Department bids farewell to Prof. Hegele
In early December the Department hosted a party to honour and thank Dr. Richard Hegele for his nineteen years of service at UBC. On January 1, 2009 Dr. Richard Hegele assumed the position of the Head of the Department of Pathology, University of Toronto.

We wish Dr. Hegele the very best in his new role.
As I prepare to begin my new position at the University of Toronto, I would like to thank all of you who have expressed such kind words and good wishes. For this message, rather than providing a laundry list of accomplishments (and things still to do) during my time as Head of the UBC Department of Pathology and Laboratory Medicine, I would like to use this opportunity to reflect on some key aspects of our Department that make us well positioned to meet future challenges as a thriving academic unit. One cannot help but be impressed by the diversity of the Department: there is virtually no area in our research and education portfolios that does not have a shining example of innovation and leadership locally, provincially, nationally and internationally. At the risk of degenerating into cliché, it truly is the people of the Department, at all levels and types of activity, who allow this to happen. There are of course two sides to this coin: with such diversity, issues like communication to such a wide range of interests across multiple locations, and promoting a sense of belonging within our academic home can be very challenging. From my perspective, if one is able to experience ongoing personal and professional growth from being part of the Department, then the Department is doing its job.

A second point I would like to emphasize is the role of our students and trainees. Instead of being considered the “future” of our discipline, they are part of the here and now. “It is our students and trainees that distinguish the academy from industry, or institutions that focus exclusively on health care delivery.”

This reality means academic activity cannot hope to achieve the various “efficiencies” of these other types of organizations (although there is always room for improvement). In this age of ever-increasing accountability (read: measurement), it behooves us to use more appropriate measures of effective outcomes of the academic mission in our complex system and make people understand them.

Finally, please be reminded that the academic mission is broadly categorized into education, research and service. Concerning the latter, it is through members participating constructively in the affairs of the Department that will ensure its ongoing vitality and relevance.

It has been a privilege for me to work with you and I will continue to follow developments of the UBC Department of Pathology and Laboratory Medicine with great interest. Best wishes for 2009.
Head, Department of Pathology and Laboratory Medicine

The Faculty of Medicine, University of British Columbia and two of BC’s academic health authorities, the Provincial Health Services Authority (PHSA) and Vancouver Coastal Health (VCH), invite applications and nominations for the position of Head of the Department of Pathology and Laboratory Medicine.

We seek an outstanding academic leader to be responsible for developing and directing the teaching and research programs of the Department. The Department attracts strong research support for 64 full-time faculty members, 158 clinical faculty members, 73 postdoctoral research fellows, over 80 graduate students and 46 undergraduate students, along with research associates, and visitors. The successful candidate should have an appropriate knowledge and clinical experience in Pathology and Laboratory Medicine and should be a proven leader with administrative experience working in a dynamic and complex healthcare environment. The individual will have substantial academic experience, a proven record of scholarly activity, demonstrated excellence in teaching, and a commitment to undergraduate, graduate and post-graduate health education that merit appointment as a tenured Associate Professor or Professor. Anticipated start date is July 1, 2009.

Within PHSA and VCH the successful candidate will be accountable for professional and clinical issues in line with the strategic directions of the organizations. The candidate will have experience and have demonstrated an ability to establish and maintain a strong academic and research mandate within changing service delivery models. The candidate will work in conjunction with hospital heads and senior executives for human resource planning, recruitment and performance management.

Salary will be commensurate with experience and qualifications, and will be subject to final budgetary approval. The successful candidate must be eligible for registration with the College of Physicians and Surgeons of BC or be nationally recognized as a distinguished scientist.

Application letters, accompanied by a detailed curriculum vitae, teaching dossier and names of four references, should be directed to:

Gavin C.E. Stuart, MD, FRCSC
Dean, Faculty of Medicine
University of British Columbia
c/o Joan Gray
#317-2194 Health Sciences Mall,
Vancouver, BC V6T 1Z3
Email: searches@medd.med.ubc.ca
with “Pathology Head” as subject.
Closing date: January 31, 2009.

The University of British Columbia is Canada’s third largest university and consistently ranks among the 40 best universities in the world. Primarily situated in Vancouver, UBC is a research-intensive university and has an economic impact of $4 billion to the provincial economy.

The Faculty of Medicine at UBC, together with its partners including BC’s Health Authorities, provides innovative programs in the areas of health and life sciences through a province-wide delivery model. The Faculty teaches students at the undergraduate, graduate and postgraduate levels and generates more than $200 million in research funding each year. It is home to Canada’s first distributed MD undergraduate program.

THE UNIVERSITY OF BRITISH COLUMBIA

UBC hires on the basis of merit and is committed to employment equity. We encourage all qualified applicants to apply; however, Canadians and permanent residents of Canada will be given priority.

www.ubc.ca & www.med.ubc.ca
Dr. Cooper received her undergraduate degree (BSc) from the University of Regina where she majored in biology. From there she moved to Vancouver to complete a Masters in Disease Ecology at the University of British Columbia. During her MSc, she developed an interest in parasitology and vector-borne diseases. With these interests in mind, she moved to Simon Fraser University to complete a PhD under Dr. Carl Lowenberger, where she focused her research on apoptosis and the antiviral immune response using Dengue virus and the yellow fever mosquito as her model system. Dr. Cooper’s academic interests include the evolution of cell death pathways, apoptosis and immunity (antiviral and anti-parasitic), and the role of cell death in disease pathogenesis. In August 2008 she joined Dr. David Granville’s group to work on mechanisms of cell death and their roles in cardiovascular disease. In addition to research, she enjoys teaching and working with graduate students.

Born and raised in Edmonton, Alberta, Dr. Dunham received his BSc in Science Psychology at the U of Alberta after which he obtained his MD from the U of Ottawa in 2001. His interest in Neuropathology was peaked by an early mentor, Dr. Vital Montpetit, Neuropathologist at Ottawa General Hospital. Dr. Dunham completed his residency training in Neuropathology at the U of Calgary under the tutelage of Drs. Bernadette Currie, Arthur Clark and Roland Auer. Upon graduation in 2006, Dr. Dunham spent a year of fellowship training in Molecular Neuropathology under the guidance of Dr. Arie Perry at Washington University in St. Louis, MO, USA. After completing his fellowship in June of 2007, and after spending a summer Neuropathology locum at the University of Saskatoon, Dr. Dunham joined the Dept of Path and Lab Med, Div of AP at C&W’s hospital in October of 2007. He is a full time Neuropathologist with interest in all areas of neuropathology including neuro-oncology.

Dr. Sanjoy Ghosh is what is known as “Made in UBC”. Having come from India in 2000, his entire research career has been built in this city. He received his Masters (2003) and PhD (2006) in Dr. Brian Rodrigues Lab in the Faculty of Pharmaceutical Sciences in UBC on lipid metabolism. Since his graduate years, his interest has always been with the effect of dietary lipids in the origin of disease. His initial work, which was a part of his Masters thesis on dietary fats on cell death, won international recognition and was awarded by Nestlé and the European Society for Parenteral Nutrition in Brussels in 2005. Since then, he has won multiple research awards and fellowships from agencies like CDA, CIHR. For his first postdoctoral fellowship, he joined Dr. Sheila Innis’ lab at the CFRI, where he studied the effect of omega-3 and omega-6 fatty acids in diabetes. At this time, having understood that diet is only a part of the disease equation, he also started a very fruitful collaboration with Dr. Ismail Laher in the Faculty of Anesthesiology, Pharmacology and Therapeutics at UBC on the effects of exercise in diabetic complications. Currently he is on his second postdoctoral training in the Diabetes Research Program with Dr. Bruce Verchere, where he is studying the effect of diet on the initiation of both type 1 and type 2 diabetes, and is funded by CIHR and the CDA. His extracurricular interests lie in history, politics, cooking and rose gardening.

After graduating from Uof T Medicine in 1980 Dr. Kasper completed his General Pathology Residency at U of Alberta and started working as a hospital and private pathologist in Edmonton. His group grew Kasper Medical Laboratories and he moved to Calgary in the early 90’s while being a Clinical Assistant Professor at Uof A and U of Calgary and Medical Director of the Private Laboratory. Alberta laboratory reorganization in the mid 90’s resulted in laboratory partnerships and Dr. Kasper took the opportunity to do a fellowship in dermatopathology with Philip LeBoit and Tim McCalmon at UCSF in San Francisco in 1998-99. He was a Clinical Associate Professor in the Departments of Pathology and Dermatology at UCSF until 2007, with about 30% teaching time with dermatology and pathology residents. Currently, he is a staff pathologist at Kelowna General Hospital. His interests are in dermatopathology, soft tissue pathology and pathology of infectious diseases.
URSULA KORTMANN  
Postdoctoral Research Fellow  
Ovarian Cancer Research Group, BC Cancer Agency  

Dr. Kortmann received her medical degree from the Georg-August-University Goettingen in Germany before completing two years of residency training in orthopedic surgery. In July 2008 Dr. Kortmann joined the Ovarian Cancer Research Group working as a research fellow in Dr. Yuzhuo Wang’s and Dr. David Huntsman’s Lab. Her research focuses on “early detection” and targeted treatment of ovarian cancer and involves studies of miRNAs as serum biomarkers and drug testing in mouse-xenograft models.

RAMESH SAEDI  
Postdoctoral Research Fellow  
BC Centre for Excellence in HIV/AIDS  

Dr. Saeedi was born in Tehran, Iran and received her Medical Degree at the Gillan University in 1997. She moved to Canada (Vancouver) in 1998. In 2001 Dr. Saeedi started as a Msc/PhD student in the Department of Pathology and Experimental Medicine under supervision of Dr. Michael Allard. During her PhD program, she received several scholarships including CIHR-DRA-CGS. Dr. Saeedi defended her PhD thesis successfully in Dec 2008. In July 2008 she started her Postdoctoral Fellowship in BC Centre for Excellence in HIV/AIDS under the supervision of Dr. Greg Bondy and Dr. Julio Montaner. She has also received a number of scholarships including CIHR for her post-doc.

PETER SCHUBERT  
Clinical Assistant Professor  
Centre for Blood Research  

Dr. Schubert is a Research Associate with Canadian Blood Services working within the Centre for Blood Research. Dr. Schubert received his PhD in biochemistry, molecular biology and microbiology at the University Erlangen, Germany. With two subsequent postdoctoral research appointments at the Biomedical Research Centre at UBC supported by a Michael Smith Foundation of Health Research award and the Canadian Institutes of Health Research/Heart and Stroke Foundation of Canada, he gained scientific training in cell biology and proteomics, respectively. Now working with Canadian Blood Services, Research and Development, his main research interests are in understanding the biochemistry of blood components by unravelling signal transduction pathways as well as the application of proteomics to transfusion medicine. In addition to a key research collaboration with Dana Devine from this Department, he set up several research collaborations both on and off campus to foster his scientific goals. In his current position with Pathology and Laboratory Medicine, Dr. Schubert is involved in the BMLSc program teaching platelet biochemistry and disorders in PATH402.

RAJESH SHENOI  
Postdoctoral Research Fellow  
Centre for Blood Researchs  

Dr. Shenoi was born in Alleppey, Kerala, India. His academic qualifications are as follow:  
PhD: Chemistry, National Chemical Laboratory, Pune, India  
Thesis Title: Synthesis, Characterization and Olefin Polymerization Reactivity of Some Early and Late Transition Metal Complexes. Thesis Supervisor: Dr. Swaminathan Sivaram.  
MSc: Chemistry (Polymer Science as specialization), Maharma Gandhi University, Kottayam, Kerala, India  
BSc: Chemistry, University of Kerala, Kerala, India  
Research work at Department of Pathology and Laboratory Medicine, UBC  
• Development of polymers for application as heparin antidotes  
• Development of polymers for nucleic acid delivery systems.

MASARU SUZUKI  
Postdoctoral Research Fellow  
The James Hogg iCAPTURE Centre for Cardiovascular and Pulmonary Research, St. Paul’s Hospital  

Dr. Suzuki graduated from Hokkaido University School of Medicine in Japan and received his MD in 2000. He specialized in respiratory medicine after his residency in internal medicine, and he entered the PhD course of Hokkaido University Graduate School of Medicine in 2005. He worked on the molecular pathogenesis of COPD, especially about an antioxidant transcription factor Nrf2, and expects to complete his PhD thesis in March 2009. He has joined Dr. James Hogg’s Laboratory in the James Hogg iCAPTURE Centre in St. Paul’s Hospital as a postdoctoral fellow in July 2008. He is investigating the gene expression both in small airways and parenchymal tissues of explanted human very severe COPD lungs by using a technique of laser capture microdissection.
Dr. Torbati was born in Mashhad, Iran. She completed MB BS degree at Dow Medical College, Karachi, Pakistan in 1983 and immigrated to Canada in 1983. She worked as a research assistant at the University of Toronto from 1984 to 1988, publishing several papers in pathology. In 1993 Dr. Torbati completed residency training in Anatomical Pathology at Dalhousie University, Halifax, Nova Scotia and fellowship training in Forensic Pathology in Calgary, Alberta. She was a Clinical Associate Professor of Pathology at Memorial University, St. John’s, Newfoundland and Labrador from 1994 to 2007. Responsibilities included anatomical pathology and teaching medical students and residents.

Several publications were produced during these years. Dr. Torbati is currently a Clinical Assistant Professor of Pathology and work at Kelowna General Hospital. She was credentialed by the British Columbia Cancer Agency (BCCA) in 2008.

Dr. Werner graduated from the Karl-Franzens University, Graz in Austria in 2005 with a Masters degree in Molecular Biology. After that she continued her postgraduate studies at the Department of Pharmaceutical Chemistry at the same institution. After some time at the university she followed her supervisor Dr. Andreas Kungl to ProtAffin Biotechnology AG, a spinoff from Karl-Franzens University Graz. In September 2008 she was awarded a PhD in Pharmaceutical Sciences. Her thesis research focused on the interaction of inflammatory chemokines and heparan sulfate proteoglycans on the surface of endothelial cells. In November 2008 she joined the lab of Dr. Bruce Verchere at the CFRI in Vancouver as a Postdoctoral Fellow. Her main interest is to investigate the interactions of human pro-islet amyloid polypeptide and perlecan in type 2 diabetes. Perlecan is a heparan sulfate proteoglycan located on the surface of insulin secreting β-cells and this interaction presumably leads to apoptosis of these cells followed by deficient insulin secretion.

Dr. Zaph obtained his BSc in Biochemistry at the University of Saskatchewan in 1995. He completed his PhD at the University of Pennsylvania with Phil Scott studying immunity to the protozoan parasite Leishmania. He did his postdoctoral work at Penn in the lab of David Artis focusing on the immune responses to the helminth parasite Trichuris. Dr. Zaph’s area of research are mucosal immunology, immunoparasitology, Cytokine biology, T cells, and T cell memory.
The 10th Annual Celebration of Pathology Day

Thursday, May 28, 2009

Keynote Speaker Dr. Jay Levy, M.D.
Professor of Medicine, Department of Medicine,
University of California, San Francisco

Poster and Oral presentations at UBC Life Sciences Centre
Cocktails & Dinner at River Rock Casino Resort
The major focus of the Wellington laboratory is on brain lipid metabolism and its relationship to Alzheimer’s Disease (AD). The majority of our work uses animal models to investigate the mechanisms involved in various disorders as well for pre-clinical evaluation of promising genetic or pharmacological therapies.

• Genetic loss of the cholesterol transporter ABCA1 in the murine brain impairs apoE lipidation and promotes amyloid deposition. ABCA1 catalyses the ATP-dependent transport of cholesterol and phospholipids from the plasma membrane to lipid-free apolipoproteins to form immature nascent HDL particles. In peripheral tissues, the primary apolipoprotein acceptor for ABCA1 cholesterol efflux activity is apoA-I, whereas it is apoE in the brain. We have shown that deficiency of murine ABCA1 leads to an 80% net reduction in total apoE levels in brain, and a 60% net loss in the capacity to deliver lipids onto apoE. These changes in apoE lipidation are associated with increased formation of amyloid deposits in several mouse models of AD.
• **Selective overexpression of ABCA1 increases apoE lipidation in the CNS and is sufficient to completely prevent the formation of amyloid plaques in vivo.** Transgenic mice expressing human ABCA1 by 6-fold or more have more cholesterol per HDL particle in CSF and exhibit virtually no amyloid deposits when crossed to a mouse model of AD.

• **Synthetic LXR agonists reduce amyloid load and improve cognitive performance in mouse models of AD.** Expression of ABCA1 and apoE is simulated by Liver-X-Receptor (LXR) transcription factors. Treatment of AD mice with synthetic compounds that activate LXRs including TO901317 or GW3965 improves memory functions and reduces Aβ levels in the brain. Importantly, these beneficial effects can be observed after only 7 days of treatment, suggesting that stimulation of LXR-responsive genes may be a suitable therapeutic approach for symptomatic AD patients.

• **ABCA1 is required for the beneficial effects of LXR agonists in vivo.** Because loss or gain of ABCA1 increases or ameliorates amyloid burden in vivo, it is likely that ABCA1 is a key LXR target gene that modulates the beneficial effects of LXR agonists for AD. However, LXR agonists also regulate many other genes, including those that affect inflammatory cascades, and empirical validation of crucial LXR-response genes is necessary. We have recently found that mice deficient in ABCA1 fail to elevate apoE levels and lipidation in the CNS and do not recover cognitive function in response to GW3965, observations that suggest that ABCA1 is necessary for LXR agonists to exert their beneficial effects in AD mice.

“Since beginning our program, our research has resulted in 11 original articles, 5 reviews, and over 45 invited presentations. This has been made possible by $1.8M in current funding, and $2.2M of operating and infrastructure support since our lab began.”

By: Peter van den Elzen

**New Translational Research Building opens at the Child & Family Research Institute on the campus of BC Children’s Hospital**

“The new translational research building will give researchers the tools and the environment they need to undertake leading-edge research and transform it into innovative ideas,” said Dr. Eliot Phillipson, CFI President and CEO. “The advancements that this facility will enable are sure to have a real and positive impact on the lives of all Canadians.”
On November 27, children and families joined research, clinical and administrative staff in celebrating the official opening of the new translational research building at the Child & Family Research Institute.

The new building was officially opened by two patients from BC Children’s Hospital, Cambie and Fiona, along with Fiona’s sister Elsa.

A crowd of over 150 guests heard remarks from Fiona’s mother and then enjoyed tours of the new five floor, 11,241-square-metre facility. Speakers at the event also included Dr. Eliot Philipson, President and CEO of the Canada Foundation for Innovation (CFI), and Brent Sauder, Assistant Deputy Minister, Technology, Research and Innovation Division, BC Ministry of Technology, Trade and Economic Development.

The translational research building is a $58.1-million expansion to CFRI and home of the newly-formed BC Mental Health & Addiction Research Institute. It houses researchers dedicated primarily to childhood diabetes; infection, immunity, and inflammatory diseases; and mental health and addiction.

Included in the new research space is the CFI-funded project, the Centre for Research in Childhood Diabetes, headed by Dr. Bruce Verchere from the Department of Pathology and Laboratory Medicine. The new space also includes some members of CFRI’s new Immunity in Health and Disease research cluster, which encompasses infectious diseases, immunology and inflammatory disease research and is headed by Dr. Rusung Tan. Over the coming year, the Centre for Understanding and Preventing Infections in Children (CUPIC), a CFI-funded project of the Immunity in Health and Disease cluster, will be moving into the building’s top floor. With the close proximity of labs and core facilities in imaging, flow cytometry, histology and other infrastructure, it is expected that the open-spaced new facility will promote new collaborations and top quality health research. Construction and some equipment were primarily funded by BC Children’s Hospital Foundation, which provided $22.5-million, the Canada Foundation for Innovation and the British Columbia Knowledge Development Fund. Additional funding for construction costs, laboratory fit out and equipment, and matching funds were provided by CFRI, University of British Columbia, Canadian Diabetes Association, and other supporters. The commitment of the Provincial Health Services Authority was instrumental in securing long-term funding for the project. ❖
The VP Research Office (VPRO) has grown dramatically in size, activity and budget over the last 10 years, to the point that an Associate VP had to be named – moi. I took on this dark side role in 2001 after serving as CFI Coordinator for a year, a job that made me realize that my colleagues in Pathology and Chemistry weren’t the only interesting people on this campus. That’s one of the best things about the job – getting to meet, argue with and occasionally help faculty in, for instance, the School of Music, the Faculty of Law or the Institute for Resources, Environment and Sustainability as well as the more familiar fellow travelers in Medicine and Science.

UBC has an enormous breadth of research activity at which we are very successful – we are ranked 31st, 33rd and 35th in the three academic rankings of world universities. The VPRO aims to maintain and enhance this reputation; I spend my days trying to help this happen. Of course the core of our success is our outstanding, devoted and sometimes devious faculty but sometimes a background organization can help them succeed. One part of my job has been to set up processes and support groups such as the Health Research Resource Office (HeRRO) to help our success rates at CIHR and other funding sources by providing workshops, internal reviews and the like, much of it in concert with Alison Buchan’s Office in the Faculty of Medicine.

We are extending this kind of service to NSERC and SSHRC applicants as well through the activities of the Faculty Coordinators. We have four such Coordinators: Janice Eng for Health Sciences, Rabab Ward for NSERC-related areas, Ralph Matthews for the Social Sciences and Humanities and Mike Blades for CFI since this is such a big activity at UBC. These are all senior academics that we have seconded to work part time with the VPRO to further research excellence and activity in their areas of focus; you can read more about their activities on the VPRO site www.research.ubc.ca.

Because of our high world ranking President Toope is interested in raising our presence abroad to complement this reputation. To this end I have over the last 18 months been visiting a growing number of the best research universities in Europe with the initial goal of setting up international exchange programs for graduate students and the longer term goal of enriching international research collaborations at many levels. I envisage a program in which some of our students would be able to spend, say, a summer at a partner institution while we would accept grad students in parallel from European institutions.

We hope to start with partners with whom we already have collaborations active through individual faculty member’s connections. I have been tremendously encouraged by the uniform interest in such a program in Europe, including from institutions such as Imperial College London, University of Cambridge, University College Dublin, the Pasteur Institute and the Technical University of Munich, to name a few. We have just hired an International Research Resource Officer to act as a point of contact for faculty interested in participating in such an activity and expect to announce an organized program with potentially some seed funding in the first quarter of this year; watch the VPRO site for more information.

I’ve just touched on a couple of the many roles the AVP Research plays. It’s a great job; I encourage anybody to whom it sounds attractive to apply for it when I retire!
The Pathology Session at the BCCA Annual Conference was a hit again this year!

By: Diana Ionescu

The Pathology Session at the BCCA Annual Conference was a hit again this year! It took place on November 21, 2008 at the Westin Bayshore Resort & Marina in Vancouver and reached a record number of over 100 registrants. At the last minute, the event had to be moved into a larger room to accommodate the growing interest for pathology and laboratory medicine. In keeping with last year’s successful hands-on session “You are made of cells”, which was an introduction to pathology, this year we presented “The BCCA Cancer Genetic Laboratory Open House: The Role of Cancer Genetic Testing in Cancer Diagnosis and Management”. Innovative and unique, this was professionally designed and enthusiastically presented by the technologists of the BCCA Cancer Genetics Laboratory as an interactive assembly. Six stations were equipped with computers, posters, laboratory materials and a designated technologist explained in details the most common tests performed in the genetic laboratory including: CML diagnosis and monitoring, PCR for clonality in non-hodgkin lymphoma, hereditary breast cancer, hereditary non-polyposis colon cancer, FISH with paraffin tissues, and cytogenetic analysis.

This event attracted a large variety of health care professionals including staff physicians, residents and fellows, scientists and research trainees, nurses, pharmacists, pharmaceutical representatives, etc who “finally understood what is happening with the patient’s samples and how complex these tests are”. Not only was this an opportunity to present the work behind the scene done in our laboratory but was also a valuable experience for the technologists, who had fun working together as a team, designing and creating all the materials and had a chance to discuss their work first hand with “the customers”.

The afternoon was designed this year especially for Pathologists. Short sessions on “Breast Cancer Cases Review Process at BCCA: The New, The Old and The Gold” enthusiastically presented by Dr. M. Hayes and the increasing “Role of the Pathologist in Personalized Cancer Care” presented by Dr. D. Ionescu warmed up the atmosphere for the interactive open session chaired by Drs. Grant, Naus and Van Nierkerk on “How Can We Build a Stronger Pathology Community in BC?” with spirited audience participation. This year the UBC Department of Pathology exiting chair, Dr. R. Hegele joined us and talked about “The UBC Department of Pathology and Laboratory Medicine and Building the BC Pathology Community”. We thoroughly enjoyed the presence of Dr. D. Grant as one of the invited speakers this year, who shared with us in his “Suburban view of Surgical Pathology in British Columbia”.

It is my strong desire to see the BCCA Annual Conference becoming one of the forums where pathologists from BC can meet, network and discuss in a collegial atmosphere practical issues for Pathology and Laboratory Medicine in our province. Please get involved by sending any ideas, suggestions or comments for future conference topics to Dr. Diana Ionescu at dionescu@bccancer.bc.ca.
Greetings from the Anatomical Pathology Residents!
By: Anna Adamiak, Co-chief Resident for AP

Currently there are 11 active AP residents within the program in PGY-2 through 5. Myself and Jeff Terry are the AP chief residents for this year, and we work together with Karen Ung, the chief resident for GP residents.

There have been a number of changes within the program in the last few years. We have settled nicely into the brand new residents’ room at VGH. Each resident’s desk is now equipped with an ergonomic microscope and a desktop computer. More recently, our ever-helpful program administrator Grace Adrias has moved her office from the third floor into the same area as the new residents’ room. A few months ago Grace was joined by Carolyn Mill, in the capacity of administrative assistant. We welcome her warmly!

Within the next few months, a major change will occur at the administrative level. Dr. Blake Gilks, the program director for AP (having served in this role for as long as any existing resident can remember), will be stepping down. We would like to take this opportunity to thank Dr. Gilks for all that he has done for us.

There are many types of pathologists and educators that one comes across during the course of one’s training. I know I speak for every single resident when I say that Dr. Gilks is in a category of his own. The sheer number of administrative, research and clinical activities that Dr. Gilks is involved in is staggering. Surely, anyone else given this much responsibility would last no longer than a couple of months. Yet he performs all these duties, and has for so many years also taken on the responsibility of guiding the next generation of pathologists. Despite his very busy schedule, he has the knack for calling an impromptu meeting, just at the right moment, and showing or teaching us something (like an approach to a Royal College oral exam question, the ins and outs of spending accounts, how to critique journal articles, or organize our studies, or introduce us to interdepartmental politics). We hang onto his every word, as his pearls of wisdom are always spot on. Another much-appreciated characteristic is his calm manner. There is nothing (I don’t think) that could make him upset or lose his temper with a bumbling resident. Whenever an issue comes up (a specimen mix up, a lost transcription, a problem with the schedule, a surgeon on the phone!) he calmly comes up with a range of solutions, and lets the resident handle as little or as much as they are comfortable with. He never accuses or judges the resident for doing something... lets just say ‘not quite right.’ Dr. Gilks is a tireless advocate for our education, but just as noteworthy is his genuine concern for the wellbeing of residents and their families. He treats us like equals professionally, yet there is a sense of guardianship and responsibility for all of us on a personal level. The door to his office is always open, regardless of how many other things are ‘on the go’ that day. And, astonishingly to us, Dr. Gilks remembers the details of all encounters, plans, and requests that come pouring forth into his office. We are all so very grateful for having had the privilege of having him as our program director, and our mentor. With utmost respect, thank you Dr. Gilks! The position of AP program director will be filled by Dr. Diana Ionescu. We welcome her in this new role, and are looking forward to working more closely with her in the months ahead.

Anna Adamiak
Jeff Terry
Diana Ionescu
In November we graduated five MSc students and seven PhD students. The program has admitted eight new graduate students for fall 2008 and four are beginning in January 2009.

Dr. Hélène Côté is taking over coordinating Path 535/635 (Graduate Student Seminar) and infinite thanks are owed to Dr. Marcel Bally and his various graduate students for having run the course for more than ten years.

Dr. David Walker will be stepping down as Graduate Advisor as of July 1 this year and a replacement has not yet been identified.

Dr. Marcel Bally in the News: Honored for Outstanding Contributions to the Pharmaceutical Sciences - AAPS 2008 Fellow

Marcel Bally, PhD is the Head of Advanced Therapeutics at the BC Cancer Agency. He’s also a Professor within the Department of Pathology and Laboratory Medicine at the University of British Columbia (UBC); Adjunct Professor in the Faculty of Pharmaceutical Sciences, UBC; and Co-Head of the Division of Drug Evaluation at the Center for Drug Research and Development (a cross institutional BC-based organization). His work is focused on defining novel methods for co-formulation of two or more agents into a single pharmaceutical preparation as well as the preclinical development of drug combinations for use in treating aggressive cancers. Dr. Bally also works with academic and industrial collaborators to help them develop products destined for use in human clinical trials. This work has led to the preclinical, manufacturing and drug development aspects of several liposomal formulations.
For me, space has always been "cool". Growing up, I spent countless nights with my friends looking towards the stars wondering, imagining and dreaming. However, my natural strength was in human biology which led me from my undergraduate degree at UVic to UBC for my doctorate. Along the way my interest in space faded in the shadow of my curiosity about the human body. I met an amazing mentor, Dr. David Walker, with whom I learned the art of electron microscopy and I studied how the dust in air pollution affects the human body, particularly the circulatory and respiratory systems. This ultimately became my PhD thesis.

During my PhD work, UBC hosted a unique summer school, The International Space University (ISU). ISU had weekly evening seminars open to the public, which I attended and where I met people who had the same fascination and enthusiasm about space that I had. To be an adult interested in space was not strange, it was encouraged! I could not help but follow the suggestions to apply for the following summer session. On a full scholarship from CIHR I spent a glorious summer as an ISU student learning about space, and how space flight impacts the human body. I also learned that NASA is concerned with the health effects of lunar dust for future lunar missions. Lunar dust is like nothing formed on Earth. It is electrically charged fine grains with sharp jagged edges enabling it to stick to everything, including space suits. This is how the lunar dust entered the lander during the Apollo missions resulting in astronaut exposure. Before humans are returned to the Moon, the true extent of lunar dust toxicity must be understood in order to maximize crew safety, keeping budget, mass and time considerations in mind.

The contacts I made at ISU, combined with the dust and research knowledge I had obtained at UBC, gave me the unique opportunity to be a Post-Doctoral Fellow at NASA Ames Research Center in Moffett Field, California studying the effects of lunar dust on the human body.

I currently spend my days doing research on dust, writing grant proposals and reading papers, not unlike what I did as a graduate student at UBC. But now I work in support of NASA's mission to return to the Moon and the dust I study comes from the Moon. It is still dust, just a highly unique, extremely precious form of dust. So to answer how I got from UBC to NASA, I worked extremely hard, I followed my passions and I dared to dream big.
Standing between the lower engines of space shuttle Discovery. It was an amazing experience to be so close to a space shuttle and my face hurt by the end of this day from all the smiling I did. I hope I will get to see a live launch someday.

Apollo 11 Lunar dust. We used this sample to test the abrasivity of lunar dust on the skin.

Clara and I analyzing the florescence of a sample. For our experiments we use florescence as an indicator of a chemical reactivity.
CONGRATULATIONS TO THE NEW PARENTS!

Dr. Linda Hoang, Medical Microbiologist at BCCDC and husband Dr. Stephan Schwarz, Anesthesiologist at St. Paul’s Hospital welcomed their first child, Siena Schwarz, on Sept 28, 2008.

Both mom and baby were healthy after a long but civilized labour and delivery (mom is thankful for the epidural!). Siena’s proud parents are blessed with a very pleasant and easy going child who sleeps day and night, and spends her waking hours feeding, baby talking or playing by herself!
The UBC Department of Pathology and Laboratory Medicine offers a bursary program for summer students who are interested in any branch of laboratory medicine. Researchers in our department can offer students projects in a wide range of disciplines including analytical biochemistry, proteomics, biomedical informatics, genetics, of course, histomorphology. Students are funded for a period of two months and, where possible, some supervisors have extended this to two or three months using funding from other sources. The application form will be posted on the departmental website in February 2009 for an application deadline in late March. There are seven bursaries available.

Prospective supervisors must hold a clinical or academic faculty position with the Department of Pathology and Laboratory Medicine and should submit brief research proposals with their application delineating the necessary background information and hypothesis along with a description of the project’s scope. There should be well-defined goals that are achievable within the two-month time frame.

Ethics approvals should be completed before the student commences the project. Typically, the supervisor submits an application along with a student who has been identified in advance but if a student has not been selected, we can advertise the specific proposal to the UBC first and second year medical school classes. Awards are given preferentially to UBC medical students and then to medical students from other universities. However, undergraduate students from UBC or other universities are welcome to apply.

Students are required to produce a brief report of their findings by August 31, 2009, preferably in the form of a poster/Power Point (if they have already presented their work) or draft manuscript. Note that failure to deliver a report may result in exclusion of the supervisor from subsequent funding from this program. Personally speaking, my experiences with the summer student program have been very rewarding. Not only have I benefited from the students’ academic productivity, but I have also gained a great deal of satisfaction and knowledge through the mentoring process.

**Pathology Summer Student Research Program**

By: Daniel Holmes

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**Student Testimonials**

**Amanda Zimmerman - Supervisor: Daniel Holmes**

Working last summer at St. Paul’s Hospital as part of the pathology summer research program was a fantastic opportunity. As an undergraduate student at UBC this experience was very rewarding on many different levels. Everything I learned as a student could be applied to actual situations in the research I was doing. I was exposed to a wealth of new information. Every day I loved going to work and found it very educational. I look back at my summer experience at St. Paul’s Hospital as a fabulous time.

**De Wet van Niekerk - Supervisor: Douglas Webber**

Last summer, I had the privilege of being involved with the UBC Pathology summer studentship program. I was put to work on a colonic cancer research project at the UBC Hospital. During my two-month work term, I was able to get a feel for what a day’s work is like for a pathologist. I think that as an undergraduate, one isn’t aware of the variety of careers available under the umbrella of “medicine.” Also, I felt the thrill of doing “real” research – something that is absent from undergraduate university classes.

**Gloria Fong - Supervisor: Honglin Luo**

While working as a summer student at iCAPTURE Centre for three engaging and educational months, I had the opportunity to broaden my scientific knowledge as well as to gain appreciation and understanding of laboratory research. By focusing on a research project, I have become more proficient at designing my own experiments and better at problem solving. Overall, it was a great experience – and I even got paid!
Dr. Donald Rix received a Bachelor of Arts degree from the University of Western Ontario in 1953, MD degree in 1957 and a Fellowship in General Pathology (FRCPC) in 1972. He has been a member of our Department since 1999. Throughout his career, Dr. Rix has been at the forefront of community-based laboratory care and management in British Columbia, as the founder of Metro McNair Medical Laboratories and Cantest Ltd. Dr. Rix has shown a sustained and dedicated commitment to medicine, science and technology, as underscored by his current and longstanding memberships on many of Boards and Councils, including the Premier’s Technology Council and the Innovation and Science Council of B.C.; British Columbia Institute of Technology (BCIT); Simon Fraser University (SFU) Council of the Segal Centre of Graduate Management Studies; the University of Northern British Columbia (UNBC); and the Morris J. Wosk Centre for Dialogue.

At UBC, Dr. Rix is a lifetime member of the President’s Circle and an Honorary Medical Alumnus in the Medical Alumni Society. He contributes to the growth and development of technology through contributions and responsibilities for BC Innovation Council, Past Chair of Genome BC and board and chair positions for Prionet Canada, Perceptronix Inc., Resverlogix Inc., and the Angel Network.

An Inspiring Philanthropist and Volunteer
Dr. Donald Rix, Emeritus Clinical Professor, UBC Department of Pathology and Laboratory Medicine

By: Michael Noble
Dr. Rix is a generous philanthropist and a dedicated lifelong volunteer who has supported through his time, energy and effort, the Salvation Army and the United Appeal. As time and resources have permitted, he has supported many worthy causes, a partial list of which includes UBC, the Department of Pathology and Laboratory Medicine, BC Children’s Hospital Foundation, the BC Cancer Agency’s Research Centre, the British Columbia Institute of Technology, and the UNBC. He has provided support for research into Huntington Disease at the Child & Family Research Institute at the BC Children’s Hospital, bursaries for medical students and other needs at UBC, simulation training for justice and public safety professionals in emergency situations at the Justice Institute, and the establishment of the medical campus in Prince George. Closer to home, among his many contributions and efforts Dr. Rix has recently donated to the UBC Department of Pathology and Laboratory Medicine in support of the Program Office for Laboratory Quality Management. The funds will be used to support broader awareness, engagement, teaching and research in improved medical laboratory quality management, a longtime interest of Dr. Rix.

In addition to supporting medicine and science, Dr. Rix is a generous contributor to the arts, supporting the Vancouver Art Gallery, Vancouver Opera and the Vancouver Summer Musical Festival, among many organizations.

Dr. Rix has received numerous honors and distinctions in recognition for his accomplishments and achievements. He has received many honors from the BCIT, the degree of Doctor of Science honoris causa from his alma mater, the University of Western Ontario, an Honorary Doctor of Science from SFU, and a Doctorate of Laws from the UBC in May, 2006. Dr. Rix received the Queen’s Golden Jubilee Award in November of 2002, and was appointed to the Sovereign Order of St. John of Jerusalem, Knights Hospitaller. In recognition of his contributions to business and industry, Dr. Rix has received the Ernst & Young Entrepreneur of the Year in Health Sciences, and has been inducted into the Business Laureates of British Columbia Hall of Fame.

In June of 2004 Dr. Rix was awarded the Order of British Columbia for outstanding achievement; in 2007 Dr. Rix was awarded a Member of the Order of Canada.

Recently, Dr. Rix was named the Philanthropist of the Year by the Vancouver Board of Trade and in June, 2008 became its Chairman. As a key objective, Dr. Rix has promoted corporate philanthropy by Vancouver business community.

Dr. Rix is committed to his belief that philanthropy is all about being engaged. “To be successful over the long term, companies have to be involved and interested in their community,” said Rix. “Not just chequebook involvement, but personal involvement.” In this regard, Dr. Rix has not only “talked the talk”, but has clearly “walked the walk”.

Through his energy, keen interest, dedication and generosity, we are grateful for the many benefits Dr. Rix has conferred over the years to our department, our university and the people of our city, province and country.

THE TOP 25 HOTTEST ARTICLES IN CHEMISTRY

By: Bernd Keller

Interfering chemicals and contaminants are of increasing importance in quality control of modern bioanalytical mass spectrometric analytical methods. These contaminants do not only include traditional compounds such as plasticizers, but also proteinaceous contaminants such as human and animal keratins found in laboratory dust and surfaces as well as instrument- and method-specific interferences.

Dr. Bernd Keller, Assistant Professor in the Department of Pathology and Laboratory Medicine located at the Child & Family Research Institute, with colleagues Jie Sui from Queen’s University, Dr. Alex Young from the University of Toronto and Dr. Randy Whittal from the University of Alberta, summarized known and new interfering compounds and published a review/tutorial with a database in a special issue on Mass Spectrometry of Analytica Chimica Acta (Keller BO, Sui J, Young AB, Whittal RM. Interferences and contaminants encountered in modern mass spectrometry. Analytica Chimica Acta, Volume 67, p. 71-81, October 2008).

Their article was received with overwhelming national and international positive response and has been listed as #2 in the Top 25 Hottest Articles in Chemistry for the period of July to September 2008 at Science Direct and as #19 of the Top 25 Hottest Articles in all Science categories and journals covered by Science Direct (top25.sciedirect.com, ranking is based on the number of article downloads in the respective period). Their publication was also featured in the scientific e-magazine SpectroscopyNow (www.spectroscopynow.com, on July 15, 2008).
Niamh (pronounced Neeve) Kelly a graduate of Trinity College Dublin (the only Irish University to make the top 50 world wide Universities listings, of which UBC is #35) came to Vancouver to pursue postdoctoral studies in 1985. Her PhD studies on the role of Pseudomonas aeruginosa in Cystic Fibrosis had caught the attention of Bob Hancock who invited her to join his team in the Department of Microbiology where she continued her work, switching her funding from the Irish Cystic Fibrosis Association to the Canadian Cystic Fibrosis Foundation. She was delighted to find that her lab. overlooked UBC’s swimming pool, where she kept fit with daily lunchtime swims. Within weeks of arriving in Canada she was on cross-country skis for the first time, traversing trails around Mt. Baker. This was followed by an introduction to down-hill skiing and a winter of days in the laboratory and nights on the local mountains punctuated by Friday evenings in the (then) Faculty club with other postdoctoral scientists from Microbiology and Biochemistry. Among that group of researchers were Susan Porter (a Clinical Associate Professor in our own department), Rob Kay (Professor of Medical Genetics and Senior Scientist Terry Fox laboratories) and Dennis Dixon (Chair of Academic Guided Studies in the VSB’s adult education program). Dennis was soon swimming laps with Niamh and abandoning the black runs to ski the blue runs with Niamh. More than 20 years later Dennis is still traversing ski runs with Niamh, sometimes accompanied by their two daughters, Breanna (aged 16) and Ciara (aged 14).

After a research stint at the Walter Reed Army Institute in Washington D.C Niamh returned to UBC to take up a faculty position in the Division of Medical Microbiology, within the Pathology Department. She soon found that she enjoyed educating students almost as much as she enjoyed doing research and was one of the earliest adopters of WebCT for course developments which enhanced student learning. Niamh is a key player in the new field of the Scholarship of Teaching and Learning (SOTL) and has been recognized with numerous Education awards including the inaugural Department of Pathology Education Award, the Killam Teaching prize and the first female winner of the Spencer Award for IT Innovation. She has recently finished a stint as part of the team that planned the delivery of UBC’s medical program to Prince George and Victoria and is now working with the College of Interdisciplinary Studies in developing a Centre for Science Communication. On the (Pathology) home front she runs an online course on Bacterial Infections as well as directing a seminar series on Teaching and Learning for our residents and she is chair of the Pathology Education Committee.
Q: Single sentence description:
Hard working, fun loving, creative, inventive.

Q: If you could go back and change something about your highschool days what would it be?
Work less and play more.

Q: What did you most get into trouble for?
Talking too much.

Q: If you were an activist what would want to protest against?
Larger nations aggressing and/or asserting their ways of doing business, upon smaller nations.

Q: What’s the most important part of the sandwich?
The moistening agent e.g. mayonnaise.

Q: Best vacation?
I love travel and have just returned from a week in Paris with my family where we spent New Years Eve enjoying a 6 course meal; it was very special. Other memorable holidays were island hopping in Greece in my twenties and spending time exploring the Big Island of Hawaii after my first child was born. But the best vacation I’ll ever have is yet to happen!

Q: Favorite drink:
Champagne and Guinness (preferably together)

Q: Funniest prank:
When the post docs in Bob Hancock’s lab decided that I must have been a nun at one stage (because of the numerous convent schools I had attended growing up) and advertised my inaugural departmental presentation as being delivered by Sister Niamh Kelly.

Q: If you could trade places with any other person for a week, with whom would it be, and why?
Stephen Toope because I’d like to know what running a University entails.

Q: What is the one thing that you would want your children to learn about life?
To believe in themselves, always.
2008: The year started with a big trip to Tanzania where I and my husband Alex, in the company of friends John, Danelle and Giselle cycled around the base of Mount Kilimanjaro, across the Rift Valley and went on safari for 3 weeks.
Following the cycle trip, we hiked to the top of Mount Kilimanjaro, at 19,500 feet, the highest mountain in Africa. As you can see there is still some snow there!

All year we had been working on plans and permits for our new floating home. Construction did not start until October, but as of Dec 14 the framing is up for the second floor.

The last big event was that we became dog owners on November 29th when we picked up our Schipperke from a breeder in Edmonton. Her name is Genesee after a bridge just outside of Edmonton. She is settling into life on the coast without much trouble, although the parents are requiring a bigger adjustment!

On the academic front I have been working with a group to revise the AJCC Cancer Staging Manual section on Ophthalmic Tumors for the 7th Edition to be published in 2009. I worked with Jack Rootman on lacrimal gland neoplasms and, with Sarah Coupland, we wrote the first classification for ocular adnexal lymphomas. I presented on this work in both Fort Lauderdale and Atlanta this year. In July at the CAP in Ottawa, I presented on my long-standing involvement in a project in Malawi on the pathogenesis of cerebral malaria. The year culminated with acceptance of my manuscript on the retinal pathology of cerebral malaria by PLoS One.
My volunteer work in Asian countries have given me an eye-opening and heart breaking memory. The tremendous needs of the children in the developing countries constantly reminds me not to take things and love for granted.

The girls all come from extremely poor families and most of them are kept out of classrooms. But their needs are not forgotten! With the help of foreign charity organizations, school tuitions have been identified and met. Though they can go to school, their life is still difficult.

Their culture is very different from ours. They live in small, close-knit communities with no right to privacy. So, when one person is different from others, everyone in the community will know and will talk about it. These kids identify themselves as lesser than others and have no choice in their life but accept this as their fate. Even their teachers don’t see any hope for these girls’ future. What hurt me the most was they believe that they shouldn’t be expressing their feelings out loud. Some of them find it hard to trust, but when they do, it makes you glow like a lava lamp during a power surge. It was emotionally and physically draining work especially when you consider the extremely tragic and heartbreaking circumstances of most the children. You can understand why they crave love and attention.

I am glad that I was able to go and walk along side with these girls. This year, I am compelled to go to a barren place in South East Asia to dedicate my time in helping a group of teenaged girls in need.
What’s New with the BC BioLibrary?
By: Sara Giesz

The BC BioLibrary is a project that is affiliated with, led by, and close to the hearts and minds of many members of the UBC Department of Pathology. The recent developments in the project are as follows:

**The BC BioLibrary BCU Network**

The BC BioLibrary biospecimen accrual component (the Biospecimen Collection Unit, or BCU) has been piloted at the Vancouver General Hospital. The VGH BCU will shortly make the step to evolve into a full service BCU to serve a range of biobanks.

Meanwhile the establishment of a second BCU pilot is actively being pursued at Children’s and Women’s Health Centre of BC. Once established, these BCUs will be a major step towards the vision of the BC BioLibrary to establish a network of BCUs in all surgical pathology centers in BC to enhance collection of tissue and blood biospecimens for translational research.

**The BC BioLibrary CFI**

The BC BioLibrary recently submitted an application to the Canadian Foundation for Innovation (CFI) titled “BC’s BioLibrary – Partnering with Patients on the Journey to Personalized Healthcare.”

This application was under the CFI New Initiatives Fund program and proposed the following infrastructure to support population-based research:

1. Implement BC public engagement to build a patient-as-partners environment for biospecimen donors to participate in biobanking.
2. Implement Biospecimen Collection Units in hospital pathology departments across BC.
3. Create off-site, mirrored, monitored storage for frozen biospecimens.

A decision for funding is expected June 2009.

**2nd Annual BC BioLibrary Workshop**

The date for the 2nd Annual BC BioLibrary Workshop has been set - please mark *Friday, April 17th* in your calendars. The workshop will be an all day event at the Century Plaza Hotel in downtown Vancouver and will focus on “Patients as Partners in Personalized Medicine”. Please watch for further details.

**eNewsletter**

To stay engaged in the activities of the BC BioLibrary please visit [www.bcbiolibrary.ca](http://www.bcbiolibrary.ca) and sign up for our eNewsletter, BioAccess.
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

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