

A Message From the Editor

It is my pleasure to serve as the first editor for the newly created **Path Micro Newsletter**. The focal point of this monthly publication is to broadcast the academic accomplishments in our department. This newsletter can only be successful if each departmental member contributes by sending information that needs to be circulated, not only within our Path Micro department, but also to audiences elsewhere at AVC and in the university community. In this new age of informatics, I believe that it is important to put faces and images to accomplishments, therefore I encourage you to send digital images along with the textual information in a timely fashion. To widen dissemination and avoid unnecessary waste of paper, the newsletter is being published electronically in the departmental website. The table of contents will typically include events such as presentations in scientific meetings, publication of books and papers, successful grant and patent applications as well as any other important academic endeavor of faculty or graduate students. It will also serve as a conduit to introduce new faces such as visiting professors, postdocs, and new graduate students. I particularly encourage those who are shy or modest to send information as it is important to show who we are and what we do in our department. If you have any question or suggestion, please do not hesitate to let me know. **Sincerely, Alfonso Lopez**

Visiting Professor / Clinical Pathology



We welcome **Dr. Darren Wood**, who is an external locum for part of the Maternity Leave replacement for **Dr. Cora Gilroy**. Dr. Wood is Associate Professor, Clinical Pathology at Ontario Veterinary College, University of Guelph. Darren is a Diplomate of American College Veterinary Pathology (Clinical Pathology); a DVM graduate of AVC (1994) and has strong roots on the Island. He has done several external locums in clinical pathology at AVC. He will be here initially for 2 weeks from Sept 14-27 and then for 1 week from Nov 23-29. Additional information about Dr. Wood is available in the following website: <http://www.ovc.uoguelph.ca/path/faculty/woodr.cfm>

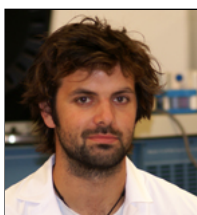
New Graduate Students



Fraser Clark came to the Lobster Science Centre in 2005 after completing an MSc in the department of Pathology and Molecular Medicine at Queen's University. At the LSC, Fraser was a molecular technician working on proteomic and genomic projects applied to crustacean disease. This fall he will begin working on his PhD in the department under the supervision of **Dr. Spencer Greenwood**. His PhD research will focus on host-pathogen interactions in the American lobster specifically looking for gene expression changes during bacterial and eukaryotic parasitic infections



Mitchell Moore, a Moncton native, obtained his BSc in aquaculture from the Nova Scotia Agricultural College in April. He joined the AVC Lobster Science Centre in September of 2009 as a MSc student, under the supervision of **Dr. Spencer Greenwood**, working on the Atlantic Lobster Moulting & Quality project focusing on gene expression in reproductive females. Once Mitchell finishes his degree he would like to work for the DFO or in a university setting. He would also like to have a hobby aquaculture operation.



Dan Hines is originally from Moncton, New Brunswick. He graduated with a BPhil in Leadership Studies and a BSc from the University of New Brunswick in Fredericton. He is beginning an MSc under the supervision of **Dr. Spencer Greenwood** in the Lobster Science Centre. His project concentrates on gene expression changes associated with moult cycling in lobster. Upon completion of his MSc, Dan plans to continue his academic and research career.



Michael Ciaramella is from Stroudsburg, Pennsylvania. He graduated with a BSc degree from Rider University, NJ, USA in Biology and Marine Sciences in May of 2009 and will be working through the AVC Lobster Science Centre on the Atlantic Lobster Moulting and Quality (ALMQ) project. Michael's MSc degree is under the supervision of **Dr. Andrea Battison** and **Dr. Barbara Horney**.



Dr. Melanie Buote obtained a BSc in marine biology from Dalhousie University, Halifax, N.S., and then graduated with her veterinary degree from the Atlantic Veterinary College at UPEI in 2003. After completing a residency in anatomic pathology at Texas A&M University, College Station, TX, she became a Diplomate of the American College of Veterinary Pathology. Melanie recently returned to the AVC to work as a diagnostic pathologist and is now pursuing a PhD degree (part-time) investigating the pathogenesis of Bitter Crab Disease under the supervision of **Dr. Andrea Battison** and **Dr. Rick Cawthorn**.

Faces you May know



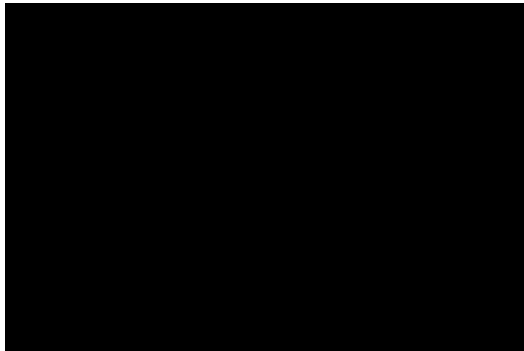
Dr. Arfan joined De Pathology Microbiol on Jan 2010. He received a PhD degree from University of Agriculture Faisalabad, Pakistan. He did his (Hons) in Microbiology from the University of Veterinary and Animal Sciences (UVAS), Lahore, Pakistan. He has been working as a lecturer at the Diagnostic Laboratory, UVAS, Lahore. Currently working on a "comparative diagnostic approach for detection of viral diarrhoeal pathogens in herds" under the supervision of **Arnost C**

Dr Ahme is leading the Health Lab. His team is conducting research on understanding the molecular mechanisms of host-pathogen interactions in the development of diarrhoeal diseases. He is currently establishing a dissemination



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Awards



During the closing ceremony of the XVII meeting of the Mexican Society of Anatomic Veterinary Pathology held in Puerto Vallarta, Mexico on September 4, 2009, **Dr. Alfonso Lopez** received a lifetime achievement award for his contribution to anatomic veterinary pathology and education in Mexico. There were over 120 participants including many of his former graduate students and trainees from Mexico and Canada. He was also the keynote speaker and gave a continuing education course on the general pathology of the respiratory system. His presentations on CE are posted at an AVC website for wider dissemination to other professionals.

http://people.upei.ca/lopez/castellano/puerto_Vallarta/puerto_vallarta.html

OIE Workshop on Wildlife Disease



Embracing the concept of "One World, One Health" the World Organization for Animal Health, better known as OIE, has created the concept of six Focal Points in each member country to represent various areas of animal health. Each country's Focal Point is appointed by the corresponding OIE Delegate to assist him/her with his/her responsibilities. One of the Focal Points in each country has been assigned to the area of Wildlife Disease. On September 8-10, 2009, the OIE, along with the Canadian Cooperative Wildlife Health Centre (CCWHC) and the Wildlife Conservation Society (WCS), presented a training workshop to the Wildlife Disease

Focal Points for the Americas. **Dr. Ted Leighton** (CCWHC Director and Canada's Focal Point for wildlife disease) and **Dr. Maria Forzan** (CCWHC Atlantic, AVC Dept. Path/Micro), along with **Dr. Marcela Uhart** (WCS Associate Director), presented a full day of background information about the socioeconomic importance and ecological complexity of wild animal diseases, and practical approaches to national planning and wildlife disease surveillance. CCWHC and WCS also coordinated group discussions and presentations on actual and potential surveillance programs in the 21 countries that participated in the workshop.

For more information on the OIE's perspective on wildlife disease click [here](#)

Scientific and Poster Presentations

Mateo D, Siah A, Araya M, Berthe F, Johnson G, Greenwood S. Haemocytic responses in soft-shell clam *Mya arenaria* induced by *in vivo* challenge with *V. splendidus*. 14th EAFP International conference on diseases of fish and shellfish, Prague, Czech Republic, September 14-19.

Stewart-Clark SE, Davidson J, Greenwood SJ. Field validation of molecular assays developed to detect invasive tunicate egg and larvae in shellfish aquaculture water samples. 12th International Conference on Shellfish Restoration, Charlottetown, PE, Sept. 15-18, 2009.

Budu-Amoako E, Dixon B, Greenwood SJ, Barkema H, McClure JT. Prevalence of *Cryptosporidium* & *Giardia* on dairy farms and surrounding water on PEI. World Association for the Advancement of Veterinary Parasitology, Calgary, AB, August 8-13, 2009.

Greenwood SJ. Fish & Chips: How science fiction can help with assessing quality. 5th Annual Lobster Science Workshop, Charlottetown, PE. Jul. 16, 2009.

Cawthorn RJ, Battison AL, Greenwood SJ, Dawe E, Morado F. "Is your crab bitter". 5th AVC Lobster Science Workshop, Charlottetown PE, July 16, 2009

Willis J, Stewart-Clark SE, Greenwood SJ, Davidson J, Quijon P. Development of a molecular assay for the detection of the invasive tunicate, *Diplosoma listerianum*, in water samples. 12th International Conference on Shellfish Restoration, Charlottetown, PE, Sept. 15-18, 2009.

Arsenault JT, Akaishi F, Jackman PM, Clark KF, Acorn A, Greenwood SJ, Towle DW, Doe KG, Fairchild WL. Total RNA extraction and cryopreservation method for American lobster (*Homarus americanus*) tissue. Atlantic OMICS Symposium, Moncton, NB, June 18-19, 2009.

Abo El Khair M, Greenwood SJ, Siah A, Casey J, Berthe FCJ, Cepica A. Investigation of Retroviral infection in the soft shell clams *Mya arenaria*. 8th CAHLN Annual Meeting, Charlottetown PE, June 7-11, 2009.

Stewart-Clark S, Davidson J & Greenwood SJ. The potential of molecular diagnostic testing in the detection of aquatic invasive species in water samples. 8th CAHLN Annual Meeting, Charlottetown PE, June 7-11, 2009.

Cawthorn RJ, Battison AL, Greenwood SJ, Lavallee J. Disease investigations in wild crustaceans- challenges in an oceanic environment. 8th CAHLN Annual Meeting, Charlottetown PE, June 7-11, 2009.

Recent Publications

Mateo DR, Siah A, Araya MT, Berthe F, Johnson GJ, Greenwood SJ. Differential *in vivo* response of soft-shell clam haemocytes against two strains of *Vibrio splendidus*: changes in cell structure, numbers and adherence capacity. *Journal of Invertebrate Pathology* 2009;102:50-56.

Pollock B, B Penashue, S McBurney, J VanLeeuwen, P-Y Daoust, NM Burgess, and AR Tasker. Liver parasites and body condition in relation to environmental contaminants in caribou (*Rangifer tarandus*) from Labrador, Canada. *Arctic* 2009;62:1-12.

Daoust, P-Y, SR McBurney, DL Godson, MWG van de Bildt, and ADME Osterhaus. Canine distemper virus-associated encephalitis in free-living lynx (*Lynx canadensis*) and bobcats (*L. rufus*) of eastern Canada. *Journal of Wildlife Diseases* 2009;45:611-624

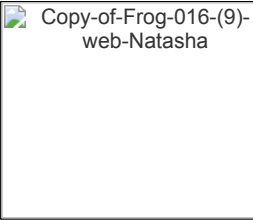
Workenhe ST, Hori TS, Rise ML, Kibenge MJT and Kibenge FSB. Infectious salmon anaemia virus (ISAV) isolates induce distinct gene expression responses in the Atlantic salmon (*Salmo salar*) macrophage/dendritic-like cell line TO, assessed using genomic techniques. *Molecular Immunology*, 2009; 46:2955-2974.

Congratulations



Congratulations to **Dr. Gary Conboy** who has been accepted as a Charter Diplomate in Veterinary Parasitology, American College of Veterinary Microbiologists (ACVM). ACVM recently began the administrative process to approve Veterinary Parasitology as a subspecialty within the ACVM by the American Board of Veterinary Specialties (ABVS) of the American Veterinary Medical Association (AVMA).

Upcoming Events



additional information please check the following website:

[Amphibian Week](#)

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For comments or suggestions for our newsletter, please contact Alfonso Lopez

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