



**Pathology & Microbiology Newsletter**  
**Bi-monthly News Bulletin**  
**Atlantic Veterinary College**  
**University of Prince Edward Island**  
Issue 30, May - August, 2013

**UPEI**  
UNIVERSITY  
of Prince Edward  
ISLAND

***Dr. Xiaoli Huang is a Visiting Scholar from China at AVC***

The Department of Pathology and Microbiology welcomed Dr. **Xiaoli Huang** from the Animal Science and Technology College, Sichuan Agricultural University in Ya'an, China. Dr Huang has been granted a 1-year-visiting scholars award from the Chinese government and will be working with **Drs. Mark Fast** and **Dave Groman**. Dr. Huang's teaching and research background in China is linked to diseases of fresh water fish, particularly carp and channel catfish. She is here to expand her background in fish pathology and learn about the Canadian academic and research activities. Dr. Huang's office is 3320-N at the AVC Annex. Please drop by and say hello.



***Biology Field Course at Dalhousie University***



On August 18, 2013, **Dr. Heather Fenton** and Merial scholarship summer student **Nancy Brochu** travelled to Halifax, Nova Scotia, to give a lecture for a marine mammal biology field course at Dalhousie University on health issues in marine mammals. The pair also assisted the students in performing a necropsy on a harbor porpoise. The students were amazed by the presence of gastrointestinal lesions and numerous parasites. Members from the Canadian Cooperative Wildlife Health Center Atlantic region are active participants in the Marine Animal Stranding Network for the Maritime region and participate as guest lecturers in this field course annually.

***First High Quality Poultry Meeting in Colombia***

On April 24, 2013, **Dr. Juan C. Rodriguez-Lecompte** was an invited speaker for the



First High Quality Poultry Congress that took place in Barú, Colombia. His presentation was entitled "Immunity of the chicken at one-day old: how the chicken defends against environmental pathogens". Attending this conference were over 120 veterinarians, pathologists, microbiologists and poultry specialists from Canada, the United States, Mexico, Costa Rica, Venezuela, Colombia, Brazil, Peru, Chile, and Argentina. Dr. Rodriguez-Lecompte reviewed the importance of the early stimulation of the respiratory immune system in chicks and the importance of increasing the mobilization and maturation of immune cell in the respiratory tract through vaccines.



### ***Bovine Respiratory Diseases in Argentina***



**Dr. Jose Luis Peralta, Dean**

**Dr. Arturo Alameda, Merial**

**Dr. Alfonso Lopez**

**Dr. Oscar Mancini**

In the last several months Argentina experienced an unusual number of outbreaks of respiratory problems in cattle. Dr. Arturo Alameda, Technical Director of Merial Laboratories, invited **Dr. Alfonso Lopez** to discuss with practitioners and producers the current trends in laboratory diagnosis of respiratory diseases in cattle. During his visit, Dr. Lopez traveled over 1,500 km on the road giving presentations to cattleman associations, clinicians and laboratory personnel. He also took this opportunity to visit the Faculties of Veterinary Medicine (Universidad de la Provincia de Buenos Aires), in Tandil, and (Universidad del Litoral) in Santa Fe where he spoke about the trends of veterinary education in North America. Dr. Lopez was also a guest at the Instituto Nacional de Tecnologia Agropecuaria (INTA-Balcarce) where he reviewed difficult histopathological cases with other pathologists.

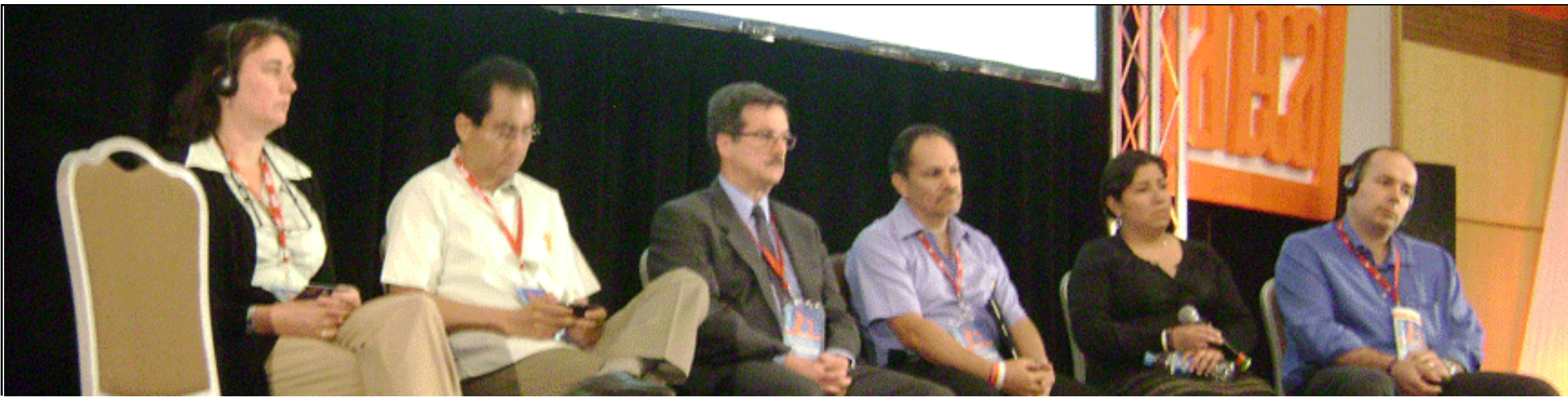
### ***Visiting Anatomic Pathology Resident from The Netherlands***



**Dr. Sandra Vrieman**, a resident in anatomic pathology from The Netherlands, spent 8 weeks as a exchange resident at AVC. Sandra obtained her DVM degree at Utrecht University (Class of 2000). After graduation, Sandra worked for almost 8 years in small animal medicine and developed great interest in feline medicine. In 2007, she changed direction and started working for the large pharmaceutical company Glaxo-Smith-Kline as a clinical trial associate for human oncology (Phases I, II and III). In April 2010, she started her residency training at the University of Utrecht which she expects to complete in early 2015. As for the long term goals, Sandra is open to other opportunities such as doing a PhD or becoming a board certified pathologist and working at a research institution or in pharmaceutical industry.



## *Convention of the Mexican Association of Avian Specialists*



Left to Right: Drs Bowes, BC; Garcia, Mexico; Rodriguez-Lecompte, AVC; Heneidi, Mexico; Julieta Ramirez, Mexico; Webby, FAO

**Dr. Juan Carlos Rodriguez-Lecompte** was invited as a keynote speaker by the Mexican Association of Avian Specialists (ANECA) at their XXXVIII Annual Convention that took place on May 5, 2013, in Ixtapa-Zihuatanejo, Mexico. His presentation was entitled: "The immune system of the avian respiratory tract: A system still in evolution." The focus of this presentation centered on the pathogenesis of important respiratory infections and the economic impact of these diseases in the poultry industry worldwide. Dr. Rodriguez-Lecompte also participated in a panel of experts debating avian influenza and the recent outbreak of high pathogenic H7N3.

## *Wildlife Disease Association Meeting and International Symposium on Ranavirus*



**Dr. Tricia Fleming**

**Ms. Marianne Parent**

**Dr. Maria Forzan**

Research work by members of the Atlantic node of the Canadian Cooperative Wildlife Health Centre (CCWHC) was presented at the recent 62th Annual International Meeting of the Wildlife Disease Association (WDA) and 2nd International Symposium on Ranavirus, in Knoxville, Tennessee, at the beginning of August. **Dr. María Forzán** and 4th year veterinary student **Marianne Parent** delivered oral presentations and a poster on the pathogenesis of ranavirus infection in wood frogs, malformations found in wild frogs from Alberta (in collaboration with colleagues from Environment Canada and Keyano College) and the use of the CCWHC database in estimating wildlife mortality due to anthropogenic activities.

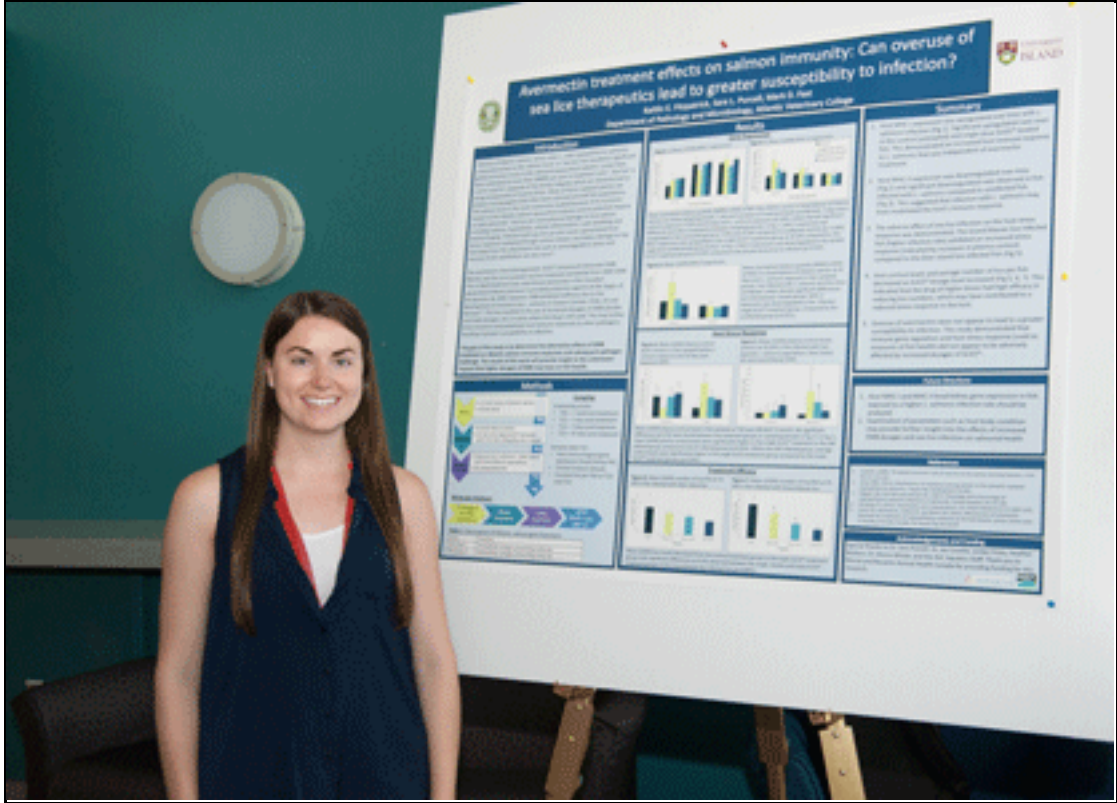
## *2013 Pathology and Microbiology Summer Research and Leadership Projects*

Five veterinary students supervised by faculty members from our department participated in the Summer



Research and Leadership Program in 2013. This successful program has been occurring at the AVC each summer for several years. The experience entails completion of a research project, preparation of a poster and further learning about research through weekly presentations by faculty members on topics such as scientific writing and ethics.

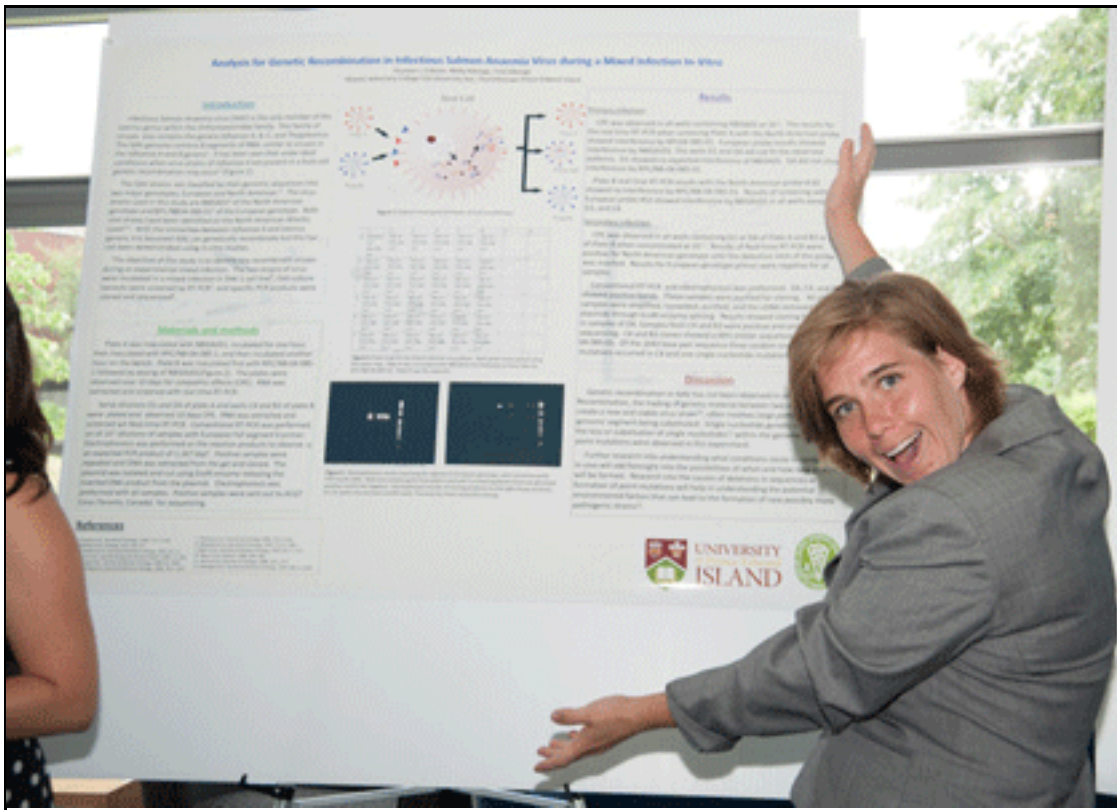
Departmental faculty participated in both project supervision and seminar provision and the program this year was guided by **Dr. Dante Mateo**.



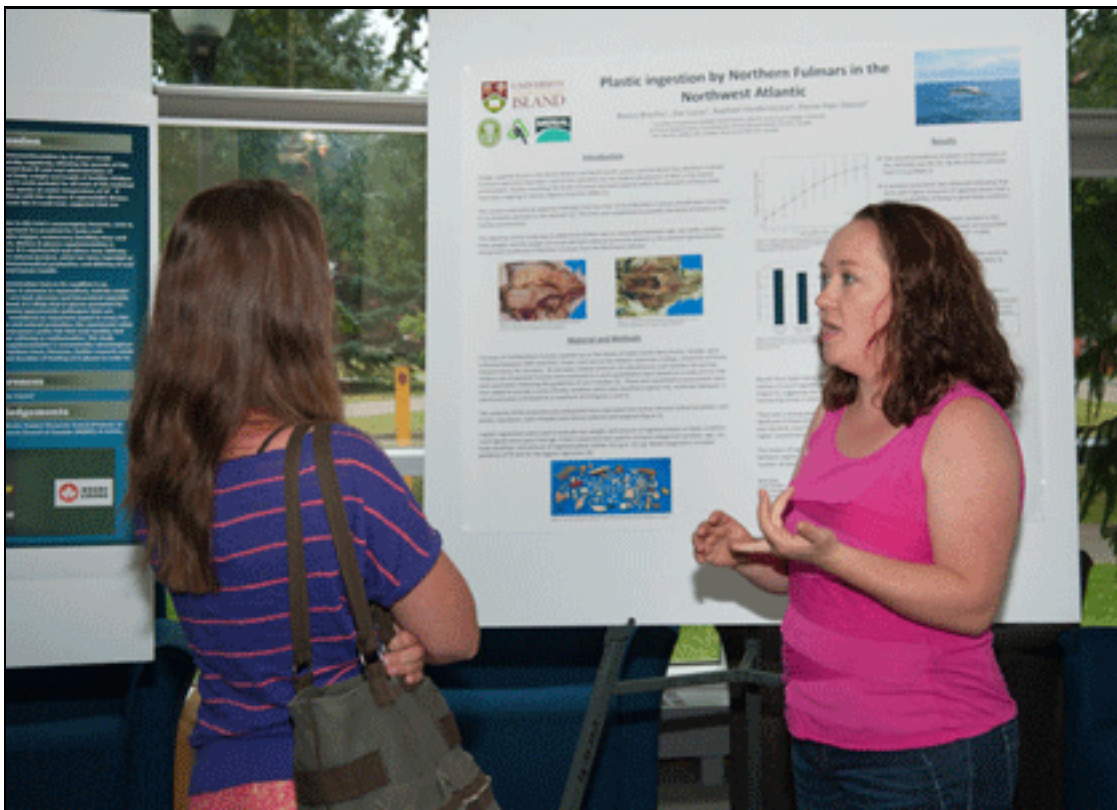
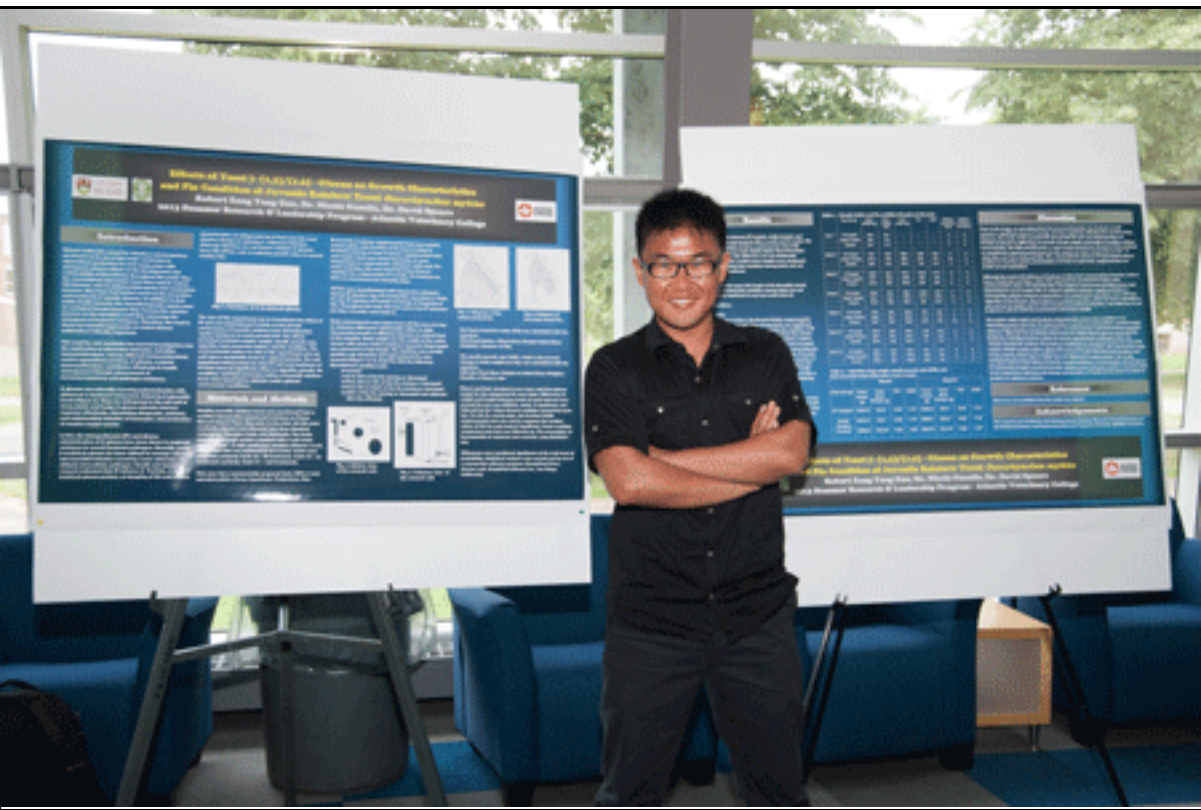
**Keitlin Fitzpatrick. Avermectin treatment effects on salmon immunity. (Supervisor Dr. Mark Fast)**



**Charlotte Ramey. Validation of MALDI-TOF mass Spectrometry for rapid identification of *Yersinia ruckeri*. (Supervisors: Drs. Jeff Lewis, Anne Muckle and Dave Groman).**



**Azureen Erdman. Analysis of genetic recombination in infectious salmon anemia virus during a mixed infection *in vitro*. (Supervisor Dr. Fred Kibenge)**





Zong Yang Gao. Effects of yeast beta (1,3)/(1/6)- glucan on growth characteristics and fin condition of juvenile rainbow trout *Onchorhynchus mykiss*. (Supervisor Dr. David Speare)

Nancy Brochu. Plastic ingestion in Northern Fulmars in the Northwest Atlantic (Supervisor Dr. Pierre Yves Daoust)

## Recent Publications

Magnadottir B, Gudmundsdottir BK, Groman D. Immunohistochemical determination of humoral immune markers within bacterial induced granuloma formation in Atlantic cod (*Gadus morhua* L.) Fish & Shellfish Immunology 2013; 34:1372-1375.

LaPatra SE, Groff JM. Keith I, Hogans WE, Groman D. Case report: concurrent herpesviral and presumptive iridoviral infection associated with disease in cultured shortnose sturgeon, *Acipenser brevirostrum* (L.), from the Atlantic coast of Canada. Journal of Fish Diseases 2013; doi;10.1111/jfd.12147 (On-line article).

Conboy G, Stewart T, O'Brien S. Treatment of *E. Boehmi* infection in a mixed-breed dog using milbemycin oxime . J Am Animal Hosp Assoc 2013;49: 204 - 209.

O'Leary SJ, Hice LA, Feldheim KA, Frisk MG, McElroy AE, Fast MD, Chapman DD. Severe inbreeding and small effective number of breeders in a formerly abundant marine fish. 2013. PLOS ONE, Vol 8 (6) pg. 1 - 8.

Isaak CK, Petkau JC, Karmin O, Ominski K, Robriguez-Lecompte JC, Slow YL. Seasonal variations in phenolic compound and antioxidant capacity of *Cornus stolonifera* plant material applications in agriculture. Can. J Plant Sci 2013; 93: 1-10.

Clark K, Hanna P, Beraud R. Sialolipoma of a minor salivary gland in a dog. Can Vet J 2013; 54: 467 - 470.

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Huang J, Arsenault M, Kann M, Lopez-Mendez C, Saleh M, Wadowska D, Taglienti M, Ho J, Miao Y, Sims D, Spears J, Lopez A, Wright G, Hartwig S. The transcription factor sry-related HMG box-4 (SOX4) is required for normal renal development *in vivo*. Developmental Dynamics. 2013; 242:790-799.

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Rodriguez-Lecompte JC, Romero-Perez G.A, Ramirez-Yañez G, Ask K, and Gauldie J. Adenoviral-mediated gene transfer into bone marrow: an effective surgical technique in rat. European Surgical Research. 2013; 50 (2-4): 282-291.

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C, Sawhney M. The Canadian Integrated Multi-Trophic Aquaculture Network (CIMTAN)-A Network for a New Era of Ecosystem Responsible. Fisheries 2013; 38: 297-308.

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Miller L. The wellness bucket. Can Vet J 2013; 54:340-346.

Saut, JPE, Oliveira PM, Nasciutti NR, Medeiros AA, Magalhães GM, Tsuruta SA, Hanna P, Headley SA. Vaginal leiomyosarcoma in a cow from Uberlandia, Minas Gerais, Brazil. Ciencia Rural 2013;43: 897-901

## ***Important Notices***

NSERC Deadlines: [Website](#).

CIHR Funding Opportunities: [Website](#).

Want to lead a Research on Tap? Research on Tap is a monthly pub night, held on the first Tuesday of the month from October to April, at a local pub (the Pourhouse, above Charlottetown's Old Triangle) for an evening of ideas, discussion, and debate. Please get in touch with research communications officer Dave Atkinson ([datkinson@upei.ca](mailto:datkinson@upei.ca) or 620-5117).

Scholarship opportunity by Chinese Embassy in Ottawa for Chinese graduate students studying in the Maritime Province universities. Scholarships are valued from \$6,000 to \$10,000. Contact Jerry Wang ([zhwang@upei.ca](mailto:zhwang@upei.ca)), UPEI Registrar's Office, for details. [Website](#).

Vanier Canada Graduate Scholarships. UPEI has an allocation for the period of 2013-2015 of one (1) nomination each for NSERC, CIHR, and SSHRC. Submit to UPEI Office of Graduate Studies by Tuesday, October 15, 2013, 4pm. For program information, please see: <http://www.vanier.gc.ca>

Banting Postdoctoral Fellowships. UPEI can nominate an outstanding candidate in each of the Tri-Council areas. Follow application process as listed on the website; submit to UPEI Office of Graduate Studies by Monday, October 7, 2013. [Website](#).

PEI Industry & Research Connector Event, Thursday, September 26, 2013, 9:00 am - 1:00 pm,

Room: NRC-INH Lecture Theatre, UPEI. The event is organized by Springboard Atlantic and partners (NSERC, Agriculture and Agri-Food Canada, PEI BioAlliance, Three Oaks Innovations Inc.). To register as Research Pitcher, submit PowerPoint template to [kkushner@springboardatlantic.ca](mailto:kkushner@springboardatlantic.ca)

**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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