



RESEARCH

PROFILE

RECOGNITIONS

EDUCATION











a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA



CONTENTS

PATHOLOGY MAGAZINE









- 3 Departmental Reflections
- 5 Office Of Biobank Education And Research (OBER)
- 7 Faculty Awards And Recognitions
- 11 Study Shows Dramatic Link Between Cancer, High-Carb Diets
- 12 Pathology Day 2011
- 15 Promoting Pathology Amongst Med Students
- 16 Graduate Studies
- 20 Residency Training Program
- 24 Bachelor Of Medical Laboratory Science (BMLSc) Program
- 27 Tetralogy James C Hogg, Northern Lights, Summer Students, Crows
- 29 Identifying Miscarriage Genes
- 31 Clinical Microbiology Proficiency Testing's International Training Program Has Visitors From Kenya
- 32 Meet The People Of Pathology
- 34 The David Hardwick Pathology Learning Centre
- 39 Fishing Trip To Galiano Island
- 40 UBC Program Office For Laboratory Quality Management Hosts International Quality Weekend Workshop
- 41 Welcome New Faculty Members

DEPARTMENTAL REFLECTIONS

MICHAEL F ALLARD



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



The 2011 CTLT Summer Institute is made up of a series of workshops to help both new and experienced faculty members prepare for their classes. Topics range from refining a syllabus, to lesson planning, to incorporating active learning and reflective practices in your teaching.

Open to all members of the UBC Teaching Community.



activities span a broad spectrum of clinical, teaching and research fields of pathology and laboratory medicine as well as other aspects of biomedical science and medical practice.

Notably (and incredibly), these activities are distributed across the vast expanse of the province, the size of which is greater than the total area of Washington, Oregon, and California! As a consequence of this fact, a very significant challenge facing our department is how we stay connected with one another. Pathology News, the departmental newsletter, is one critical means by which we can connect and learn about the department, its programs, and, most importantly, its people.

This issue of the newsletter, like others before, not only provides snapshots of existing programs and how they are developing but also highlights new ones, such as the Office of Biobank Education and Research (OBER), that join our ever-changing range of departmental activities and programs. The success, growth and evolution of these departmental activities and programs depend entirely on the faculty, staff,

students, and trainees that populate, participate in, promote, and lead them and who serve as the foundational piece that enables them wherever they may occur. Given the significant roles they play in the academic mission of the department, it is vitally important for us as a community to learn about our colleagues and the unique aspects of their educational and scholarly pursuits as well as acknowledge their accomplishments. Of additional importance is the recognition that people in the department are much more than what we know of them at work.

Gaining an appreciation of the activities and accomplishments of people at or away from the workplace, their personal experiences, histories, and characteristics, and their perspectives on "life, the universe, and things" helps deepen our understanding of each other and further highlights the quality of people in our department. So, read on to learn about and realize the talent and value of some of the people and the programs made possible by the faculty, staff, students, and trainees of our geographically dispersed department.

We are pleased to announce the establishment of the Office of Biobank Education and Research (OBER) by the UBC Department of Pathology



OFFICE OF BIOBANK EDUCATION AND RESEARCH (OBER)

DR. PETER WATSON

We are pleased to announce the establishment of the Office of Biobank Education and Research (OBER) by the UBC Department of Pathology. The mission of this office is to provide support for BC biobanks through education on biospecimen science and communication of best practices and standards for biobanking, in order to advance translational health research in BC.

The overall objective of the office is to build on the existing expertise in biobanking in BC to establish an international centre of excellence in biobanking education and biospecimen based translational research and to facilitate biospecimen focused BC health research.

The Specific Goals are as follows:

- create and deliver education and training for a range of stakeholders involved in biobanking
- develop and deploy mechanisms to communicate common protocols, standards and policies for biobanking
- facilitate registration/certification of biobanks in coordination with provincial and national and international biobanking organizations
- promote establishment and maintenance of biobanks to support biospecimen based translational research in BC

BACKGROUND

Biobanks are an important conduit for transfer of biospecimens (tissues, blood, body fluids) and related health data to research. The 1990's saw the origins of the first formalized biobanks in BC and Canada, the 2000's saw the origins of the first frameworks to facilitate biobanking (eg CTRNet 2004, BCBL 2007) and growth of international societies and journals dedicated to biobanking (eg ISBER, Biopreservation and Biobanking) and now in the early 2010's we are establishing the first biobank education and training centre in Canada (OBER), capitalizing on the leadership in BC. But why are these frameworks, societies and centers necessary? The answer is that disease focused research biobanks have evolved outside of the historical source of many biospecimens, clinical pathology and laboratory medicine archives.

These research biobanks have developed advanced standards, protocols, databases, and mechanisms to interface with researchers seeking biospecimens. However, our current biobanks lack common standards, are limited in their capacity and ability to ensure quality in the face of increasing demand, and are relatively disconnected from donors limiting accrual capacity and endangering public confidence. One strategy to address these issues is to create a new framework that repatriates the activity of biospecimen accrual for biobanks to pathology and laboratory

medicine and at the same time improves the ability of biobanks and donors to connect with one another. In BC this is a key focus of the BC BioLibrary. Another strategy is to establish centers to communicate common standards and policies amongst biobanks and between biobanks and the public through education and training. This is a key focus for the OBER.

FACULTY AND STAFF AND CONTRIBUTORS

Dr. Peter Watson will provide leadership for the UBC Office of Biobank Research and Education. He is Director of the Tumor Tissue Repository Program at the BC Cancer Agency. He also holds appointments as the Chief Physician Vancouver Island Centre, Senior Scientist and a Professor of Pathology, University of British Columbia, and academic positions at the University of Victoria and University of Manitoba. He currently combines a clinical practice as a breast pathologist with research interests in the molecular pathology of breast and ovarian cancer, and in the discipline of biobanking.

His research program has included the discovery, validation, elucidation of the mechanism of action, and exploration of the therapeutic potential of the S100A7 gene in breast cancer. He also leads and coleads provincial and national biobanking initiatives to advance translational cancer research. These include the BC BioLibrary platform and the Canadian Tumor Repository Network. OBER staff along with Peter will include Lise Matzke (OBER project coordinator) and Sheila O'Donoghue (OBER Project Manager), and several contributors/analysts: Rebecca Barnes (certification analyst), Simon Dee (information technology analyst), Stephanie Cheah (Biolibrary

coordinator), and Sima Eshragh (Biolibrary pathologist analyst).

OBER project coordinator, Lise Matzke, has spent the past 10 years in human biological research with the past seven directly involved in biobanking and research coordination. Formerly manager of the James Hogg Research Centre (JHRC) Cardiovascular Biobank at St. Paul's Hospital, Lise has participated in technical, research and administrative aspects of tissue biobanking. The past three years, Lise taught biobanking and cardiac anatomy to high school students. She is a member of the International Society for Biological and Environmental Repositories (ISBER) Education and Training Committee. Prior to her work at JHRC, she worked various positions in forensics and archaeology including the RCMP.

OBER project manager Sheila O'Donoghue is also the project manager for the BC BioLibrary. She spent the previous fifteen years involved in clinical research. She was the Canadian coordinator for the Oxford University-sponsored of Heart and Renal Protection study. She has held various management roles in emergency, cardiology and nephrology research groups. She also spent two years working as a clinical trials consultant for medical device manufacturers.

UBC emails and telephones are being set up in the new office space. In the meantime queries related to the OBER office can be directed to Lise Matzke (lise.matzke@hli.ubc.ca) or Sheila O'Donoghue (sodonoghue@providencehealth.bc.ca), and information on related biobanking programs can be found at www.bcbiolibrary.ca and www.ctrnet.ca.

AWARDS AND RECOGNITIONS

AWARDS, HONORS, ACHIEVEMENTS, PROMOTIONS



DR. ARUN GARG

Congratulations to Dr. Arun Garg on receiving the **BC Medical Association's (BCMA) inaugural Dr. Don Rix Award** for
Physician Leadership. This award for exemplary physician
leadership recognizes lifetime achievement as the prime
requisite in determining the recipient. Dr. Garg has served
the medical profession and the BCMA in numerous capacities
over the years, including BCMA President, Board Chair,
Board Member, Chair of the Council on Health Economics
and Policy, and Co-Chair of the Guidelines and Protocol
Advisory Committee. Dr. Garg was also a member of the
CMA Board of Directors and chaired the CMA Council on
Policy and Economics. Dr. Garg has led groups in Health
Authorities, clinical faculty, business, trade, and philanthropic
organizations to name but a few. He has also been active in
clinical teaching and research and published several articles.



Now in its seventh year, the College's Award of Excellence Program is an annual peer recognition program that honours individual physicians who have made an exceptional contribution to the practice of medicine in teaching, research, clinical practice, administration or health advocacy. Dr. Don Rix Award for Physician Leadership Presented: July 2011

Dr. Garg obtained a PhD in Biochemistry from the University of Saskatchewan in 1970 and then received his MD degree from the University of British Columbia in 1977.
Dr. Garg became a certificant and fellow of the RCPSC in Medical Biochemistry and Clinical Pathology in 1980.

Dr. Arun Garg, College's Award of Excellence for 2011

Presented: May 25, 2011



DR. CALUM MACAULAY

Congratulations to Dr. Calum Macaulay, **Martha Piper Research Fund Award**, winner for the project: "Selective Excitation Light Fluorescence (SELF) and Gynecological Malianancies".

The program provides UBC faculty members with seed funding for collaborative research projects with an emphasis on interdisciplinary and international activities.

Dr. Calum MacAulay, Martha Piper Research Fund Award

Vancouver, Spring 2011



DR. MORRIS PUDEK

Dr. Morris Pudek is the recipient of the MUS 2011 Year 2 Teaching Excellence Award. The Year 2 Teaching Award is given annually to an individual demonstrating an excellence and dedication to teaching and a commitment to students. Congratulations!

Dr. Morris Pudek, The MUS 2011 Year 2 Teaching Excellence Award

Vancouver, Spring 2011

AWARDS, HONORS, ACHIEVEMENTS, PROMOTIONS

Dr. Amanda Bradley, 2011 Faculty of Medicine Distinguished Achievement Award, Excellence in Education

Vancouver, May 2011

DR. AMANDA BRADLEY

Congratulations to Dr. Amanda Bradley, Senior Instructor in the Department of Pathology and Laboratory Medicine, for taking home a Distinguished Acheivement Award from the UBC Faculty of Medicine in the category "Excellence in Education."



Dr. Torsten Nielsen, 2011 Faculty of Medicine Distinguished Achievement Award, Excellence in Clinical or

Vancouver, May 2011

Applied Research

DR. TORSTEN NIELSEN

In addition to the usual process for merit and outstanding academic performance awards and performance salary adjustment, the Dean wished to recognize individuals whose performance during an assessment year (April 1, 2010 to March 31, 2011) was particularly meritorious. Full time faculty members, including grant tenure and partner track appointees, have been selected at an annual meeting of Department Heads and School Director to receive an additional merit increase or outstanding academic performance as a Faculty of Medicine Distinguished Achievement Award (DAA). Dr. Torsten Nielsen was selected to receive the award for Excellence in Clinical or Applied Research. Congratulations!



Dr. Torsten Nielsen was also Awarded the Basic Science
Award from the 2011 Canadian Breast Cancer
Symposium for his work on "Practical Biomarkers for
Aggressive Breast Cancer" and is co-investigator on
two grants recently funded by the Canadian Breast
Cancer Foundation: "Clinical Testing for Basal-like Breast
Cancers" (with Blake Gilks and John Garratt from VGH)
and "Concordance and Clinical Utility Study of PAM50 in
Comparison to Immunhistochemical (IHC) Assessment of
Estrogen Receptor Negative and Low to Moderate Positive
Stage I-III Breast Cancer" (with Drs. Stephen Chia, Malcolm
Hayes and Tom Thomson from BCCA).

Dr. Torsten Nielsen, Basic Science Award from the 2011 Canadian Breast Cancer Symposium

Spring 2011

Dr. Aly Karsan, Genome BC's Personalized Medicine Program

Vancouver, July 2011

DR. ALY KARSAN

Genome BC's Personalized Medicine Program has funded applied genomics research project "Genomics Applied to the Management of Acute Myeloid Leukemia (AML)" led by Dr. Aly Karsan, Medical Director of the Cancer Genetics Laboratory at the BC Cancer Agency and Dr. Marco Marra, Director of the Genome Sciences Centre. Genome BC and the BC Cancer Foundation are contributing \$1 million each to the AML project. Additional co-funding is provided through other sources including Simon Fraser University and Illumina.



ACADEMIC & CLINICAL PROMOTIONS

Congratulations to the following individuals on their academic and clinical promotions effective July 1, 2011:

- Jason Ford to Associate Professor
- Jay Kizhakkedathu to Associate Professor
- Sylvie Champagne to Clinical Associate Professor
- Katherine Chipperfield to Clinical Associate Professor
- Patrick Doyle to Clinical Professor
- Christopher Dunham to Clinical Associate Professor
- Monika Hudoba de Badyn to Clinical Associate Professor
- Magdalena Martinka to Clinical Professor
- Susan Porter to Clinical Professor
- Marc Romney to Clinical Associate Professor

2011 UNIVERSITY-WIDE NEW FACULTY & STAFF WELCOME ORIENTATION

To Register: http://www.events.ctlt.ubc.ca

To support your transition to UBC, we are pleased to invite you to attend a University-Wide Welcome Orientation on Tuesday, **August 30, 2011.**



ACADEMIC GOWNS RECEPTION

The Dean is pleased to host this annual event where faculty members promoted to the ranks of Professor or Clinical Professor in the previous academic year are recognized. Each awardee is presented with an academic gown by the Dean and his/her Department Head or School Director.

Professor and Clinical Professor 2011 Honourees

- Nigel Ball to Clinical Professor
- Wan Lam to Professor



Dr. Jiri Frohlich, Dr. Nigel Ball, Dr. Gavin Stuart
Pathology Magazine | July 2011

AWARDS, HONORS, ACHIEVEMENTS, PROMOTIONS

Michael Noble wins Canadian Standards Association Award of Merit 2011

Dr. Michael Noble was one of 12 Canadians awarded the Canadian Standards Association's Award of Merit at their Annual General Meeting held this year at the Empress Hotel in Victoria. The award was in recognition of "visionary leadership, renowned expertise and dedication to



the development and advancement of medical laboratory standards".

Dr. Noble has worked with the Canadian Standards Association for the last 15 years during which time he founded

the CSA Technical Committee CSA/TC Z252 Medical Laboratory Quality Systems, and has chaired the Canadian Advisory Committee to Standards Council of Canada (SCC) on the activities of the International Organization for Standardization (ISO) Technical Committee TC212 Clinical laboratory testing and in vitro diagnostic test systems.

Through the CSA and ISO he has participated in the development of 23 international standards and 4 national standards, and has co-authored and authored two books on guiding implementation of the international standard ISO15189:2007 Requirements for Quality and Competence in the Medical Laboratory.

He currently has stepped down from the position of vice-Chair of the TC Z252 and serves as the vice-Chair and acting Chair of the CSA Strategic Steering Committee for Healthcare and Safety.

SELECTED DIRECTOR, UBC PATHOLOGY EDUCATION CENTRE



Dr. Maria Issa, Clinical Associate Professor, Department of Pathology Pathology Education Centre. Maria Gyongyossy-Issa is a "seasoned" member of the department who has long enjoyed teaching students of all levels: from kindergarten to PhD students and residents. Though

she started in Microbiology at UBC, Maria went on to London, UK, to complete a PhD in immunology with Ivan Roitt that resulted in the first description of antigen receptors on T cells. Maria skied in Switzerland

and in France while doing biochemistry (complement) and blood (apoptosis), then moved to Saskatchewan to and Laboratory Medicine at UBC has work on the biological warfare agent: T2 toxin. Finally, been selected as Director of the UBC in Vancouver, Maria raised a family while working on platelets with Canadian Blood Services, then the Centre for Blood Research at UBC. In between, she mounted courses for Douglas College, taught biochemistry for Canadian International Development Agency (CIDA) in Indonesia, created Science World's "Opening the Doors" science networking program, taught Summer Science to Northern youth and fell in love with Problem-basesd Learning (PBL) for medical students. As a Black Belt instructor, Maria also teaches TaeKwonDo for UBC Recreation. Her motto is Emmanuel Kant's dictum, "Dare to find out!"

STUDY SHOWS DRAMATIC LINK BETWEEN CANCER, HIGH-CARB DIETS

DR. GERRY KRYSTAL

THE VANCOUVER SUN WED JUN 15, 2011 BY: Denise Ryan



Dr. Gerald Krystal, PhD
Senior Scientist, Terry Fox Laboratory
Terry Fox Cancer Research Scientist of the
NCI
Professor, Pathology & Laboratory
Medicine, University of British Columbia
(UBC)
Member, Experimental Medicine,
University of British Columbia (UBC)
Member, Genetics, University of British
Columbia (UBC)



VANCOUVER — It's another blow for the bagel and the baguette: a new study shows a dramatic link between highcarb diets and the growth and spread of cancerous tumours in mice.

"It's possible that by simply changing our diet to a low-carb, low-fat, high protein diet, we can starve the cancer by eliminating the glucose the tumours need to grow," said Dr. Gerry Krystal, the research scientist at the BC Cancer Agency who authored the study along with Dr. Victor Ho. Krystal and his team fed one group of mice a typical Western diet, and another group of mice a high-protein, low carb diet.

"On the Western diet, half of the mice had tumours by middle age. On the low-carb diet, none of the mice had the tumours."

Krystal said the mice used in the experiment were genetically pre-disposed to breast cancer, and had a normal life expectancy of two years. About 70 per cent of the mice on the Western diet developed cancer by the time they died, compared with 30 per cent of those on the low-carb diet.

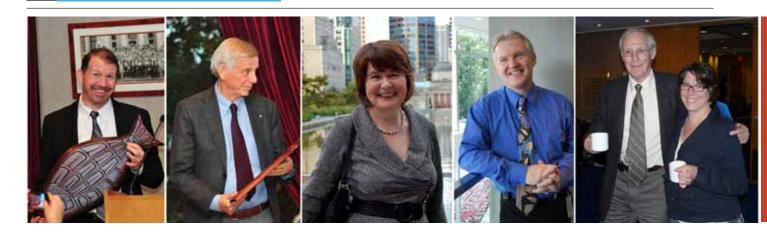
"Only one of the mice on the Western diet reached a normal lifespan, and half of the other mice reached or exceeded the expected lifespan." The mice on the Western diet ate 55 per cent carbs, 23 per cent protein, and 22 per cent fat. Mice on the low-carb, high-protein diet ate 15 per cent carbs, 25 per cent fat and 60 per cent protein.

Krystal said he was intrigued by the fact that, although the researcher "kept the diets the same number of calories, the mice on the Western diet gained a lot of weight." Although the study hasn't yet been conducted on humans, the link between growth of cancer cells and glucose has long been known, said Krystal. Carbs, whether complex or simple, convert quickly to glucose in the bloodstream.

"It's yet another indicator that a higher protein, lower carb diet will reduce not just the incidence but the growth rate of cancer."

In another finding, Krystal said the low-carb, high-protein diet is even more effective when combined with a Cox-2 inhibitor (a non-steroid anti-inflammatory), or Aspirin or Motrin. Krystal said that he has made significant changes in his own diet since seeing the results of the research.

"I would like to see people go up to 35 per cent protein," said Krystal. To boost protein without increasing fat levels, he drinks whey protein mixed with water. Any dietary changes people can make to lower carb levels and increase protein, without increasing fats, would have a beneficial effect, said Krystal. "Avoid things that are white — white pasta, white potatoes. They are just starch." Anyone with Type One or Type Two diabetes should consult their physician before making any dietary changes, cautioned Krystal. The study will appear in the July issue of Cancer Research.

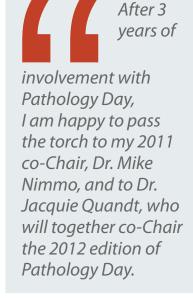


PATHOLOGY DAY 2011:

Celebrating Together

DR. HÉLÈNE CÔTÉ

This year, Pathology Day took place at the Sheraton Wall Centre followed by a reception at the Vancouver Law Court Inn. Our James Hogg lecture on COPD was given by Dr. James Hogg himself while our Keynote speaker, Dr. Dario Vignali, elegantly demystified "Immune regulation, T-regs and inhibitory receptors" for the audience. With two concurrent oral sessions each counting 12 speakers and more than 40 posters presented, this was once more a great occasion to witness the breadth of research taking place in our department. I know the students and residents really appreciate this opportunity to exchange with each other and most importantly, with faculty members.







In addition to Hayley Spencer who received the Dukovitch Graduate Student Seminar award for the best GSS presentation as judged by her peers, the following trainees were recognized for their excellent presentations at Pathology Day this year:

THE RESIDENT ORAL PRESENTATION AWARD WINNERS ARE:

1st Place: Anna Lee "Loss of BAF250a (ARID1A) is frequent in high-grade endometrial carcinomas"

2nd place: Tyler Smith "Using evidence and expert consensus to clarify the clinical confusion surrounding heritable thrombophilia testing"

3rd place: Titus Wong "Community and hospital rates of group B streptococcus resistance to penicillin, erythromycin and clindamycin in Vancouver, Canada"

THE GRADUATE ORAL PRESENTATION AWARD WINNERS ARE:

1st place(tie): Clara Westwell-Roper and Kevin Yang:

Clara Westwell-Roper "Blockade of interleukin-1 signalling improves human islet amyloid polypeptide-induced pancreatic islet graft dysfunction"

Kevin Yang "Small molecules to inhibit prostate cancer proliferation by targeting androgen receptor"

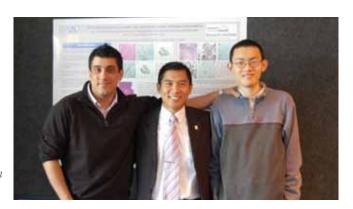
3rd place: Jennifer Choo "An immunohistochemical survey of biomarkers for basal-like breast cancer against a gene expression profile gold standard"

THE POSTER PRESENTATION AWARD WINNERS ARE:

1st Place: Jasmine Hamilton "Novel macromolecular iron chelators: an innovative approach to the treatment of transfusion associated iron overload"

2nd place: L. Apel-Sarid "Non-immune hydrops fetalis in Vancouver: are we different?"

3rd place: Amanda Vanden Hoek "Identification of a novel coagulation factor X compound heterozygous mutation associated with differential initiating clotting pathway function"





At the reception at the Law Courts Inn, more than 120 of us got the chance to mingle on the patio and enjoy the company of colleagues we may rarely see given the geographic diversity of our members. During the reception, the following faculty and staff were recognized with awards for their respective contributions to our department:

FACULTY RECOGNITION AWARDS:

Dr. Haydn Pritchard: Most Valuable Player

Dr. David Walker: David Hardwick Lifetime Achievement

Dr. Jayachandran Kizhakkedathu: Excellence in Research and Discovery

Dr. Carol Park & Dr. Morris Pudek: Excellence in Education

Dr. Katherine Chipperfield: Excellence in Service

Ms. Sabine Hutchinson: Staff Service Award in the Technologist/Technician Category

Mr. John Garratt: Staff Service Award in the Administration Category

After 3 years of involvement with Pathology Day, I am happy to pass the torch to my 2011 co-Chair, Dr. Mike Nimmo, and to Dr. Jacquie Quandt, who will together co-Chair the 2012 edition of Pathology Day. I wish them great success and would like to encourage all faculty members to participate in Pathology Day; the event's success mostly depends on you.

See you all at Pathology Day May 25, 2012!

Hélène Côté, PhD



















PROMOTING PATHOLOGY AMONGST MED STUDENTS

DIANA DIAO & LAWRENCE LEE



From left to right: Lawrence Lee, Dr. Michael Allard, Dr. Michael Nimmo, Diana Diao

The 2010-11 academic year was a highly successful inaugural year for the Pathology Student Interest Group (PSIG). The PSIG is a student run organization whose objective is to promote Pathology as a postgraduate specialty amongst undergraduate medical students and to give students in Vancouver and the distributed programs the opportunity to connect with Pathologists. Although the PSIG is only one year old it has already been a great success with over 70 members.

With the help of the UBC Department of Pathology, the PSIG has hosted three popular speaker events at the Medical Student and Alumni Centre (MSAC). Moreover, thanks to videoconferencing technology, students from the Victoria and Prince George campuses were able to participate. In addition to hosting information sessions at the MSAC, the PSIG has also connected several of its members with the Pathology Summer Studentship

At the first event "Pathology Revealed", Drs. Mike Allard, Jason Ford, and Mike Nimmo spoke to an audience of roughly fifty interested students and answered numerous questions about what it means to be a Pathologist.

Our second event "Research in Pathology", aimed at highlighting the breadth of research opportunities in Pathology. Keen medical students had an opportunity to meet with leading researchers including Drs. Blake Gilks, Mike Allard, and Rusung Tan, and to arrange future research projects in Pathology.

At our third event"Pathology CaRMS and Residency Night", enthusiastic medical students filled the room to learn about the Pathology residency program at UBC not only from the residency program director but also from junior and senior Pathology residents.

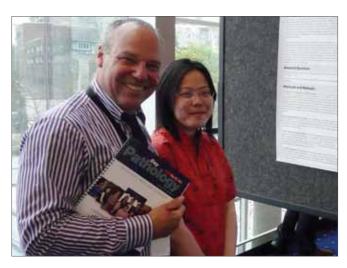
Program where they have the opportunity to participate in groundbreaking research.

Encouraged by the success of our first year, the PSIG plans to continue its activities in the 2011-2012 academic year. One of our projects for next year includes creating a list of Pathologists who would be willing to have undergraduate medical students shadow them to further their interest in Pathology. If you wish to contribute to the PSIG or have any suggestions, please feel free to email us at pathology.ubc@gmail.com.

Diana Diao & Lawrence Lee PSIG Co-Chairs, UBC Medicine Class of 2012

GRADUATE STUDIES

DR. HAYDN PRITCHARD





(L) Farrah Rooney (R) Aleya Abdulla

Administrative Updates

This summer we said goodbye to our Program Assistant, Farrah Rooney. After nearly two years in her position, Farrah is moving on to a new and exciting career opportunity in the not-for-profit sector. During her short time with us, she was able to:

- Prepare a comprehensive operations manual for all aspects of Graduate Studies in our Department;
- Redesign all of our office and administrative systems to enhance productivity and clarity for you all;
- Develop a comprehensive student-focused electronic tracking and support system database;
- Lead the relocation of the Graduate Student office to the new Pathology Education Centre at VGH;
- Develop and maintain outstanding relationships with the Faculty of Graduate Studies and other Departments; and;
- Play a central role in establishing our program as the "gold standard" in Graduate Program administration.

Cleary, we will all miss her but her legacy will be strong and will enable our program to continue to help you all navigate the complexities of Graduate Studies.

As a transition position, we have been fortunate to recruit Aleya Abdulla as a temporary Program Assistant until a permanent replacement for Farrah can be identified. She has adapted easily to our processes and our culture, and has already developed a great working relationship with students and supervisors alike. Welcome Aleya!

The Graduate Studies program has had another successful year and we have graduated many outstanding scientists with PhD degrees (see table). Across the program, both students and supervisors have worked hard, especially in these early summer months, to ensure that all the students participate in their annual progress meetings and complete their comprehensive exams before the deadline. Lastly, just a reminder that our office is now located in the Pathology Education Centre at VGH (Jim Pattison Pavilion North, Room 3200).

Recent Graduates

Name	Program	Thesis title	Supervisor	Where are they now?
I-Fang Lee	PhD	The role of natural killer cells in autoimmune diabetes	Rusung Tan	PDF Surgery, UBC
Darrell Bessette	PhD	The role of the protein tyrosine phosphatase PRL-3 in regulating cell signaling in cancerous and non-cancerous cell lines	Catherine Pallen	Biotechnology Business Development Consultant, Australia
Guang Gao	PhD	Role of the ubiquitin/proteasome system in coxsackievirus induced-myocarditis	Honglin Luo	Manager, Olimax Scientific Development, Richmond BC
Peter Schutz	PhD	Neuroprotective effects of ketone bodies during hypoglycemia	Sylvia Stockler- Ipsiroglu	PGY2 in Neuropathology, UBC
Pei-Shan Wang	PhD	The role of protein tyrosine phosphatase alpha (PTPalpha) in oligodendrocyte development and CNS myelination	Catherine Pallen	Commencing Postdoc at the Stowers Institute for Medical Research in Kansas City, USA in September 2011
Angela Burleigh	PhD	Regulatory mechanisms governing mammary epithelial and progenitor cell growth	Samuel Aparicio	MD Undergraduate program, UBC
Maite Verreault	PhD	Improving treatment outcomes in models of glioblastoma cancer	Marcel Bally	PDF, Brain and Bone Marrow Institute, Paris, France
Brian Wong	PhD	Vascular endothelial growth factor-induced permeability in the pathogenesis of cardiac allograft vasculopathy	Bruce McManus	PPDF, VIB Vesalius Research Center, Leuven, Belgium
Kate Potter	PhD	The role of islet amyloid and chop in islet graft dysfunction and failure	Bruce Verchere	Returning to MD Undergraduate program, UBC
Amanda Vanden Hoek	PhD	Novel function of clotting factor Xa: Conversion of factor Xa into a clot-dissolving cofactor	Ed Pryzdial	PDF, Life Sciences Center, UBC
lbrahim Mustafa	PhD	The crisis of iron in transfusion medicine: improved iron chelation therapy and its implications for clinical practice in the maldives	Mark Scott	See student spotlight!

Student Spotlight – Ibrahim Mustafa



In May 2011, Ibrahim was awarded the Top Clinical Science Abstract at the Canadian Society for Transfusion Medicine annual meeting in Toronto, in which all national leading representatives in transfusion

medicine gather to discuss novel and innovative advances across the discipline. Ibrahim gave a well-received presentation on improved high molecular weight iron-chelation therapy in thalassemia, and his work addresses the unique needs of developing nations such as the Maldive Islands - Ibrahim's homeland. As the Maldives has one of the highest global rates of thalassemia, they will benefit greatly by the effective, inexpensive and non-toxic chelation that Ibrahim's research focuses on. Ibrahim has recently defended his PhD thesis.

Naturally, he enjoys science research and is presently considering postdoctoral possibilities, ultimately aiming to go back to the Maldives to explore problems highlighted in his research. He aims to translate his research into clinical practice, and would also like to perform collaborative research with UBC other institutes.



Back Row (L-R): Haydn Pritchard, Paul Hiebert, Gurmeet Sohi, Mark Sze, Jonathan Han, Michael Bround, Vincent Montoya, Horace Wei; Front Row (L-R): Hayley Spencer-Hiebert, Chansonette Harvard, Chris Pascoe, Lisa Ang, Kevin Yang



Beyond the lab: A PALM-initiated graduate student soccer team

HAYLEY SPENCER-HIEBERT

Collaboration and teamwork are undeniably important aspects to any successful academic endeavor. From establishing working relationships with the lab down the hall, to trans-continental, multi-centre research projects, the ability to network with other scientists is paramount in our field... and speaking of fields, the ability to play well together on the soccer pitch is equally critical to a team's ultimate success and to this new initiative for our Department.

Team captain **Chansonette Harvard** led the formation of the Inflammatory Markers, one of the 8 teams to constitute the UBC GSS Summer Soccer League. Our team wears the PALM brand and the majority of the 'Markers' are Pathology Graduate students. The addition of several colleagues from other graduate programs rounds out the group. We were coached in pre-season practice by team member and Graduate Advisor, **Dr. Haydn Pritchard**, who also secured some

sponsorship funds to help with the our team jerseys. These are emblazoned with a soccer science logo, designed by defenseman **Michael Bround**.

The Inflammatory Markers participate in this competitive yet fun event that has brought together students from multiple programs and has provided opportunities to play together — even for those who have never played soccer before! The team has done well — largely through the efforts of rookie Goalkeeper Paul Hiebert and top goal scorers Vincent Montoya, Jaques Courtade, and Momir Bosiljcic. Apart from having an immense amount of fun romping around on the pitch and staying in shape, playing in the GSS soccer league provides a less anticipated benefit: the opportunity to network with students in related areas of research.

Vincent reflects that "...in all honesty many of our conversations dwell on science and our current experiments. (That is, when we aren't cheering for our teammates or offering 'constructive







Close-up of Inflammatory Markers jersey logo

The Inflammatory Markers

criticism' for the opposing team)." **Momir** similarly notes that today's teammates could easily be tomorrow's co-authors. "These relationships foster cooperative work or collaboration years later, based on the initial friendships made on this team."

And, particularly for our flung-far-and-wide Pathology graduate students, **Jaques** may have stated the specific advantages best when he said, "[being on this team] has helped me to meet contacts within the Pathology department that do not necessarily work in my building. In the future, having these contacts may open up the possibility work on collaborative projects."

An opportunity exists for winter league intramural play. We are sure there are several aspiring or accomplished players in our Department – let us know if you want to join in. Any Residents want to join us? Email Chans at: chansybad@gmail.com.

Captain: Chans Harvard

Coach/Player: Haydn Pritchard

Goalkeeper: Paul Hiebert

Players: Lisa Ang, Momir Bosiljcic, Micheal Bround, Jaques Courtade, Jonathan Han, Bryant Harbourne, Dana Kyluik, Vincent Montoya, Chris Pascoe, Hayley Spencer-Hiebert, Sophie Stukas, Marc Sze, Sarah White

Alternates: Paul Hanson, Gurmeet Sohi, Horace Wei, Kevin Yang

RESIDENCY TRAINING PROGRAM

CAROLYN V. MILL





AP/GP PGY3 Residents: Jason Morin, Patrick Wong, Tareq Mohammad, Ananta Gurung, Erin Chapman



HP Program Director Monika Hudoba and Clinical Associate Professor

UBC Pathology Residents' Graduation Dinner

MONDAY JUNE 20, 2011 | ROYAL VANCOUVER YACHT CLUB

A ceremony and dinner for our 2011 pathology graduates was held on a beautiful summer's evening at the Vancouver Royal Yacht Club on Jericho Beach. For the 3rd year residents, faculty and

staff were celebrated in style, with a west coast seafood buffet and some pretty hilarious toasting of the grads. Teaching awards were presented to various faculty for their contribution to the program

in recognition of their excellence and inspiration. Residents chose Morris Pudek (MB), Bakul Dalal (HP), Sylvie Champagne (MM), Doug Webber (AP/GP), and Ian Mackenzie (NP).



After entering the General Pathology residency program at UBC, I saw the light and switched into hematopathology, which I have found to be incredibly satisfying both personally and intellectually.

Tyler Smith - Hematopathology













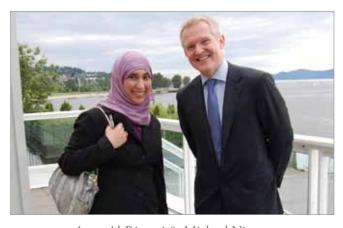








Diana Ionescu & David Schaeffer



Arwa Al-Riyami & Michael Nimmo



2011 Graduates

Fang-I Lu - Anatomical Pathology



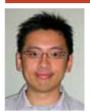
Plans for the future Comments

2006- McGill University, Faculty of Medicine directly after CEGEP

Memorial Sloan Kettering Cancer Center (New York) for 1-year Breast Pathology Fellowship

I'd like to thank all the pathologists for their guidance and support throughout the years and to thank Grace and Carolyn for being my unofficial "moms". See you all at next year's USCAP in Vancouver

Kennard Tan - Medical Microbiology



2006- University of Alberta; Didn't do very well. In fact did so bad that they preferred to graduate me than to let me repeat another year. UBC MM has done the same thing

Plans for the future Going to bum around on the Eastern US. Maybe live off his beautiful wife

Comments

Warning to other grads: the techs gossip quite a lot about the residents

RESIDENCY PROGAM

2011 GRADUATES CONT'D

Tyler Smith - Hematopathology



BSc with a major in Biochemistry at University of Victoria, where I also completed the co-operative education program with molecular biology research terms at facilities such as the Terry Fox Lab and Merck Frosst in Montreal. Medical school at UBC where I met my future wife Karolina. After entering the General Pathology residency program at UBC, I saw the light and switched into hematopathology, which I have found to be incredibly satisfying both personally and intellectually.

Plans for the future

Starting July, I look forward to commencing a two year fellowship in thrombosis and hemostasis here at VGH under Dr. Agnes Lee that will be a mixture of clinical and laboratory hematology, epidemiology, and research.

Comments:

Karolina, our daughter Mila, and our dog Toli are happy to have me back now that my licensing exam is behind me.

David Schaeffer – Anatomical Pathology



2003- MD/PhD Johannes Gutenberg University of Mainz, Germany

Plans for the future GI Fellowship - Mount Sinai Toronto

_

Comments Happily married to a newly certified Psychiatrist

Arwa Al-Riyami – Hematopathology



Graduate from Sultan Qaboos University in Oman. Completed B.Sc. (Health Sciences) degree with a grade of "Distinction" on 2002. Completed MD degree on 2005. Completed a year of Internship in Oman, 2006. College awards: Four University Outstanding Academic Performance Awards 1998-2002. Eight Dean's B.Sc. Honor List Certificate Awards 1998-2004. Honored the S.Q.U Academic Distinguished students Annual trip award to Asia in 2001. Two university awards for organizing the 4th Scientific Conference for Medical Students, as a head for the research evaluation committee, 2006. Joined hematopathology Residency program, UBC, 2007-2011. Chief resident 2010. 2nd Best oral presentation award, Pathology day May, 2010.

Plans for the future

Heading back to Oman to start career in Hematopathology at the Sultan Qaboos University Hospital. Aiming to pursue further degrees to meet interests in the field of Transfusion Medicine.

Elaine Willman - General Pathology

Plans for the future



2005- Graduated from Med School in 2005 - University of British Columbia

Neuropath at UCSF until residency completed July 31, 2011 and then continue research in PSA (procedural sedation and analgesia). Would like to spend time with family and rock climb until a job is secured.

PHYSICIAN'S MANAGEMENT INSTITUTE

(PMI) COURSE ON 'SELF AWARENESS AND EFFECTIVE LEADERSHIP" JUNE 2011

The Pathology Residency program once again organized a CME accredited learning activity provided by Physician's Management Institute (PMI) on 'Self Awareness and Effective Leadership". This 3 day course ran from June 21 – 23, 2011 in the Cypress Room at Holiday Inn Vancouver Centre.

The course is part of the program's approach to meeting some of the non-medical expert CanMEDS competencies and was therefore, mandatory for all PGY2s and above (optional to PGY1s). This was an extremely beneficial course for all attendees as they

learned more about themselves and their peers, and how to effectively communicate with those of different temperaments. Along with the residents and some faculty, the program directors for Hematopathology (Monika Hudoba) and Medical Microbiology (Patrick Doyle) also attended. Dr. Doyle was most instrumental in getting the PMI courses into the residency program as he spearheaded its inclusion in the residents' core training. This year was a complete success; while last year's course was 'Conflict Management' with the hugely popular Janice Stein. We can't wait to see what's on the menu for next year, so register early!

Alaa Samkari – Neuropathology



Comments

Medical school, King Abdul-Aziz University, Jeddah, Saudi Arabia, 2000; Anatomical Pathology, FRCPC, McMaster University, 2008; Molecular Pathology fellowship, McMaster University, 2009

My dear father with me for the whole period of training 8 years, Whatever I did and accomplished is because of help of God and then him. God bless him for me. Whatever I will do for him will not return any minor thing from what he did for me.

Ahmad J. Al-Sarraf - Medical Biochemistry



I graduated from Arabian Gulf University in 1999, then I joined Mubarek Hospital; which is one of the teaching hospitals in Kuwait. I was a surgeon and urologist for 5 years but for family reason I decided to switch gears and join the medical biochemistry residency program. I don't have any regrets. Before my royal college exam, I passed the American Board of Clinical Lipidology exam and officially became a lipidologist.

Plans for the future

To improve my lab back home and obtain an international accreditation. I also want to open a lipid clinic to apply and follow Dr.Frohlich's vision.

Comments

I would like to thank my family especially my wife, my kids and parents for their support and encouragement.











BACHELOR OF MEDICAL LABORATORY SCIENCE (BMLSc) PROGRAM

DR. CAROL PARK & JOANNE WOUTERSE

FAREWELLS AND THANKS TO...



MR. CRAIG SMITH
who retired in 2010, taught the
Laboratory Safety section of
Pathology 306 for 21 years and was
the Course Coordinator since 2004.





DR. MARION COULTER-MACKIE for her 15 years teaching the Carbohydrates section of Pathology 301.



DR. MARTIN PETRIC
has taught the virology section of
Pathology 327 for the last 8 years.
Although he retired in 2010, we
are grateful that he has offered to
continue to share his expertise with
the BMLSc students.

Students commented:

"A very good and well organized lecturer... Stimulated thinking during the lectures by asking questions and keeping everyone engaged... I'm definitely more aware of lab safety and the actions needed when exposed to risks..."

Students commented: "Interesting topics...Good emphasis on what we need to know...I love the anecdotes/historical information - it helps me remember!"

Students commented:
"Dr. Coulter-Mackie is very
knowledgeable... Information
was kept straight forward, simple
and within our scope..."

Students commented: "I found the lectures very engaging... A very interesting course taught by a very stimulating professor... Anecdotes are very interesting... Well organized lecture."

NEW FACES IN THE BMLSc TEACHING FACULTY...

MR. BRUCE ANDERSON

Manager, Occupational and Research Safety, will be taking over the role of Course Coordinator of Pathology 306

DR. COLBY ZAPH

Assistant Professor, will be taking over the Pathology 301 Lipid lectures

DR. GRAHAM SINCLAIR

Clinical Assistant Professor, will be taking over the Path 301 Carbohydrate lectures



2011 GRADUATES

This year eighteen students received their BMLSc degrees in May, bringing the total number of program graduates to 432.

At the Awards Tea, held on May 24 in the lobby of The Woodward Instructional Resources Centre the following students were recognized for their outstanding academic achievements:



VICTOR LIU

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



JUDY CHIU

received the B.J. Twaites Prize in Laboratory Administration, awarded to the student with the highest standing in Laboratory Administration.



RYAN BREDIN

The Eugenie Phyllis and Philip Edward Reid Prize in Morphological Sciences for academic excellence in histology, histochemistry and microscopy was awarded to Ryan Bredin.



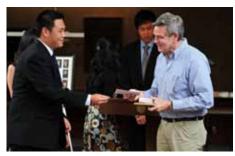
ADRIAN FUNG

The William J. Godolphin Prize was awarded to Adrian Fung, who demonstrated excellence in critical thinking.



ADRIAN FUNG & VICTOR LIU

were jointly awarded the Prize for Best Presentation in the Pathology 405 Seminar Course.



GRADUATES' CHOICE FOR TEACHING EXCELLENCE AWARDS

The graduates recognized the following instructors, who each received a BMLSc Graduates' Choice for Teaching Excellence Award: Dr. Mark Scott (at right), Dr. Carol Park and Dr. Morris Pudek.



THE REID MEMORIAL CUP

This award recognizes a Faculty or Staff member who has made an outstanding contribution to the experience of the BMLSc students. This year's recipient is Dr. David Walker. Dr. Walker has been a dedicated supporter of students in the Program since he began teaching the microscopy course in 1983. He generously shares his enthusiasm for morphological sciences with the students and has graciously hosted the student potluck dinner at his home for the past 16 years.

Congratulations to our 2011 BMLSc Graduates and award recipients!

TETRALOGY – JAMES C HOGG, NORTHERN LIGHTS, SUMMER STUDENTS, CROWS

DR. BRUCE MCMANUS



They seek, they learn and discover, they see early lights in Northern skies, they are superb scientists.

James C Hogg was just a kid from the Southern prairies who liked hockey and respected his parents. He was just a kid who, like all good Canadian kids, learned to work for the simple joy of the hunt. He was just a young scholar who pursued science because he loved asking and answering questions. He was just a guy who believed that the science of human ailments began with knowing the pathology. He was just a young faculty member who listened well to mentors and teachers, then reached further.

He was just an adventurer who unknowingly became a pioneer in his own land, moving to unknowns. He brought his passion and positivity to a laboratory in the far West where history would be built. He had a vision for what was possible, always including others, bringing them along, growing them too. He attracted great people with whom

to work, staff, students, advanced trainees, and talented faculty. He grew the science, and the marriage of structure and function became a thread for many to explore.

His way of thinking put him beyond the rest, somewhere above, with a unique and powerful prescience. His early insight sparked – that small airways may be a key to chronic obstructive pulmonary disease. His belief set on fire a new direction to be chased, pursued, and sought unrelentingly by many a peer. His own work and that of others would surely show in time that, yes, the airways play a crucial role. His work was a beginning for works that parsed





TETRALOGY CONT'D

epithelium, muscle, inflammation, viruses and more. He never let any level of visibility or recognition alter a crucial sense of humility and sane perspective. He always understood that the journey of discovery is simply worth it for its own sake, to learn, to know. He also knew that ignorance we have about the complexity of systems would challenge our best efforts. He taught others about patient persistence, about whole-hearted investment in processes of inquiry. He forever has conducted science with honour, joy, equanimity, clarity, fairness and raw ingenuity.

Northern lights have man-made enemies, glaring city lights that obscure sparkling galactic grandeur. When we escape the garish glare of artificial light, depths of fiery skies cut through ever so brilliantly. Among wonders of summer nights, colours of the aurora borealis are the most dramatic and enigmatic. They challenge our senses, stretch our hearts, and reach a romantic crescendo like few natural wonders. The aurora amplifies its beauty in summer, slinging a panoramic spectacle across the upper atmosphere.

Evening astronomical splendor over our heads is rivaled each summer by a vital hoard of rising stars. These stars choose our Centre for research, for mentoring, for learning, for tasty noon time hot dogs. The brightness of these young folks pushes a fresh and vibrant breeze into the Centre, lifting all of us. The summer's contingent of energetic, curious souls reminds us of our own remote starts in research. Urging new ideas, fostering a streak of insight that otherwise would not have emerged in the busy-ness.

Yes, youth impacts thinking and doing, exciting our discovery, bringing true novelty to scientific inquiry. Thanks to all of the students who chose to shine here this summer, in a laboratory created by Dr. Hogg. And thanks to all the able mentors who have well chosen a wave of stars to light up our scientific souls. Another appreciation is due to the staff who shepherd the nascent Einstein's in their boisterous journey. No star would fly so very, very high were it not for donations, taxes, and learning values of our culture.

Crows can fly without donations

and taxes, and yet they are learners, ruling skies in noisy belligerence. Oh I knew crows early in my rural time, I saw their sharp personalities, their rather. omnipotent patrols. In my academic vagrancy, traveling from city to city, country to country, I almost forgot about crows. For sure, they were there, with their intelligence, from grasslands, to mountains, to coasts, east or west. They reveled in windy days, in blowing leaves, in the chaos of a stormy, electric day of thunderous rain.

Since living in Kitsilano ('Xats'alanexw', Khatsahlano), I have come to know well Vancouver city crows. Their disdain for humans, their relentless chorus of "caws", their legendary spite, all are widely known. They are pre-eminent on tips of pines and maples, in scrums for food on vacant lots, on busy roadsides. They guard their young with ferocity, swooping to "attack" when unwitting pedestrians pass too close. Yet they are stars, aspiring in eerie blackness, with keen sight, cautious paranoia, assembled murders.

IDENTIFYING MISCARRIAGE GENES

DR. EVICA RAJCAN-SEPAROVIC

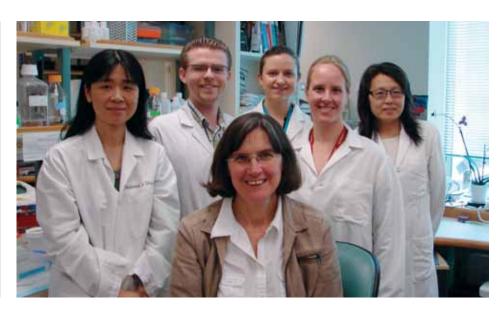
The major focus of Dr Separovic's research laboratory is the chromosomal etiology of human diseases. One particular area of our interest is reproductive pathology and the identification of new genetic causes of unexplained pregnancy loss using whole genome array screening. This study, funded by CIHR, and recently featured at the CIHR web site (http://www.cihr-irsc. gc.ca/e/43150.html), involves an international team of clinicians and scientists from Canada, USA and Austria.

Pregnancy loss is a significant health concern as 15 percent of clinically recognized pregnancies end in miscarriage, with the highest rate in the first trimester. Although finding the cause of pregnancy loss is essential for prognosis, recurrence risk counseling, and the management of all future pregnancies, the cause remains unknown in 30-50 percent of all cases. Our studies, recently published in Human Reproduction and Molecular Human Reproduction, were performed on sporadic and recurrent miscarriages, with detailed clinical evaluation of the miscarriage and the couple. This included state of the art embryoscopy investigations and documentation of the morphological abnormalities in

human embryos. The application of the new genomic array technology showed that very tiny chromosome changes, previously not described and undetectable by routine chromosome analysis, occur in 30 percent of miscarriages.

Some of these changes include genes relevant for pregnancy development such as those involved in placenta function/ development and stress response. In addition, our studies revealed that these tiny chromosomal abnormalities may also occur in couples with a history of recurrent pregnancy loss and may represent predisposing genetic factors for recurrent pregnancy loss.

For some infertile couples, the problem isn't getting pregnant, it's staying pregnant. Unexplained repeated miscarriages can leave many couples not knowing where to turn.



Members of Dr Separovic's lab who participate(ed) in this study

In addition to the identification of new genetic causes of miscarriage, the CIHR study will allow us to determine if the function of the genes affected by these small chromosomal rearrangements is altered at the RNA, protein and DNA sequence level. The benefit of our study is that costly multiple testing and searching for causes of miscarriage can be eliminated for couples found to carry or transmit the candidate miscarriage genes to their pregnancies. The better understanding of

genetic factors that contribute to pregnancy loss will pave the path for their future prevention and treatment and facilitate optimal care for reproductive health of families wishing to have a successful future pregnancy.

Members of Dr Separovic's lab who participate(ed) in this study: Jiadi Wen, Christine Tyson, Sally Martell, Chansonette Harvard, Ying Qiao, Celina Fawcett, Kristina Calli, Byron Brook.

HELPFUL INFO GALLERY

UBCBound!

DR. MARIA GYONGYOSSY-ISSA

TRY THIS LINK:

http://www.med.ubc.ca/research/st_postdocs/rcrec.htm

This leads to a series of presentations from a wonderful course, run through the Faculty of Medicine, called "Responsible Conduct of Research." Although this course is geared for graduate students, others further up the totem pole would also find much of interest. The course doesn't provide pat answers, rather it raises questions that we have all asked at one time, but have forgotten to revisit in the flurry of other activities. This course reminds us that it is worth questioning our own principles, motivations, behaviours and that there is no such thing as a simple answer... to anything.

PIs can direct their teams' attention to a range of useful related information through the grad students' handbook – also on the FoM website:

http://www.grad.ubc.ca/handbook-graduate-supervision/research-ethics-guide-graduate-students

...and since this has found us on the topic of "ethics," the Office of Research Services provides help, courses and a wide range of information to support applications for ethical review.

HUMAN ETHICAL REVIEW | UBC Office of Research Ethics (http://www.ors.ubc.ca/ethics/home)

Ethical review, and the details required may seem onerous, but if approached with the attitude that clear communication is the shortest route to success, the process is educational and brings us full circle – to step back and question the whys and wherefores of the work we do and how we do it because, ultimately: Tuum est!

CLINICAL MICROBIOLOGY PROFICIENCY TESTING'S INTERNATIONAL TRAINING PROGRAM HAS VISITORS FROM KENYA

DR. MICHAEL A. NOBLE



Stephen Munene (L) and Martin Matu (R

UBC Department of Pathology and Laboratory Medicine's Clinical Microbiology Proficiency Testing (CMPT) program has for many years been a mentor for other PT programs around the world. This year two technologists, Stephen Munene (L) and Martin Matu (R) joined us from the African Medical Research Foundation (AMREF) laboratory in Nairobi Kenya. They were sponsored by AMREF Canada, an international office for AMREF in Toronto.

The AMREF program provides samples for medical laboratories in a number of countries including Kenya, Tanzania, Uganda, and Ethiopia and South Africa. Their program is largely microscopy based and so our gram stain program is a perfect fit for them.

East Africa in particular is going through an active process of promoting and developing better medical laboratories through improved Quality systems, including proficiency testing as both an education and quality assessment and improvement measure. It is funded through sponsors within Africa and through its network of international offices, and through a special sponsor in Japan.

This was not CMPT's first experience in providing education and mentoring for international programs. Over the last 10 years we have put on training programs for Thailand, Zimbabwe, South Africa (twice), Belgium, China (twice), and Oman, with sponsorship coming from the US and from WHO. The process is fully consistent with our policy that it is better for us to assist countries by training their laboratories to set up their own programs rather than going through the challenges of transport of dangerous goods, customs, couriers, package integrity and insulation, and sample decay which would result from sending our sending fresh microbiology samples to these regions.

CMPT staff including Esther Kwok, Caleb Lee, Suhanya Bhuvanendran, The AMREF program provides
samples
for medical
laboratories
in a number
of countries
including Kenya, Tanzania,
Uganda, and Ethiopia
and South Africa.

and Veronica Restelli and Program Office for Laboratory Quality Management (POLQM) coordinator Maggie Ma all participate in this training program. In addition we are able to have them tour the laboratories of Vancouver General Hospital and BC Centre for Disease Control, so this is a program with input throughout our Department.

This year, in addition to having the two week training session our visitors were able to attend the POLQM Quality Weekend Workshop held in Vancouver. The director of the AMREF Clinical Laboratory and Research Program, Dr. Jane Carter was also able to attend and give a presentation at the conference about their program and opportunities that exist for Quality oriented programs through AMREF. CMPT is currently in discussions with two new countries for 2012 and 2013.

MEET THE PEOPLE OF PATHOLOGY

DR. MURRAY L. SAVARD



Department of Labs Kelowna General Hospital 2268 Pandosy St Kelowna BC V1Y 1T2 Canada After five years I am now the KGH site Director and the central Okanagan Health Service Area Department Head and hope that we, as a team, can make these laboratories the best that they can be.

I grew up in Edmonton Alberta, in a time when it was the "city of champions". I knew that I wanted to be a doctor when I was six years old. Hunting and fishing with my father stirred an interest in comparative anatomy within me. The summer before entering university I asked a clerk at the U of A bookstore for the "biggest, fattest medical textbook" to read when I went up North along the McKenzie river to build oil tanks for a summer job. She produced the purple Robbins and I actually read it through that summer. There was no other Medical school that I wanted to be at other than the U of A. I was the proud recipient of the John James Owen Gold medal in Pathology and earned my MD with distinction.

I met my lifelong soulmate Debby when we were fifteen years old and we wed in second year medicine during reading week. I joined the Canadian military in order to contribute financially to make ends meet. There was a four year commitment to serve which turned into twenty. We moved to West Germany as I served as an artillery regimental medical officer, flight surgeon for F-18 fighter jet pilots and was a diving physician for diving operations. I spent two years each in unaccredited residency positions in General Surgery and Obstetrics and

Gynecology serving military dependents in Lahr. We returned to Canada and I successfully completed a General Pathology residency in Vancouver. I finished my career with the military as Chief of Laboratories of the Canadian Armed Forces at National Defence Medical Center in Ottawa.

I initially stayed in Ottawa as Laboratory Director for Gamma Dynacare Laboratories of Eastern Ontario and was on staff at Queensway Carelton and Ottawa General Hospitals. I was recruited back to Alberta where I spent the better part of nine years with a number of former UBC Pathology Grads. I always practiced true general pathology and developed a love for Microbiology and was infection control officer whilst in David Thompson Health Region.

Moving to Kelowna has been a challenge on many levels for me. After five years I am now the KGH site Director and the Central Okanagan Health Service Area Department Head and hope that we, as a team, can make these laboratories the best that they can be. Our medical school opens its door this year and we are all excited about conntributing to medical students' education.

I am an avid cytclist. I cycle to work daily (1.5 hr round trip) and have two Rocky mountain treks under my belt and a few bike races. We ski as many weekends at Big White in the winter and boat as many days on the Okanagan lake in the summer as possible. I would love to write a book someday about a little adventure I had in Somalia. I dabble with the

guitar on ocassion. I have two sons in Edmonton and one in Kelowna. The latter just got married in Mexico. My moto is live every day like it is your last.

DR. SAVARD: ONLY HONEST ANSWERS

INTERVIEW

WHERE DID YOU GROW UP AND WHAT WAS IT LIKE THERE? Edmonton. It was a cold, barren wasteland but the people were spectacular.

WHAT THINGS DO YOU FIND YOURSELF DOING THAT YOU SAID YOU'D "NEVER" DO"?

Administration!

HOW HAS YOUR LIFE BEEN DIFFERENT THAN WHAT YOU'D IMAGINED?

I never ended up a multimillionaire rockstar.

NAME ONE THING YOU MISS ABOUT BEING A KID? 90% of your day is playtime.

WHAT'S YOUR FAVORITE SONG OF THE MOMENT? Almost anything by ACDC.

WAS THERE A PERSON IN YOUR CAREER WHO REALLY MADE A DIFFERENCE?

Dr. David Dawson, previous lab director in Red Deer, directed the best laboratory I have ever been a part of.

WHAT WAS THE BEST PIECE OF ADVICE YOU EVER GOT? Don't take yourself too seriously because no one else does!

WHAT CAN YOU TELL US ABOUT COMPUTERS? Don't buy a meditech system!

OUTSIDE OF THE CLASSES REQUIRED FOR YOUR MAJOR, WHAT WAS YOUR FAVORITE CLASS AND WHY?

Organic chemistry was fun because they almost put a context to how a chemical reaction was discovered and it was easier to learn.

WHY DO YOU THINK CHARLES CHAPLIN IS FAMOUS? How old do you think I am....who is Charles Chaplin?

DO YOU SPEAK WITH YOUR DOG/CAT?

I had kids so I didn't need pets. Yes, I talk to my kids.

WHICH IS YOUR FAVORITE LANGUAGE OTHER THAN YOUR NATIVE LANGUAGE?

Habla espanol?

THE DAVID HARDWICK PATHOLOGY LEARNING CENTRE - OUTREACH UPDATE





Contact: Helen Dyck: TEL: 604 875 5117 E-MAIL: hdyck@pathology.ubc.ca

LOCATION: 2nd floor Diamond Health Care Centre

FACILITIES: 4 computer stations; small library; videoconferencing/presentation area; study space

COLLECTIONS:

The William Boyd Museum;
The BC Children's Hospital
Congenital Heart Defect
Collection; The Betty Poland
Embryo-Fetal Collection,
Portions of the William Thurlbeck
Emphysema Research Collection.

SPECIMEN LENDING PROCEDURE

Specimens may be borrowed short term for teaching purposes. Contact Helen Dyck if you wish to borrow specimens. You may borrow pre selected sets: (Lung, Liver) or you can browse the collection for specimens that will suit your topic. A form is filled out with your contact information and which specimens were borrowed. There is no cost unless you break the Plexiglas case.

VIRTUAL COLLECTIONS ACCESS

Website: http://spectrum.med.ubc.ca/pathology

User ID: dhplc | Password: hardwick

Categories:

Cases: Diseases that have grouped gross, micro, xray, ct images

Specimens: Images from the William Boyd

Museum

Slides: Aperio scanned slides

Note: it is best to download the free Aperio ImageScope software to view the files

VOLUNTEER OPPORTUNITIES

We currently have a number of Graduate and BMLSc student volunteers that help in a number of areas:.

- Photographing Gross Specimens
- Maintenance of Specimens
- Database entry for the Congenital Heart Collection
- Cataloguing the William Thurlbeck Emphysema Research Collection
- Workshop development and delivery



OUTREACH ACTIVITIES

The outreach activities of the David Hardwick Pathology Learning Centre started as a continuation of the work that Dr. Jenny Davis did with schools when the William Boyd Museum was located on the 3rd floor of VGH. She had set up several sets of lungs that teachers could borrow and conducted talks for schools who were interested in coming in to see a range of specimens. These activities were incorporated into the planning of the space in the Diamond Health Care Centre leading to the development of a presentation and videoconferencing area. Enquiries continued to come in regarding borrowing specimens and tours so our outreach program has grown out of this interest from the community and health professionals who wish to educate others.

SPECIMEN LENDING

We have an ongoing program where Plexiglas mounted specimens are borrowed by individuals or groups who are interested in taking specimens into schools and other community settings. The specimens have traveled around the lower mainland visiting elementary and secondary schools and have gone as far as Prince George as part of a project to help motivate students to continue with their education.

One of most popular sets of specimens is the Lung set which consists of a normal lung slice, and emphysema lung slice and a lung cancer slice. This set, along with a liver set showing fatty liver, sclerosis, and cancer, have been used as aids in public health outreach by the UBC Student Health when they hold talks in the dorms about the consequences of smoking and drinking.

We frequently collaborate with instructors from various institutions in the lower mainland, in particular with the Langara Nursing Program, lending them specimens to illustrate their lectures.

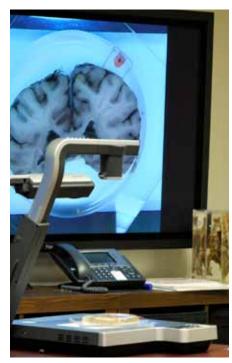
TOURS

Our tour is based on the organization of the William Boyd Museum and the way diseases processes are classified. Examples are shown from the various categories, with a very brief explanation of what the process is and how it compromises the function of the organ. Specimens are passed around and the group is encouraged to ask questions and share their experiences. After the talk the participants are able to browse and ask questions about the specimens on display. The specimens have a short clinical history and findings card which we are beginning to supplement with information cards about the disease produced by our Path 500 students.

There are several secondary schools in the lower mainland that bring their Grade 12 Biology classes every year for a tour and some have developed specific assignments for the students to complete while at the centre.

Enquiries
continued
to come in
regarding
borrowing specimens
and tours so our
outreach program has
grown out of this interest
from the community and
health professionals who
wish to educate others.





Neuro-corner

Presentation-area

The tours have also become part of the curriculum for several courses not only in our department (Path 500, BMLSc) but also for the Langara Nursing School Pathology course. We are also one of the places that nursing students from BCIT, UBC and Langara come to when they are doing rotations at VGH.

The students on rotations find it helpful to see what the disease impact on the organ can be when they are dealing with patients.

WORKSHOPS

The idea of holding workshops in schools rose out of a desire to promote the centre as a resource for secondary schools, especially for Grade 12 Biology when they cover the human body systems. This spring we were invited by Dr. Niamh Kelly to be part of an Art and Science pilot project at Gladstone which focused on the cardiovascular system. David Lin, a PhD graduate student, and I spent two days visiting 5 science classes and getting the students to make observations about

various diseases that affect the cardiovascular system and refining our ideas for what a workshop would entail.

David then approached the Canadian Heart and Stroke Foundation to see if we could conduct the workshop for their grade 11 summer student program. We held this workshop on July 12th with a very positive response. (See infographic figure for a synopsis.)

We are looking forward to develop more of these workshops, which combine student stations where the students examine specimens and share their observations with the group with a short talk about what is occurring with the specimens and the consequence to the person with the disease.

ONLINE RESOURCES

Dr. David Hardwick's vision for the Pathology Learning Centre included the dissemination of pathology educational materials through the internet so that it would be available to all. We serve as a hosting service for various educational materials that being produced by members of the department as well as hosting various virtual collections.

Book Hosting

- Essentials of Cytology Series
 - Dr. Gia-Khanh Nguyen has put together a series of illustrated monographs for practicing pathologists and cytotechnologists to serve as a refresher and as references. These have been gratefully received by those practicing in other countries who have fewer educational resources available to them. There are currently 4 books posted with one in process and another being written.
- Hematopathology Atlas
 - Dr. Jason Ford and Sophia Wong put together an atlas of teaching slide cases in haematology that links cases with Aperio scanned slides. Each case in the Atlas consists of a concise patient history, corresponding CBC findings and other pertinent laboratory data, as well as digitized slide(s) of peripheral blood smears, bone marrow aspirates/biopsies, lymph node biopsies, and/or other relevant histological tissues. One is allowed to work through the case and then view annotations on the slides and the discussion document.
- BCCA Cervical Cytology ThinPrep Digital Teaching Set
 BCCA Pathologists Drs. Diana Ionescu, Greg Naus and
 Dirk Van Niekerk developed a set of 45 cervical cytology
 Thin Prep cases. After reviewing the Aperio scanned

slide you can click on the "What is the diagnosis" link to see the Interpretation/Result based on the latest Bethesda system guidelines for reporting cervical cytology.

VIRTUAL COLLECTIONS

Several of our departmental collections have been digitized and put on our website in the Aperio Spectrum database. These resources are available to anyone who wishes to use them for educational purposes. This is a work in progress and has received a lot of support from our volunteers over the years.

The William Boyd collection is slowly getting online and can be found under the specimens section of the database. You can further sort by organ system and disease classification.

There are two departmental slide sets that have been digitized: The Path425 slide set that was used when Pathology was a distinct course in the medical undergraduate curriculum and is now used by the Path500 students for the pathology slides. In addition the Path304 slide set is being used to show normal histology for Path500 and by the instructors in Path304. We also have a variety of slides that have been scanned and used in the medical undergraduate curriculum and by residents in ophthalmology.



Dr. Peter
Cheung, a
Research
Associate for
the BC Centre for Excellence
in HIV/AIDS, has been the
honorary lead for arranging
this fishing trip every year
since 2007. This would be
my second time on the
trip, and it was every bit
as good as the first. I went
for the first time in 2009
with my daughter, who
couldn't wait to come back.







FISHING TRIP TO GALIANO ISLAND

DR. MUHAMMAD MORSHED

Deep sea fishing? Charter Sea cruising? Whale watching? Picnic on a fishing boat? Yes, all of them came together as a package for our team on May 24th. Dr. Peter Cheung, a Research Associate for the BC Centre for Excellence in HIV/AIDS, has been the honorary lead for arranging this fishing trip every year since 2007. This would be my second time on the trip, and it was every bit as good as the first. I went for the first time in 2009 with my daughter, who couldn't wait to come back. But in 2010, the fishing trip fell days before her wedding, and this year, she's in India for a Master's practicum. So I took the next best thing, my son-in-law Asif. What better way to interrogate a new son-in-law, than putting him on a boat where he can't escape?

I am usually fashionably late for any occasion, but somehow on the day of the fishing trip, Asif and I arrived there 2 minutes earlier than scheduled time (7:00 am). But within the next five minutes, all the other parties arrived. All of us (4 staff from BCCDC including me, 2 from St Paul's Hospital, 1 from SFU, 1 from Stem Cell Technologist and 1 Architect) got very excited, took a few

pictures, paid for the fishing license and around 7:30 am we headed towards sea with an appetite for adventure (and shrimp)!

The Captain, George, was an experienced fisherman, and briefed us what to expect and how to behave on the boat. The first part of the trip was dedicated to puling out 8 prawn traps and 4 crab traps, which were laid the night before. The catches from these traps are usually steamed for lunch – my favorite part. During my 2009 trip, we caught over 40 crab and over 20 pounds of spot prawns. But this time, luck was not in our favor, we caught 7 crabs and ONE spot prawn. Everyone took turn to take picture of that lucky spot prawns and then took turns refusing to eat it out of politeness. I however, wasn't born with the politeness gene, so I ended up eating the lucky prawn (but shared half with another lucky crew member!)

Then we headed out towards the fishing destination. It was close to Galiano Island, a famous spot for Lingcod and Rock cod. We thought our luck had changed; each of us caught few Lingcod fish! But we

had to release most of them because of the size restriction. Regardless, the feeling of hooking the fish and struggling to bring them on the boat was electric and indescribable. Once you have experienced this thrill, sea will draw you back every year. Jonathan from my lab (BCCDC) caught the most (8) but released them all back to the sea. Yin (BCCDC) was the luckiest and caught a giant lingcod (16.7lbs), which was later prepared for dinner in a fancy downtown restaurant.

As we were nearing the end of our trip, the Captain received a message through his radio that a pod of killer whales were found a few kilometers further down to where we were fishing. George kindly offered to show us the killer whale pod if anyone was interested. The vote was unanimous, everyone pulled out all of their fishing rods and we headed straight for the pod. After 20 minutes of a very bumpy and speedy boat ride, we caught up to the whales. They were gorgeous; I believe we saw four of them in total. Everyone took lots of pictures, but Min-Kuang Lee from BCCDC took the most, as usual. It was a great end to an already memorable trip. We came back to Stevenson wharf around 3:30 PM and headed home. It was another amazing experience, and I can't wait to come back next year.

UBC PROGRAM OFFICE FOR LABORATORY QUALITY MANAGEMENT HOSTS INTERNATIONAL QUALITY WEEKEND WORKSHOP

DR. MICHAEL NOBLE













Dr. Michael Noble and the POLQM staff hosted a very successful Quality Weekend Workshop in June 2011. About 60 people participated in the program. The conference had two main themes, including Quality Partnerships and the Growing Opportunities in Laboratory Quality. Speakers came from our own department, from across Canada and the United States and from Europe and Africa, presenting much of the most current views in medical laboratory quality. In total there were 12 individual presentations and three break out sessions. Some of the highlighted speakers including Dr. Michael Astion presented on the impact of Human Resources on laboratory quality and Jane Carter talked about the evolution of the African Medical Research Foundation from is origins as the first "Flying Doctor Program" as it grew to providing international assistance in medical laboratory quality. Dr. Denise Dudzinski gave a unique perspective on the ethical logic path for addressing the dilemma of adverse event

reporting with medical laboratory errors that involve many patients. And Dr. Elisabeth Dequeker talked about the European EQA program for monitoring the quality of the tumor marker KRAS. The Keynote presentation was by Dr. David F Hardwick on the Medical Laboratory – Past, Present and Future.

One of the participants, Sheryl Thiessen, was the prize winner for her achievement in the POLQM Certificate Course in Laboratory Quality Management and gave a presentation on the pros and cons of on-line quality education.

Exit surveying of participant satisfaction ranked very high (4.8 on a 5 point scale), and was strongly supportive of POLQM making the Quality Weekend Workshop a regular event on the international Quality calendar. Discussions are underway for planning our next workshop, perhaps in 2012.

ANNOUNCEMENT



The International Society of Blood Transfusion announced at its 2011 meeting in Lisbon that the next editor-in-chief of its journal, Vox Sanguinis, will be Dr. Dana Devine. Her editorship will begin with volume 102 of the journal.





In October 2011 Dr. Paula J Waters will be moving to Sherbrooke, Quebec, to take up a new position as Director of the Biochemical Genetics Laboratory at CHUS - Centre Hospitalier Universitaire de Sherbrooke.

WELCOME NEW FACULTY MEMBERS



DR. RASHMI GUPTAI

Dr. Rashmi Guptal did her PhD in molecular microbiology from All India Institute of Medical Sciences, New Delhi. For her PhD thesis, she worked on molecular detection and characterization of Pneumocystis jirovecii from patients with a clinical diagnosis of PCP in India. Before PhD, Dr. Guptal worked on B cell responses to heat killed S. pneumoniae and also on molecular detection of CMV. At present she is working in the lab of Dr. Rusung Tan at Child and Family Research Institute (CFRI) as a Postdoctoral Fellow. Dr. Tan's lab is interested in studying the function of immune cells, including cytotoxic T lymphocytes, natural killer and natural killer T cells in two diseases, type 1 diabetes and X-linked lymphoproliferative disease. Dr. Guptal research interests are host pathogen interaction and innate immune responses to infectious agents. She is currently working on innate immune responses to EBV infection.

Postdoctoral Fellow, working in the lab of Dr. Rusung Tan at Child and Family Research Institute (CFRI)



DR. CLARISSA FAUTH

Dr. Clarissa Fauth completed her medical training at the University of Calgary. She did her residency in Anatomic Pathology in Calgary as well. This was followed by a fellowship in Pediatric Pathology at the Seattle Children's Hospital with the University of Washington. She is very excited to be working at the Children's and Women's Health Centre in Vancouver. She enjoys all aspects of pediatric and fetal pathology. She particularly enjoys teaching, and passing along her enthusiasm for pathology and pediatric pathology.

Clinical Instructor, Children's and Women's Health Centre - Division of Anatomical Pathology

WELCOME NEW FACULTY MEMBERS CONT'D



DR. MICHAEL SUTHERLAND

Dr. Michael Sutherland received his PhD from the University of Ottawa, Department of Biochemistry, Microbiology and Immunology in 2003. Since then, Michael has been working with Dr Ed Pryzdial as a Senior Research Assistant with Canadian Blood Services at the UBC Center for Blood Research. The focus of Michael's research is the manipulation of the coagulation system by enveloped viruses. This has lead to identification of novel pathways to initiate coagulation directly on the virus surface facilitated by both normal blood proteins and proteins encoded by the virus genome. These pathways not only contribute to the risk of vascular pathology, but the clotting enzymes the virus has evolved to activate enhance the susceptibility of host cells to infection.

Honorary Lecturer, Canadian Blood Services, Centre for Blood Research



DR. JIADI WEN

Dr. Jiadi Wen received her MD degree in Beijing, China in 1993, and completed her PhD at the Department of OB/GYN, UBC in Dec. 2010. Her PhD studies have demonstrated that ADAMTS gene family of metalloproteinases play critical role in endometrial physiology and pathology. Dr. Wen's current research focus is to study new genetic causes underlying miscarriage that are not detectable with conventional cytogenetic analysis. It will therefore identify new families with genetic predisposition to recurrent pregnancy loss, facilitate more accurate genetic and reproductive counselling and assisted reproductive planning by early pre-implantation diagnosis of pregnancies carrying culprit genes.

In addition to research and academic activities, she enjoys reading and spending time with my family.

Postdoctoral Research Fellow, Department of Pathology and Laboratory Medicine, UBC, Supervisor: Dr. Evica Rajcan-Separovic



DR. GERRY JAMES

Dr. Gerry James graduated from UBC with a B.Sc. in cell biology. He attended medical school at UBC and graduated in 1992. After completing a rotating internship at St. Paul's Hospital in Vancouver and one year of general practice, he returned to UBC to complete his residency in general pathology. Dr. James has worked as a general pathologist at Royal Inland Hospital in Kamloops, BC since 1998. His laboratory subspecialty interests include hematopathology and transfusion medicine and he is currently the Area Department Head for Pathology and Laboratory Medicine in Interior Health West. He is looking forward to teaching medical students in the new UBC Southern Medical Program.

Clinical Instructor Royal Inland Hospital, Kamloops



DR. ALEKSANDRA STEFANOVIC

Dr. Aleksandra Stefanovic obtained her MD and completed her residency in internal medicine at University of Ottawa. Pursuing her interests in global health and cultural diversity in health care, she spent a year of her training in Central and South America. She returned to the west coast to complete fellowships in infectious diseases and medical microbiology at UBC. She is thrilled to be working as a medical microbiologist at Vancouver General Hospital where she hopes to pursue her interests in transplant infectious diseases, medical education, and infection prevention and control.

Clinical Instructor,
Division of Medical
Microbiology &
Infection Control, JPPN



DR. ALICIA TONE

Dr. Alicia Tone completed her PhD in Laboratory Medicine and Pathobiology at the University of Toronto in 2010. She recently joined Dr. David Huntsman's lab as a Postdoctoral Fellow, working in collaboration with the OvCaRe (Ovarian Cancer Research) team. Previous and current work focuses on the study of pre-cancerous lesions and identifying early events in the development of specific subtypes of ovarian carcinoma, with an emphasis on the potential role of aberrant inflammatory signaling.

Postdoctoral Research Fellow, BC Cancer Agency, Supervisor: Dr. David Huntsman



DR. DAVID YANG

Dr. David Yang joined Prof. Brooks' lab in April as a Postdoctoral Fellow. In 2008, he received the Ph.D in polymer chemistry and physics at Sun Yat-Sen University in China. Between 2008 and 2010, he conducted research at University of Wisconsin-Milwaukee in USA as a Postdoctoral Fellow. Dr. Yang's focuses on developing novel multifunctional polymeric nanocarriers for active targeted anticancer drug delivery and ultrasensitive imaging systems. His research interests include novel multifunctional nanomicelles, vesicles and other non-viral vectors for targeted drug and gene/siRNA delivery to malignant cancerous cells and tumor angiogenic endothelial cells, ultrasensitive MRI- and PET- nanoprobes for guided drug/gene/siRNA delivery and diagnosis of tumor angiogenesis and progression, synthetic methodology of supramolecular devices for delivery purpose.

Postdoctoral Research Fellow, Centre for Blood Research, Supervisor: Dr. Donald Brooks



DR. MOHAMMAD MAHMUDUR RAHMAN

Dr. Mohammad Mahmudur Rahman is a Visiting Associate Professor being mentored by Professor J. L. Wright at the Department of Pathology and Laboratory Medicine at UBC. Born and raised in Bangladesh, Dr. Rahman received his DVM degree in 2000 from Bangladesh Agricultural University, where he currently holds an Associate Professor position. Dr. Rahman received his MSc. degree in 2006 from department of Anaesthesiology, Pharmacology and Therapeutics at UBC, where he investigated the effects of cigarette smoking in vasculature of animal model. In 2010, Dr. Rahman obtained his PhD degree from University of Bath, UK. His PhD work focussed on the role of voltage-gated potassium channels in the contractility of pulmonary artery in normoxic and hypoxic conditions in rat and mouse models. His current work at UBC department of Pathology and Laboratory Medicine involves investigation of the pathophysiology of cigarette smoking in guinea pig models.

Visiting Associate Professor, Mentored by Professor J. L. Wright at the Department of Pathology and Laboratory Medicine at UBC Hospital



UNIVERSITY OF BRITISH COLUMBIA Faculty of Medicine Department of Pathology

G227 - 2211 Wesbrook Mall Vancouver, BC V6T 2B5

Next Issue - January 2012



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

Editors: Maureen Barfoot Debbie Bertanjoli

Publisher: Debbie Bertanjoli

Email: dbertanjoli@pathology.ubc.ca

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