

Pathology & Microbiology Newsletter Bi-monthly News Bulletin Atlantic Veterinary College University of Prince Edward Island Issue 32, March, 2015



Pathology Training of Medicine and Surgery Residents

The internal medicine and surgery residents enjoyed an intensive week of pathology training from December 8-12, 2014. The clinical pathology sessions were led by **Drs. Cora Gilroy and Barbara Horney** Anatomic pathology training was provided by **Drs. Enrique Aburto, Andrea Bourque, Melanie Buote and Paul Hanna.** This week partly or fully met the requirement for time spent with American College of Veterinary Pathologists (ACVP) boarded pathologists in residency programs accredited by the American College of Veterinary Internal Medicine (ACVIM) and the American College of Veterinary Surgeons (ACVS).



Left to right: Drs. Amanda Gerard, Julie Walter, Po-Yen Chou, Cora Gilroy, Shiori Arai. Dr. Nora Biermann (not pictured) was present for 2 days of training.

Dr. Gary Conboy Invited to Speak at OVMA Sunset Symposium

Dr. Gary Conboy was an invited speaker/panelist for the OVMA Sunset Symposium sponsored by BayerHealthCare at the Ontario Veterinary Medical Association Conference on January 29, 2015. The title of his presentation was "Parasite Diagnostics & Control - Fundamentals of Good Patient Care".

2014 Interesting Activities in Clinical Pathology

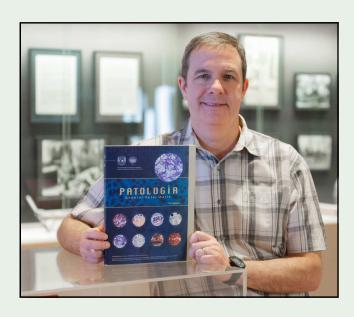
In addition to their routine academic duties, the clinical pathology group was involved in several interesting activities in 2014. In the spring, **Drs. Shelley Burton, Cora Gilroy, Barbara Horney and Sandra McConkey** wrote questions for the entire 2014 Clinical Pathology Practice Quiz (CPPQ), a one day examination consisting of images, glass slides, multiple choice and essay questions. This test assists clinical pathology residents studying for the American College of Veterinary Pathologists (ACVP) certifying examination at 4 sites (the Ontario Veterinary College, Michigan State University, Oklahoma State University and the University of PEI). The slides and other materials were sent via courier to the other 3 universities for the testing to be done on site. In August, the clinical pathology group welcomed Dr. Shannon Martinson from the University of New Hampshire for an intensive week of cytology training. In the fall, Dr. Barbara Horney was appointed as the representative for the Atlantic Veterinary College and the Faculte de medicine veterinaire (FMV) to the Canadian Veterinary Medical



Photo: Left to right: Drs. Shannon Martinson & Cora Gilroy.

Association (CVMA). Dr. Shelley Burton was voted in as President-Elect of the American Society for Veterinary Clinical Pathology (ASVCP) and served on the ACVP committee to write general pathology questions for the Phase 1 certifying examination to be administered in March 2015. The fall also saw the welcome re-establishment of a tenure -track faculty position in clinical pathology. December brought a busy resident training week (see separate article) and the welcoming back of Dr. Betsy O'Neil in a short-term contract position.

Textbook of General Pathology for Latin American Students



Drs. Enrique Aburto and Alfonso López authored two chapters in a General Pathology textbook (Patología General Veterinaria) recently published in Mexico. This popular textbook in Spanish, now in its 5th edition, is used in veterinary colleges not only in Mexico but in other Latin American countries. Dr. Aburto contributed the chapter "Cell Growth Disorders and Neoplasia" while Dr. Lopez wrote the chapter "Tissue Regeneration and Repair." It is important to remember that many veterinary students in other countries cannot benefit from traditional English textbooks.

Photo: Dr. Enrique Aburto

Holland College Wildlife Conservation Technology Students Receive Necropsy Training

An interest in wildlife health is a natural fit for many involved in veterinary medicine but it is also very relevant for those working or studying in the field of biological sciences. As a result, the Regional Director and staff of the Canadian Wildlife Health Cooperative (CWHC), Atlantic Region in the Department of Pathology and Microbiology are often asked to provide educational opportunities for students, technicians and professionals on a variety of topics related to wildlife health. The Learning Managers and students of the Holland College Wildlife Conservation Technology Program have developed a close relationship with the CWHC and often engage members of the CWHC to instruct in various aspects of their program. A recent white-tailed deer necropsy wet lab on February 27, 2015 given by **Drs. Pierre-Yves Daoust** and **Scott McBurney** and wildlife technician **Darlene Weeks** is an example of such an activity. Ben Hoteling and Jennifer Roma brought eleven of their Wildlife Conservation Technology students to learn proper necropsy techniques and indicators of health in white-tailed deer. The students determined the age, sex and body condition of white-tailed deer that had died as a result of vehicular collision in New Brunswick. In the female specimens, they also determined reproductive status and aged the fetuses of the pregnant individuals. Lastly, they examined all of the deer for *Parelaphostrongylus tenuis*, the "brainworm" parasite that commonly infects white-tailed deer. In addition to this wet lab,



Dr. Scott McBurney provided 3 hours of lecture to the students in both years of the Wildlife Conservation Technology Program earlier in the week on February 25, 2015. Topics included "Introduction to the CWHC", "Wildlife Health Surveillance - A Collaboration Between Disciplines" and "Current Topics in Wildlife Health in Atlantic Canada". The ongoing relationship between the CWHC and Holland College provides an excellent opportunity to reach out and engage wildlife professionals early in their careers so that they are well aware of wildlife health and more specifically, its significance to the work they will do.

Standing on the stairs - left to right:

Kristy Hutchinson, Shaylyn Wallace, Brittany MacLean, Janelle MacLeod, Emma Billings, and Brittany Jay

Standing on the floor-left to right:

Ben Hoteling, Jennifer Roma, Alex Seyforth, Kyle Doucette, Layton McAndrew, Josh Young and Trevor Coffin

Departments of Biomedical Sciences & Pathology & Microbiology 2015 Winter Seminar Series, Tuesdays, 3:30-4:30 p.m., AVC Lecture Theatre C

<u>Date</u>	<u>Topic</u>	<u>Presenter</u>
March 17	Sex based gene expression reveals mechanisms responsible for sexual dimorphism in the salmon louse (<i>Lepeophtheirus salmonis</i>).	Jordan Poley Pathology & Microbiology
March 24	Investigating the relationship between inflammation and invasion in oral squamous cell carcinoma.	Walaa Nasry Pathology & Microbiology
	Discovering UV-Absorbing metabolites produced by Arctic Ectremophiles.	Amanda Thomas Biomedical Sciences
March 31	Signaling pathways mediating α7 nicotinic/NMDA receptor interactions in the hippocampus.	Denise Happ Biomedical Sciences
	Modulation of alpha 7 nicotinic acetylcholine receptor function in organotypic hippocampal slice cultures.	Jessica Hawkins Biomedical Sciences
April 7	Effect of water temperature on the immune response of American lobster (<i>Homarus americanus</i>) and the pathogenicity of White Spot Syndrome Virus (WSSV).	Louise Roux Biomedical Sciences
	Porcine Circovirus Type 2- Associated cerebellar vasculitis in Postweaning Multisystemic Wasting Syndrome (PMWS) – A case report.	Laura Ross Pathology & Microbiology
Co-ordinators of the seminar series are Drs. Spencer Greenwood and Chelsea Martin.		

Recent Publications

Godoy MG, Suarez R, Lazo ES, Llegues KO, Kibenge MJT, Wang Y, Kibenge FSB. Genetic analysis and comparative virulence of infectious salmon anemia virus (ISAV) types HPR7a and HPR7b from recent field outbreaks in Chile. Virology Journal 2014;11:204. http://www.virologyj.com/content/11/1/204

Opapeju FO, Rodriguez-Lecompte JC, Rademacher M, Krause DO, Nyachoti CM. Low crude protein diets modulate intestinal responses in weaned pigs challenged with *Escherichia coli* K88. Canadian Journal of Animal Science 2015; 95:1-8.

Mansour SMG, Ali H, Chase CCL, Cepica A. Loop mediated isothermal amplification for diagnosis of 18 World Organization for Animal Health (OIE) notifiable viral diseases of ruminants, swine and poultry. Animal Health Research Reviews 0 (0);1-18 Cambridge University Press 2015.

McConnachie SH, Sheppard J, Wright GM, Speare DJ. Development of microsporidian parasite, *Loma salmonae*, in a rainbow trout gill epithelial cell line (RTG-1): evidence of Xenoma development *in vitro*. Parasitology 2015; 142:326-331.

Onukwufor JO, Kibenge FSB, Stevens D, Kamunde C. Modulation of cadmium-induced mitochondrial dysfunction and volume changes by temperature in rainbow trout (*Oncorhynchus mykiss*). Aquatic Toxicology 2015; 158: 75-87.

Speare D. Editorial - Journal of Fish Diseases 2015; 38:1-1.

Muckle A, López A, Gottschalk M, López-Mendez C, Giles G, Saab M. Isolation of *Streptococcus suis* from two lambs with history of lameness. Canadian Veterinary Journal 2014; 55: 946-949.

We welcome all comments, suggestions and submissions. Please contact:

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