, and Michael Noble.

Post conference evaluation was done as a combination of on-line and on-paper, with a response rate greater than 25 percent. The meeting was rated highly as an opportunity for new knowledge about laboratory quality management.

Discussions are underway about the next POLQM conference.

Presentations from the conference are available on the POLQM website: www.POLQM.ca

FACULTY AWARDS 2013

Our Faculty continues to be recognized with prestigious international, national and provincial awards and honours, which is an indication of excellence in research, education and service/leadership to the profession. The following faculty members were recognized in 2013:



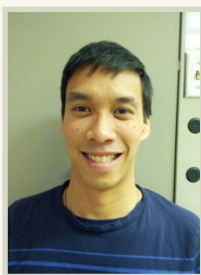
Some of our award recipients

Name	Rank	Affiliation	Name of Award/Prize	Agency Giving the Award	Category
Aparicio, Samuel	Professor	BCCRC	Distinguished Achievement Award for Overall Excellence – Senior Faculty	UBC Faculty of Medicine	Research
Aparicio, Samuel	Professor	BCCA	Award for Excellence in Research and Discovery	Dept of Pathology and Laboratory Medicine, UBC	Research
Brooks, Donald	Professor	Centre for Blood Research	2013 Blood Safety Innovation Award	TerumoBCT Inc.	Research
Chang, Linda	PDF (Karsan lab)	BCCA	Postdoctoral Trainee Fellowship	US Department of Defense Bone Marrow Failure Research Program	
Crawford, Richard	Clinical Professor	VGH	Clinical Faculty award for career excellence in clinical teaching	FoM	Education
Duns, Gurben	PDF (Karsan lab)	BCCA	Postdoctoral Trainee Fellowship	Michael Smith Foundation of Health Research	
Ford, Jason	Associate Professor	BCCH/BCWH	UBC MUS Undergraduate Society William A. Webber Award	UBC Medical Undergraduate Society	Education
Ford, Jason	Associate Professor	BCCH/BCWH	UBC MUS Teaching Excellence Award	UBC MD Class of 2015	Education
Ford, Jason	Associate Professor	BCCH/BCWH	Canadian Association of Pathologists Leadership in Education Award	Canadian Association of Pathologists	Education
Hayes, Malcolm	Clinical Professor	BCCA	Clinical Faculty Award for Career Excellence in Clinical Teaching	FoM	Education

Hogg, James	Professor Emeritus	SPH	Canada Gairdner Wightman Award	Gairdner Foundation	Service/Leadership
Huntsman, David	Professor	BCCA	William E. Rawls Award	Canadian Cancer Society	Research
Godolphin, William	Professor Emeritus	UBC Hospital	Award for Excellence in Education	Dept of Pathology and Laboratory Medicine, UBC	Education
Isaac-Renton, Judith	Professor	BCCDC	Gen-Probe Joseph Public Health Award, American Society for Microbiology	American Society for Microbiology	Service/Leadership
Kizhakkedathu, Jay	Associate Professor	UBC	Distinguished Achievement Award - Excellence in Basic Science Research	FoM	Research
Nielsen, Torsten	Professor	VCHRI, BCCA	Bernard and Francine Dorval Prize (Canadian Cancer Society Young Investigator Award), 2013	Canadian Cancer Society	Research
Nimmo, Michael	Clinical Associate Professor	VGH	Killam Teaching Prize	FoM	Education
Owen, David	Professor	VGH	Invited Speaker	ESPC	Service/Leadership
Park, Carol	Senior Instructor Emerita	UBC Hospital	David Hardwick Lifetime Achievement Award (Golden Bow Tie Award)	Dept of Pathology and Laboratory Medicine, UBC	Service/Leadership
Pudek, Morris	Clinical Professor	VGH	Teaching Excellence	BMLSc Program	Education
Quandt, Jacqueline	Assistant Professor	Brain Research Centre, Division of Neurology	Donald Paty Career Development Award	Multiple Sclerosis Society of Canada	Research
Shah, Sohrab	Assistant Professor	BCCRC	Canadian Research Chair	Government of Canada	Research
Shah, Sohrab	Assistant Professor	BCCRC	Distinguished Achievement Award (Overall Excellence - Early Career category)	FoM	Research
Sinclair, Graham	Clinical Associate Professor	BCCH	Award for Excellence in Service	Dept of Pathology and Laboratory Medicine, UBC	Service/Leadership
Steidl, Christian	Assistant Professor	BCCA	CIHR Salary Award	CIHR	Research
Verchere, Bruce	Associate Professor	CFRI	Queen Elizabeth II Diamond Jubilee Medal	Presented by the Canadian Diabetes Association (CDA) from the Governor General of Canada	Research
Webber, Douglas	Clinical Assistant Professor	VGH	Most Valuable Player Award	Dept of Pathology and Laboratory Medicine, UBC	Service/Leadership
Yip, Stephen	Assistant Professor	VCHRI	Mentored Clinician Scientist Award	VCHRI	Research
Young, Sean	Associate Professor	BCCA	Jeremy Jass Prize for Research Excellence in Pathology (co-recipient)	Journal of Pathology	Assistant

WELCOME TO NEW FACULTY MEMBERS

OUR DEPARTMENT WOULD
LIKE TO FORMALLY WELCOME
AN OUTSTANDING GROUP
OF FACULTY MEMBERS WHO
ARRIVED ON CAMPUS IN
SUMMER/FALL 2013.



JIECHUANG SU (SUJIE), PHD

Postdoctoral Research Fellow, Department of
Integrative Oncology, BCCRC

I completed both my undergraduate degree in biomedical science and PhD in molecular medicine at the University of Auckland, New Zealand. For my PhD, I worked on improving our understanding of the activation of hypoxia-activated prodrugs during the bio-reduction phase of their activation, in particular the role of cytochrome P450 reductase. I gratefully accepted an excellent opportunity to further my research in the area of tumour hypoxia, by joining Dr. Andrew Minchinton's lab at the BC Cancer Research Centre. Here, I will be working on improving the efficacy of radiotherapy by modulating tumour hypoxia using anti-angiogenic agents (compounds that disrupt the tumour vasculature). My main research goal is to ultimately improve cancer therapeutics by discovering and characterizing novel predictive and/or therapeutic cancer biomarkers.

Outside of the lab, I like keeping active by playing sports and skiing. I also have caught the travel bug and love traveling to new places.

DANIEL R. RADILLOFF, PHD

Postdoctoral Fellow, Department of
Molecular Oncology, BC Cancer Agency

Currently, I am a postdoctoral fellow in Poul Sorensen's laboratory in the Department of Molecular Oncology at the BC Cancer agency. The main focus of my work is understanding the molecular mechanisms underlying brain tumorigenesis, specifically medulloblastoma and glioblastoma. Prior to joining the University of British Columbia, I completed a postdoctoral fellowship in the Department of Radiation Oncology at Duke University working on understanding physiological responses and adaptation to hypoxia. I received my undergraduate degree in biology from the University of North Carolina at Chapel Hill and my PhD at Duke University in the Department of Pharmacology and Cancer Biology studying the role of trefoil factor secreted proteins on pancreatic and prostate tumorigenesis.

In my free time I enjoy outdoor activities including climbing, exercising, and music.



ALINE TALHOUK, PHD

Postdoctoral Research Fellow and
Biostatistician, BCCA

I completed my PhD in Statistics at the University of British Columbia in 2013. Since then, I have been working as a biostatistician in David Huntsman's group at the BC Cancer Agency in Vancouver to assist in studying the molecular mechanisms underlying cancer to help improve diagnosis, prognosis, and prevention of the disease. My specific areas of interest include developing sound statistical methodology suitable for the complex data structures in cancer research, as well as data visualization. The last few months have been a very exciting learning experience, and I am thrilled to be working in a multidisciplinary and collaborative scientific environment.

Outside of work, I enjoy fitness, the outdoors, and attending cultural events.

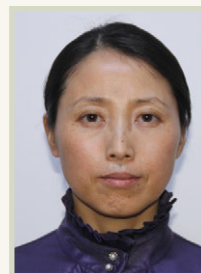


HECTOR LI-CHANG, MD FRCP(C)

Postdoctoral Research Fellow
BC Cancer Agency

I completed medical school and an anatomical pathology residency in London, Ontario, after which I trained as a fellow in GI & liver pathology at the University of Toronto. I joined the research laboratory of David Huntsman in July 2013, and am pursuing a master's degree in genome science & technology at UBC. My research focuses on the molecular mechanisms underlying hereditary diffuse gastric cancer and small bowel neuroendocrine tumours, as well as various prognostic morphologic features in GI malignancies. Outside of work I enjoy cooking, traveling, strength training, and playing guitar.

During our time in Vancouver my wife and I are looking to acquire more outdoor hobbies as well!



FENGPING WANG

Visiting Scholar
St. Paul's Hospital

Hello, friends. My name is Fengping Wang, I'm a physician from department of emergency, the Second Affiliated Hospital of Harbin Medical University, China. I am joining Dr. Decheng Yang's laboratory as a visiting scholar. My research will focus on studies of the mechanism of heart disease causing by coxsackievirus infection.

In my spare time, I love cooking, traveling, shopping, watching movies and making friends. I am very excited to be working here. Looking forward to meeting you all.



TITUS WONG, BSC (PHARM), MD, FRCPC

Clinical Instructor,
Vancouver General Hospital

I am a medical microbiologist with interests in quality and infection control. I completed my MD and residency at UBC and am currently finishing my MSc in clinical epidemiology at the UBC School of Population and Public Health. I have been working in the Division of Medical Microbiology and Infection Control at Vancouver General Hospital since 2012; I have fantastic colleagues and I enjoy the case variety and complexity. My current research interests include prevention and control of hospital-acquired infections, most recently working with Dr. Elizabeth Bryce and Dr. Diane Roscoe on pre-surgical decolonization bundles including photodisinfection to reduce surgical site infections, and with Dr. Elizabeth Bryce on UVC disinfection technology. I have interests in laboratory quality, and am part of the bacteriology committee of CMPT (Clinical Microbiology Proficiency Testing). I am involved with residency training as the Assistant Program Director of the UBC medical microbiology residency-training program, and as the course director for UBC Pathology 722 (MM/IC course for residents and fellows in general pathology, infectious diseases and medical microbiology). I look forward to working with my colleagues in the Department of Pathology in the future!

Away from work, I enjoy spending time with my wonderful wife, Nancy (a gastroenterologist with IBD training); I am an avid hockey fan (Go Canucks!), an aquarium enthusiast, a classic pianist (Chopin Nocturnes are my favorite), and enjoy the year-round outdoor activities that beautiful BC offers.



ANTHONY N. KARNEZIS, MD PHD

Postdoctoral Research Fellow,
BC Cancer Agency, CTAG

I am an Anatomic Pathologist pursuing specialty training in the molecular genetics and pathology of gynaecologic cancers. I obtained my medical degree from Northwestern University in Chicago and my PhD studying cell cycle control at the Albert Einstein College of Medicine in New York. I completed Anatomic Pathology residency at the University of California San Francisco and am a board-certified pathologist in the U.S. I also pursued postdoctoral training studying oncogene and tumour suppressor gene signalling in lung cancer, pancreatic cancer and melanoma. In September 2013, I joined Dr. David Huntsman's group at the BCCA where I am studying the genetics and biology of ovarian and endometrial cancers. In particular, I am interested in how cancer-associated mutations regulate differentiation to determine cell fate, tumour morphology and response to molecular targeted therapies. I am pursuing specialty training in Gynaecologic Pathology at Vancouver General Hospital with Drs. Blake Gilks and Phil Clement and doing clinical research to further refine the diagnosis and management of women with gynaecologic cancers.

In my spare time, I enjoy photography and cooking.

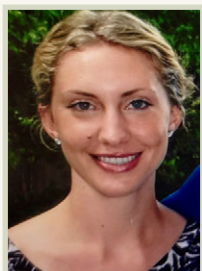


TEHMINA MASUD, MBBS PHD

Postdoctoral Fellow
BC Cancer Agency

I obtained my medical degree from Rawalpindi Medical College (Pakistan) in 2002. I worked as an instructor of Pathology at Shifa college of Medicine in Islamabad, Pakistan for three years. In 2007, I was awarded a Fulbright scholarship for a PhD in Human Genetics at the University of Michigan, Ann Arbor. My thesis work was focused on examining DNA double-strand break repair pathways required for antigen receptor gene rearrangements by V(D)J recombination in developing lymphocytes. I characterized novel aberrant DNA repair processes responsible for potentially oncogenic chromosomal translocations and genomic instability in both inherited and sporadic tumors. After graduating in 2013, I joined Dr. Samuel Aparicio's lab. Currently, I am examining genetic and non-genetic clonal evolution in breast cancers.

I enjoy nature, reading books, watching independent movies, hiking and traveling.

**KATE O'CONNOR, MB BCH BAO**

Fellow Gastrointestinal Pathology,
Vancouver General Hospital ; Supervisors:
Dr. David Schaeffer / Dr. David Owen

I obtained my medical degree from University College Cork, Ireland. After my intern year I completed five years of anatomical pathology in Cork and Dublin including a breast pathology fellowship. Since July 2013 I have been working as a gastrointestinal pathology fellow in Vancouver General Hospital with specific interest in pancreatic and hepatobiliary pathology. My main research focus is in pancreatic cancer specifically prognostic parameters.

Outside of work I enjoy skiing, travelling and running.

**JÉRÔME ROBERT, PHD**

Postdoctoral Fellow
Child and Family Research Institute (CFRI)

After completing my PhD at the University of Zürich in Switzerland where I studied the transport of the high-density lipoprotein (HDL), the good cholesterol, through endothelial cells and established an in vitro model of atherosclerosis. I shifted my interest to the brain vasculature and the neurodegenerative disease in particular and I joined Dr. Cheryl Wellington's laboratory at the CFRI. Specifically the project consists of engineering a novel in vitro model of the brain vasculature and explores the role of apolipoproteins in Alzheimer's disease.

Outside of the lab I am a very active person and I am enjoying beautiful British Columbia.

**ASAD JAN QURESHI, MBBS PHD**

Postdoctoral Research Fellow,
BC Cancer Research Centre

I studied Clinical Medicine and graduated (2005) from the Liaquat University of Medical and Health Sciences, Jamshoro in Pakistan. Then, I moved to Switzerland for a research fellowship followed by a PhD thesis in Neurosciences at the École Polytechnique Fédérale de Lausanne (2010) under the supervision of Prof. Hilal Lashuel. After a brief postdoctoral stay in the laboratory of Prof. Ruth Luthi-Carter, I moved to Canada and joined the laboratory of Prof. Michael Hayden at the Centre for Molecular Medicine and Therapeutics, University of British Columbia, Vancouver (2012).

An overriding theme of my research work has been to understand the molecular and cellular basis of amyloid neurotoxicity in Alzheimer's disease (AD) and identify targets for therapeutic interventions. To this end, I have actively participated in establishing research partnership with colleagues from academia and industry. Currently, I am working in the laboratory of Prof. Poul Sorensen on research projects related to the validation of novel neural pathways implicated in neurodegenerative diseases as well brain tumours for developing therapies for AD and potentially other degenerative diseases of the nervous system.

Outside work, I actively volunteer in not-for-profit events, organizing social meetups and travel.

**HILARY RACHER, PHD**

Clinical Instructor / Molecular Geneticist, BC
Children's Hospital & BC Women's Hospital

I completed my PhD in developmental genetics at the University of Calgary in 2010. The focus of my thesis was to investigate the genetic regulatory mechanisms controlling stem cell self-renewal and differentiation using the *C. elegans* germ line. In order to pursue my interests in human genetics, in 2011, I joined the Molecular Diagnostic Laboratory at the Alberta Children's Hospital where I began my Canadian College of Medical Geneticists (CCMG) Molecular Fellowship. During my fellowship, I explored the use of massively parallel sequencing as a strategy to uncover the genetic causes of some rare genetic conditions. Upon completion of my training in 2013, I joined the Vancouver Molecular Genetics Laboratory at the BC Children's and BC Women's Hospital as a Molecular Geneticist.

In my spare time, I enjoy jogging with my dog, yoga, tennis, skiing and gardening.

**NAGARAJAN (RAJ) KANNAN, PHD**

Mitacs Elevate Fellow
UBC/BC Cancer Agency

I obtained my BSc (Biochemistry) & MSc (Industrial Biotechnology) from India. I trained in radiobiology in Cancer Hospital in Bhopal, India, which treats victims of 1984 catastrophic Union Carbide's methylisocyanate-gas leakage. My interest in researching cancer began there. With an International Doctoral Fee Scholarship I trained in breast cancer biology and obtained

PhD (Molecular Medicine) at U of Auckland, New Zealand, where I studied how breast cancer cells resist endocrine therapy. My work contributed towards developing neutralizing antibodies against secreted peptides conferring drug resistance. I then pursued training, funded by Canadian Breast Cancer Foundation's postdoctoral fellowship, with stem cell expert Dr. Connie Eaves (UBC/BC Cancer Agency). We investigated mechanisms which controlled mutagenic ROS in human mammary stem and progenitors. I recently joined the Department of Pathology & Laboratory Medicine as a Mitacs Elevate Fellow (co-sponsored by STEMCELL Technologies) supervised by Dr. Eaves and Dr. Samuel Aparicio (UBC/BC Cancer Agency).

I spearhead an industry-academic research partnership. I am a law enthusiast and an ardent fan of South Indian classical music.

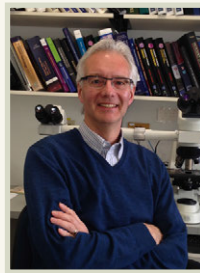


GIAN LUCA NEGRI, PHD

Postdoctoral Fellow
BC Cancer Agency

I completed my PhD in Bioinformatics and Systems Biology at the University College of Dublin, Ireland. Throughout my PhD I focused on the study of biological network topology and network dynamics through time and upon exposure to different conditions. In October I joined Dr. Poul Sorensen's lab at the BC Cancer Agency centre where I'm working on high-throughput data analysis and integration in pediatric tumour samples. My future goal is to apply proteomics techniques on cancer samples and develop the delicate process of connecting high-throughput data output to biological hypothesis generation and testing.

In my spare time I enjoy the outdoor activities that the beautiful Vancouver surroundings offer.



DAVID REICH, MD FRCP

Clinical Instructor,
Royal Columbian Hospital

After graduating from Medical School at the University of Calgary and an Internship in Victoria BC, I practiced as a Family Physician in Prince Rupert on the Northern Coast of BC. I then moved on to complete a General Pathology Residency at UBC. For the last 24 years I have been an Anatomical Pathologist with CJ Coady Associates and have worked in various hospitals within the Fraser Valley but primarily at Royal Columbian Hospital. My professional interests are non-Gyne cytopathology and Surgical pathology. I have also participated in medical missions to West and Southern Africa and I am interested in helping to improve the level of laboratory services in the Sub-Saharan Region.

When not at work, I can be found on the golf course, listening to jazz or reading a good book.



GRACE F. T. POON, PHD

Postdoctoral Research Fellow,
BC Cancer Research Centre

My fascination with the immune system began to develop while I was investigating the interaction between immune cells and a common carbohydrate hyaluronan, and its role during lung inflammation for my PhD project. After completing my PhD in the Department

of Microbiology and Immunology at UBC, I wanted to further expand the scope of my study to cancer immunology and was very fortunate to join Dr. Fumio Takei's lab at the BC Cancer Research Centre in 2013. My current project aims to elucidate the functional role of Group 2 Innate Lymphoid Cells (ILC2) in the development of breast cancer.

In my spare time, I enjoy travelling, hiking, and watching movies with friends.



JIM HUTCHINSON MD, FRCPC

Clinical Professor,
Medical Microbiologist, Medical Director -
Antimicrobial Stewardship Program
Vancouver Island Health Authority

I have recently relocated to Victoria, British Columbia working as a consultant medical microbiologist for Island Health and I am Medical Director of the new Antimicrobial Stewardship program. I am also affiliated with the Island Medical Program of the University of British Columbia. I received my MD from the University of Alberta in 1985 and completed Royal College training in Medical Microbiology in 1992. I spent 17 years at Memorial University of Newfoundland where I developed a large interest in the clinical epidemiology of infections.

My work centers on antibiotic utilization in hospital and the community locally, nationally and internationally. I am a past chair of the Canadian Committee on Antibiotic Resistance (CCAR) and am presently co-chair of the Antimicrobial Stewardship Working group of the International Society for Chemotherapy, the overarching body representing 80 professional societies of Infectious Diseases and Medical Microbiology. You can see what I am up to now at <http://infectionnet.org>.



**TRACY TUCKER, PHD FCCMG**

Clinical Assistant Professor,
Clinical Molecular Geneticist &
Cytogeneticist, Cancer Genetics Laboratory,
BC Cancer Agency

I finished my BSc in Biology at the University of Waterloo before moving to Vancouver to pursue graduate studies in Medical Genetics at UBC. During my PhD, I studied the origins of neurofibromas in a cancer predisposition disorder, NF1. I then went on to do a post-doctoral fellowship where I designed a targeted microarray to identify genetic causes of intellectual disability. I then pursued two Canadian College of Medical Genetics fellowships in Molecular Genetics and Cytogenetics at BC Children's & Women's Health Centre. I am currently a Clinical Molecular Geneticist and Cytogeneticist in the Cancer Genetics Laboratory. My main interest is implementation and validation of new technologies for clinical applications.

After work, I enjoy doing anything outside (biking, running and skiing) and spending time with family.

**CYDNEY NIELSEN, PHD**

Research Associate
BC Cancer Agency, Molecular Oncology

I obtained my PhD from the Department of Biology at the Massachusetts Institute of Technology in 2008. My dissertation focused on computational analyses to understand RNA level regulation. During that time, I

became very interested in building interactive visualization tools to facilitate the integration and interpretation of genomic data.

I pursued this interest as a CIHR and MSFHR postdoctoral fellow at the Michael Smith Genome Sciences Centre working primarily on epigenomics. As a Research Associate in Dr. Sohrab Shah's laboratory at the BC Cancer Research Centre, I am now tackling some of the challenges of integrating and visualizing a wealth of cancer genomics information.

**JAGBIR SINGH, PHD**

Postdoctoral Research Fellow
Experimental Therapeutics
BC Cancer Research Centre

I joined my postdoctoral position under the supervision of Dr. Marcel Bally to develop novel nanoparticle formulations to target metastatic breast cancer. I completed my PhD in Pharmaceutical Sciences in the College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon. During my PhD, I designed and developed liposomal nanoparticle formulations of plasmid DNA with novel amino acid-based cationic gemini surfactants. For my research, I received the 2012 Gattefossé Canada/CSPS Award in Lipid-Based Drug Delivery and won poster awards at the 17th and 19th Annual Life & Health Sciences Research Days, Saskatoon. I was supported by scholarships throughout my studies, including the Teacher Scholar Doctoral Fellowship, to design and deliver a course on pharmaceutical dosage form design.

I received my Bachelor's and Master's degrees in Pharmacy from Birla Institute of Technology and Science, Pilani, India. My research interests include nucleic acid-based therapeutics, targeted nanoparticle formulations, and stimuli-responsive drug delivery systems.

**MICHAEL A. SEIDMAN, MD PHD**

Cardiovascular Pathology Fellow
St. Paul's Hospital

I conducted undergraduate studies at Cornell University in molecular biology and biochemistry, including research in gene regulation with John Lis and the cell biology of gene therapy vectors with Ronald Crystal. Following university, I studied at the University of Cambridge, UK, as part of the Churchill Fellowship, with William Colledge, also in the field of gene therapy vector biology. I pursued my MD and PhD at Weill Cornell Medical College, completing my thesis with William Muller in the field of vascular biology. Most recently, my residency and clinical fellowship training were at Brigham & Women's Hospital and Harvard Medical School, where I focused on cardiovascular/pulmonary pathology and molecular genetic pathology.

Although I tend to work longer hours than are probably in my best interest, when out of the hospital I enjoy wine tasting and gaming (predominantly table-top role-playing games), and spending time with my wife, Lisa (also an American, and an expert in human subjects research protection and regulation), and my daughter, Juliana (born Canadian on 2 September 2013).

Arun K Garg, PhD, MD, FRCPC
Chair and President
Canada India Network Society

Canada India Networking
Initiative (CINI) June 2014 -
Organized by the Canada India
Network Society and co-hosted
by the Fraser Health Authority
and Simon Fraser University

The conference is designed with a theme of Health and Civil Society and includes sessions on Nursing and Allied Health training in Canada and India - Closing the Gap; Health-Technology-Economy, Innovation and Emerging Technology in Healthcare both in Canada and India; Primary Care Transformation and Innovation, Sharing of Recent Developments in BC and India and Yoga and Mental Health. All of these sessions will allow active participation by delegates with a focus on practical solutions to improve the health of the population. The conference will provide two days of programs which will not only build healthy communities and enhance South Asian health, but provide immense opportunity to build strong links between Canada and India.

A gala banquet is planned for June 20th. The registration fee for the full conference is \$300 +GST per person including the banquet on June 20th. Separate tickets for the Banquet are available for \$100 +GST per person.

Please contact Anna (anna@thecins.org) or myself (arun@thecins.org) for further information. Registration for the conference and further information is available on our website at www.thecins.org.



Congratulations to Dr. Blake Gilks, recipient of a prestigious UBC Killam Research Prize. The prize recognizes Dr. Gilks' outstanding research and scholarly contributions to his field and the UBC community.



COMING UP IN APRIL 2014

UBC Workspace Project Pilot

The anticipated launch of Workspace is April 2014. It will be available at no charge and will include 20GB of storage. More available at a nominal cost.

- What are the benefits of using the UBC Workspace compared to other cloud file sharing solutions such as Dropbox®, iCloud, and Google Drive?

The UBC Workspace is the first of its kind in Canada for a cloud storage solution that's tailored toward higher education. In addition to features such as file synchronization, UBC Workspace is hosted at UBC and meets UBC policy and BC legislative requirements. As we often deal with private and confidential information at UBC, it's important to consider a solution that provides the utmost security on information assets. More info available at <http://it.ubc.ca/projects/ubc-workspace-service>.



UNIVERSITY OF BRITISH COLUMBIA
Faculty of Medicine
Department of Pathology

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Next Issue - August 2014



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

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Current and back issues of all Newsletters can be found on
the Departmental Website:
<http://www.pathology.ubc.ca>