



Pathology & Microbiology Newsletter
Bi-monthly News Bulletin
Atlantic Veterinary College
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Dr. Gary Conboy and Dr. Shelley Burton Promoted to Full Professor

Congratulations to **Drs. Gary Conboy** and **Shelley Burton** who have been promoted to Full Professors at UPEI. Dr. Conboy joined the department as an Assistant Professor in parasitology in 1991, was tenured in 1996 and promoted to Associate Professor in 1997. Dr. Burton joined the department as a clinical pathologist in 1993, was tenured in 1997 and promoted to Associate Professor in 1999. These faculty members have extensive experience and success in both undergraduate and graduate teaching and have contributed in other ways to the department over the years. Both are sincerely grateful for the generous support they have received over the years from departmental colleagues and staff.



CCWHC Atlantic Staff and Students Participated in the Necropsy of a Leatherback Sea Turtle



Through collaboration with the Canadian Sea Turtle Network, a leatherback sea turtle (*Dermochelys coriacea*) was necropsied at the Atlantic Veterinary College by members of the Canadian Cooperative Wildlife Health Centre (CCWHC) on August 20, 2012.

Leatherback turtles are the largest of the living sea turtles and are classified as endangered in both Canada and the United States. A visiting National Oceanic and Atmospheric

Administration (NOAA) scientist and marine biologists from Fisheries and Oceans Canada were able to obtain valuable information and samples from this amazing animal which weighed more than 300 kg.

Wildlife Disease Association/Biennial European Wildlife Disease Association Conference in France

Canadian Cooperative Wildlife Health Centre pathologist and PhD candidate **Dr. Maria Forzan**, and pathology resident **Dr. Heather Fenton** had the opportunity to attend the 61st Wildlife Disease Association/10th Biennial European Wildlife Disease Association Conference in Lyon, France, in July. The theme of the conference was “Convergence in Wildlife Health” and presentations covered worldwide wildlife disease topics emphasizing the “one health” concept and the importance of interdisciplinary cooperation among professionals in order to address global health crises. Heather presented two posters: “Unusual mortality event in of young grey seals (*Halichoerus grypus*) associated with Apicomplexan protozoal hepatitis in Nova Scotia, Canada” and “Aleutian mink disease virus in wild American mink (*Mustela vison*) on Prince Edward Island, Canada”.



Dr. Gary Conboy Invited Speaker at 2nd Bayer Angiostrongylosis Symposium



Dr. Gary Conboy was an invited speaker at the Second Bayer Angiostrongylosis Symposium held in conjunction with the Third European *Dirofilaria* Days meeting in Parma, Italy, June 21-22, 2012. His talk (co-authored with Dr. Fred Markham) was titled, “Serological survey of *Crenosoma vulpis* infection in dogs with chronic respiratory disease”. Shown seated here in the Piazza with colleagues Manuela Schnyder (Institute of Parasitology, Zurich, Switzerland) and Dieter Barutzki (Veterinary Laboratory Freiburg, Freiburg, Germany) (left) and somebody else (right), his suspicions were confirmed that the weather in June in scenic Parma, Italy, would be significantly warmer

than that on PEI.

Test Validation of the MALD-TOF Mass Spectrometry for identification of Aquatic Bacterial Pathogens

Dr. Dave Groman, Principle Investigator, and a team composed of **Jan Giles**, **Dr. Jeff Lewis**, **Dr. Anne Muckle** and **Dr. Sophie St. Hilaire**, have been awarded an in-house CERC grant for \$20,000 to undertake a "Test Validation of the MALD-TOF Mass Spectrometry (MS) for identification of Aquatic Bacterial Pathogens". The team will collaborate with researchers at Michigan State University Veterinary College, beginning in September 2012.

Visiting Professionals in Anatomic Pathology



Selene Salazar-Colunga, University of Nuevo Leon (UANL) in Monterrey, Mexico, came to AVC for a four-week externship in Anatomic Pathology. In her last year of the DVM program in Mexico, she is seriously considering anatomic pathology as a career option. We were pleased to have Selene with us as the spin-off of an exchange program established a few years ago between UANL and AVC. Under the International mobility program sponsored by HRSD Canada and Mexico's Department of Education, several AVC students have taken external rotations (VPM-410 International Veterinary Medicine) in Mexico.



Sofia Rosales-Martinez, a recent veterinary graduate from the National University of Mexico (UNAM), spent one month this summer with us to learn anatomic pathology. She spent part of her time in the post-mortem room observing and assisting with necropsies, and regularly attended biopsy and gross rounds. She also spent part of her time working in a retrospective study of equine skin melanomas under the supervision of **Dr. Alfonso Lopez**. She is writing a paper as part of her externship experience in Canada. Sofia hopes to come back to AVC to do graduate degree in pathology.



Dr. Maziel Arauz was born, raised and educated in the Republic of Panama. She obtained her DVM degree at the School of Veterinary Medicine in the University of Panama. For a few years she practiced as a small animal and exotic species veterinarian in South Florida. Later, she completed her residency in Anatomic Pathology at Cornell University. Maziel is currently an Assistant Professor and course coordinator for General Pathology at Ross University, St Kitts and Nevis. She has a strong interest in diagnostic pathology and a passion for teaching veterinary students. The purpose of her visit to AVC, sponsored by **Dr. Paul Hanna**, was to review histopathology material in preparation for the ACVP certifying board exam in September.

CCWHC Provides Marine Mammal Necropsy Training to Dalhousie Students



On August 19, 2012, CCWHC Atlantic regional director **Dr. Pierre-Yves Daoust** and graduate student **Dr. Heather Fenton** traveled to Dalhousie University to provide marine mammal necropsy training to undergraduate biology students as well as to discuss pertinent diseases of marine mammals. The students were able to obtain practical necropsy experience of a young-of-the-year, long-finned pilot whale (*Globicephala melas*) that had beached earlier in August close to Lunenburg, Nova Scotia. No cause of death was determined at necropsy, but tissues will be examined by a veterinary pathologist as part of ongoing wildlife disease surveillance at the Canadian Cooperative Wildlife Health Centre.

Dr. Maribel Quiroga is a Visting Professor from Spain



Dr. Maribel Quiroga is a visiting professor from the Facultad de Veterinaria de Lugo, University of Santiago de Compostela in Galicia, Spain. She is a Professor of anatomic pathology, the Coordinator of Diagnostic Services and the leader of a research group in fish pathology. The main purpose of her visit to AVC is to familiarize herself with the diagnosis of important fish diseases in Canada by doing some fish postmortem and laboratory work with **Dr. Dave Groman**. For the past year, Dr. Quiroga has also been working with **Dr. Alfonso Lopez** to establish academic links between AVC, the Veterinary College at the University of Santiago de Compostela, and the Faculty of Science at UPEI. Her trip to AVC was funded by “Campus do Mar”, is an international campus of excellence for teaching, research and technology transfer in marine sciences in northern Portugal and the Spanish region Galicia.

If you would like to know more about “Campus do Mar” please visit the following website (<http://campusdomar.es/>) or get in touch with Dr. Quiroga misabel.quiroga@usc.es

Dr. Kirstin Barnhart Provides Pathology of Laboratory Animals Training

On August 23-24th, the department was pleased to welcome Dr. Kirstin Barnhart, a clinical pathologist from Abbott Laboratories (Chicago, Illinois). Dr. Barnhart is a world expert in laboratory animal pathology who has been involved in numerous pharmaceutical research trials during her time at MD Anderson Cancer Center in Texas. She is a current past-president of the American Society for Veterinary Clinical Pathology (ASVCP) and a current member of the American College of Veterinary Pathologists (ACVP) Examination Committee. During her time in our department, she provided instruction to our residents and other interested individuals. These included Dr. Sheila Macri (DVM, AVC 2004), a laboratory animal pathology resident at the New England Primate Research Center near Boston. Dr. Barnhart also provided a special seminar on her research entitled, “Adipotide:

a novel, targeted approach to weight loss” “ as well as case discussions and Information on husbandry of non-human primates.
Photo: from left to right: Drs. Sheila Macri, Dania Villarnovo, Kirstin Barnhart, Heather Fenton and Carlos Lopez-Mendez.



Departmental Seminars for September and October

Speaker	Title of Seminar	Date	Department
Dr. Alfonso Lopez	So You Think You Can Give a Great Seminar? Yes You Can!	Sept 4	Pathology Microbiology
Dr. R. Gilmour	Low Energy Anti-fibrillation Pacing (LEAP): Low Gain, No Pain	Sept 11	VP Research
Michel Arsenault	The Role of Sox4 in Urogenital Development	Sept 18	Biomedical Sciences
Dr. Maria Forzan	Using native amphibian species as experimental subjects: benefits and problems	Sept 25	Pathology Microbiology
Sarah McConnachie	Studies on the Environmental Persistence of <i>Loma salmonae</i> . Spores with Special Reference to Integrated Multitrophic Aquaculture Practices	Oct 2	Pathology Microbiology
Doug Marchbank	Investigating the anti-tubercular mechanism of action of pseudopteroxazole: An affinity-based proteomics approach	Oct 9	Biomedical Sciences
Dr. Sarah Stewart-Clark	Shellfish transcriptomic studies and advances in invasive tunicate monitoring	Oct 16	Pathology Microbiology
Dr. Jordan Kreidberg	New Insights into Polycystic Kidney Disease	Oct 23	Harvard Medical School
Ghada Ebea	Strategies towards Drug Discovery from Algicolous Fungi	Oct 30	Biomedical Sciences
Jez Huang	Identifying protein partners for SoxC transcription factors	Nov 6	Biomedical Sciences
Heather Wotton	Differential gene expression in <i>L. salmonis</i> during host switching		Pathology Microbiology
Dr. Anil Kalupahana	Characterization of an avian orthoreovirus isolated from incidents of wild bird mortality in eastern Canada	Nov 13	Pathology Microbiology
Ben Perry	Investigating Chinese Herbal Extracts as Potential Anti-Obesity Therapeutics	Nov 20	Biomedical Sciences
Dr. Ravinder Sappal	Elevated temperature sensitizes rainbow trout mitochondria to copper toxicity	Nov 27	Pathology Microbiology

Recent Publications

Wagner BA, Hoberg EP, Somers, CM. Soos, Fenton H, Jenkins . Gastrointestinal helminth parasites of double-crested cormorants (*Phalacrocorax auritus*) at four sites in Saskatchewan, Canada. Comparative Parasitology 2012; 79: 275-282.

Kibenge, FSB, Godoy MG, Fast M, Workenhe S, Kibenge MJT. Countermeasures against viral diseases of farmed fish. Antiviral Research 2012; 95:257-281.

Sokolowski MS, Allam BA, Dunton KJ, Clark MA, Kurtz EB, Fast M. Immunophysiology of Atlantic sturgeon, *Acipenser oxyrinchus oxyrinchus* (Mitchill), and the relationship to parasitic copepod, *Dichelesthium oblongum* (Abilgaard) infection. J of Fish Health 2012;35: 649-660.

Mota-Rojas D, Martinez-Burnes J. Villanueva D, Roldan P, Trujillo ME, Orozco H, Bonilla-Jaime H, Lopez-Mayagoitia A. Animal welfare in the newborn piglet: A review. Vet Med 2012; 57:338-349.

Cepica, A, Zargar A, Mohamed B, Iwamoto, T. *In vivo* MALDI-TOF markers for early detection of Aleutian disease (AD) among the AD virus infected mink. Part 1. Health and disease. Proceedings of the X International Scientific Congress in fur animal production. 2012; pp: 134-145.

Cepica, A, Iwamoto T. Field evaluation of CIEP and PCR detection/removal control methods of Aleutian mink disease (AD) in Canada. Part 2. Health and disease. Proceedings of the X International Scientific Congress in fur animal production. 2012; pp: 196-205

Upcoming Meeting



The Atlantic Society of Fish and Wildlife Biologists annual general meeting is happening on PEI this year and the organizing committee is now accepting abstracts for consideration

(<http://www.chebucto.ns.ca/environment/ASFWB/annualmeeting.html>), with an extended deadline of September 14. The ASFWB meeting is an opportunity to meet fish and wildlife professionals of the Atlantic region and discuss the work being done by academics, governmental organizations and graduate students. We are currently looking for volunteers for the general meeting on October 23-25th, 2012. Please contact mparent@upei.ca if you are interested in helping out.

Please don't print this newsletter unless you really need to!

For comments and suggestions please contact us by e-mail:

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