

Chinook Project 2016 Update

After months of preparation the Chinook Project has successfully completed its eleventh year of clinics. This year two locations in Labrador and one location in Nunavut were visited. Organizers were grateful for the veterinarians who donated their time and expertise and for the sponsors who make this project possible. Planning has begun for the 2017 clinics. If you would like to learn more about the Chinook Project, please visit the web site: <http://chinookproject.ca/> or visit the Facebook page: "The Chinook Project".

Dr. Lisa Miller is the Coordinator of The Chinook Project.



Labrador – May 24-June 4

The first stop was Nain. Drs. Peter Foley (AVC 1997, Companion Animals-AVC), Heather Gunn McQuillan (OVC 2005, VTH-Hospital Director- AVC), Dr. Rebecca Jackson Inkpen (AVC 2007, Practitioner – Newfoundland) and AVC 4th-year veterinary students – Elizabeth Byers, Christopher Dominic, Michelle Gorayeb, Kelsey Harding and Alison Reindel spent 4 clinic days seeing primarily dogs but also a few cats. The total number of ovariohysterectomies and castrations tallied 29. The total number of appointments for vaccinations and/or medical examinations was 77. This was the third visit to Nain and as always everyone was most appreciative of the efforts.

Photos from Nain:



History and record keeping



Ready for surgery!

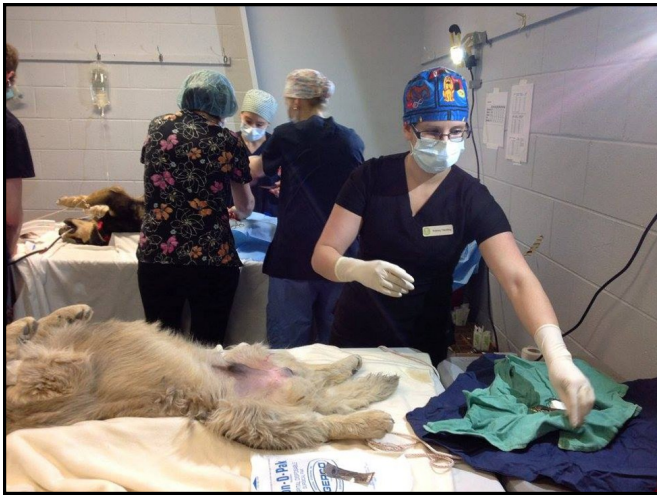


Dinner is served!

Chinook Project 2016 Update continued

Next, the team of students and Dr. Peter Foley were joined by Dr. Marti Hopson (OVC 2001, Companion Animals-AVC) and Dr. Carrie Lavers (AVC 2002, Practitioner – PEI). Drs. Gunn McQuillan and Inkpen returned to their respective locations. The next stop was Sheshatshiu for four days of clinics. The total number of ovarhiohysterectomies and castrations tallied 47. The total number of medical appointments for vaccinations and/or medical examinations was 70, bringing the grand total of patient visits in Labrador to 223. The team worked 15 hours or more each day. With travelling, unpacking, setting up, repacking at two sites the team returned exhausted but excited and happy with all that was learned and accomplished.

Photos from Sheshatshiu: Preparing for surgery



Saying goodbye to Labrador and the team was hard. Here are the number of cases we saw:
Nain- 29 surgeries, 77 medical appointments in 4 days
Sheshatshiu- 47 surgeries, 70 medical appointments in 4 days
Total- 76 surgeries , 147 medical appointments in 8 days
Results: 223 total animal visits to Labrador clinics.



Photo: Team Nunavut: (back row) Vanessa, Mila, Nicole, Dionne, (front row) Dr. Katie Lee, Dr. Marti Hopson, Dr. Alison Pollard.



Photo: Sheshatshiu team - Liz Byers, Dr. Carrie Lavers, Dr. Peter Foley, Alie Reindel, Chris Dominic, Dr. Marti Hopson, Kelsey Harding, Michelle Goyareb. Well done all!

Chinook Project 2016 Update continued

Nunavut June 17-25

Two Chinook student alumni, Dr. Katie Lee MacDonald (AVC 2011, Practitioner – Ontario), and Dr. Alison Pollard (AVC 2007, Practitioner – Nova Scotia) joined Dr. Marti Hopson and four AVC veterinary students – Vanessa Gerber, Mila Profit, Nicolle Davis and Dionne Paine to travel to Iqaluit. The Chinook Project was hosted by the Iqaluit Humane Society, which arranged transportation and a location for the clinic.

The total number of ovariohysterectomies and castrations tallied 62. The total number of appointments for vaccinations and/or medical examinations was 85, resulting in a total of 147 patient visits in 4.5 clinic days. This was the first trip to Nunavut since 2009, and was a pilot project to partner with the Iqaluit Humane Society. Organizers hope to visit outlying communities on Baffin Island in the future. In conclusion, the Chinook Project saw 370 patients in the North pass through its clinics this year.

Diseases of Poultry Rotation

Summer to **Dr. Rodriguez** has meant teaching. His “Diseases of Poultry” rotation included visits to several farms, a feed mill, a processing plant and a hatchery in the Annapolis Valley, Nova Scotia. Students acquired hands on experience and learned directly from practicing veterinarian Dr. Randall Bishop, helping strengthen the links Dr. Rodriguez has fostered between the AVC and the poultry industry. Dr. Pablo Lopera, a PhD student of Dr. Rodriguez’s working in Colombia and visiting the AVC as part of his program, also took part in the rotation’s activities.



Photo: Students visit a turkey farm in Nova Scotia.



Photo: Diseases of Poultry rotation students (left to right): Damita Hansen, Natalie Dow, Wilson Chung, Kathryn Butler, Teri White and Amanda Butler.

Necropsy of Rare Sowerby's Beaked Whale

On June 13, 2016, the carcass of an adult male Sowerby's beaked whale (*Mesoplodon bidens*) had been found in the Baie des Chaleurs, near Escuminac, Québec. The carcass was subsequently carried out by the tide but washed up again near Campbellton, New Brunswick. According to Don McAlpine, curator of the [New Brunswick Museum](#), this is the first confirmed occurrence for this species in the province. The whale was towed approximately 0.25 km to a more accessible location for loading on a flatbed truck. The whale was delivered to the Canadian Wildlife Health Cooperative (CWHC-Atlantic) at the Atlantic Veterinary College in Prince Edward Island on June 17th.

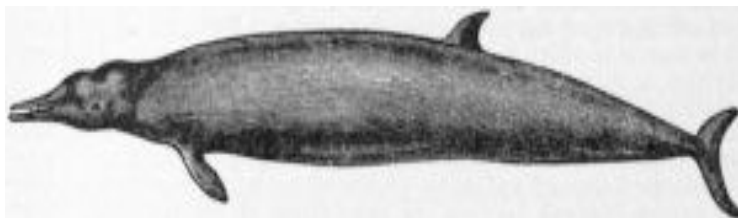


Photo: **Dr. Pierre-Yves Daoust** is performing a Necropsy on a Sowerby's whale. Looking on are **Fiep de Bie**, Don McAlpine, visiting student Mili Sanchez and DVM student Cassandra Mellish.



Photo: Luc Gagnon (New Brunswick Department of Energy and Resource Development)

On June 18th, a necropsy of the Sowerby's whale was performed, lead by **Dr. Pierre-Yves Daoust** accompanied by **Darlene Weeks** and **Fiep de Bie** (CWHC), **Drs. Shannon Martinson, Nicole Kaiser** and Don McAlpine as well as many veterinary students. The whale weighed approximately 1,059 kg and measured 4.75 m in length. The carcass was moderately decomposed with all internal organs intact. It was found to have an empty stomach, therefore it had not fed before death. The cause of death is still pending but at the time of necropsy, there was no obvious reason such as trauma or entanglement in fishing gear, to account for its demise.



The Sowerby's beaked whale is a small to medium toothed whale, thought to be the most northern species of beaked whale in the North Atlantic. Very little is known about their biology, distribution or abundance as at-sea sightings are few. Their diet is believed to consist of deep sea fish and squid, and they are presumed to be deep diving whales. In Canada, Sowerby's beaked whales were listed as [Special Concern on the Species At Risk Act in 2011](#). Research suggests that beaked whales are sensitive to underwater noise pollution such as boat traffic, drilling, military sonar or seismic surveying. Whales exposed to acute noise may become disoriented or have abnormal dive patterns that can lead to mass strandings.

Canadian Animal Health Network Laboratorian of the Year Award

Laboratorian of the Year Award

Congratulations to **Dr. Alfonso Lopez** who was the recipient of the "Laboratorian of the Year Award" for 2016 given by the Canadian Animal Health Laboratorian Network (CAHLN).

CAHLN was created in 2002 to promote the exchange of information on trends, techniques and research in the field of animal health diagnostics, to provide an opportunity for networking to identify issues of common concern in this area, and to facilitate relationships between organizations and scientists who work in the field of animal health diagnostics in Canada. CAHLN includes people from all specialties of laboratory diagnosis, including specialists in bacteriology, pathology, immunology, virology, parasitology, toxicology and molecular biology. This annual award recognizes a diagnostician, educator, researcher or mentor for their contributions to veterinary laboratory medicine in Canada.



Photo: Dr. Jim Goltz, President of CAHLN presenting the award to Dr. Alfonso Lopez.

Recipients are selected from provincial, federal and university diagnostic veterinary laboratories, Canadian veterinary colleges, and veterinary research organizations. The award was presented during the CAHLN meeting held in Charlottetown, June 6-8, 2016. Dr. Lopez, Professor Emeritus, Pathology and Microbiology, continues to assist veterinary diagnostic laboratories of many countries, particularly in Latin America.

Well done Dr. Lopez!

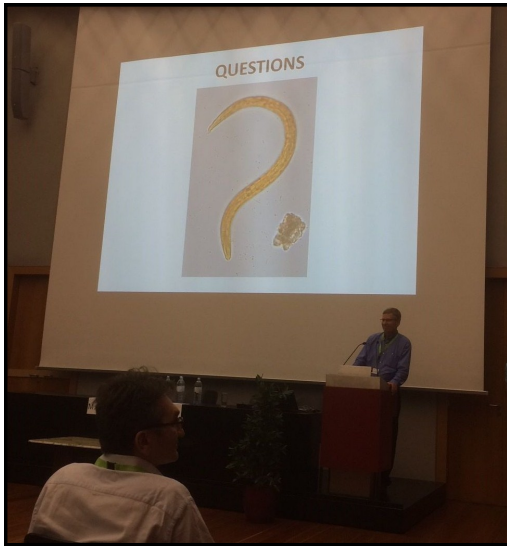
Keynote Speaker at the Canadian Association of Veterinary Pathologists



Dr. Alfonso Lopez was the keynote speaker at the annual meeting of the Canadian Association of Veterinary Pathologists (CAVP) held at the Atlantic Veterinary College in Charlottetown, PEI, on June 5, 2016. The topic for this conference was Pathology of the Respiratory System, and the moderator was Dr. Catherine Graham from the Nova Scotia Department of Agriculture and President of the CAVP.

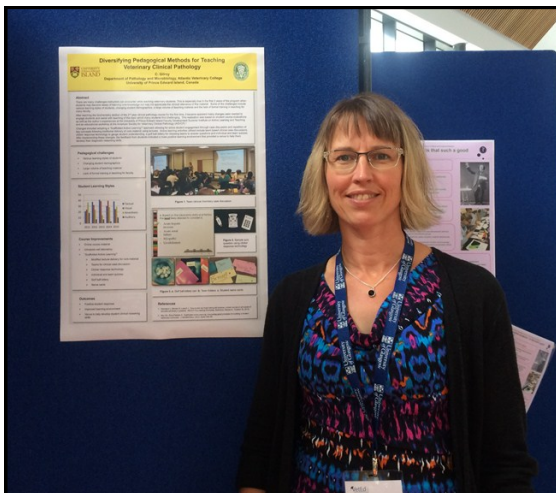
Dr. Lopez's presentations were entitled "Alveolar filling disorders in pulmonary pathology" and "Parasitic rhinosinusitis caused by *Eucoleus boehmi* in red foxes (*Vulpes vulpes*)." Veterinary pathologists from federal and provincial laboratories and universities were in attendance.

Keynote Speaker at the Fourth Bayer Angiostrongylosis Forum in Europe



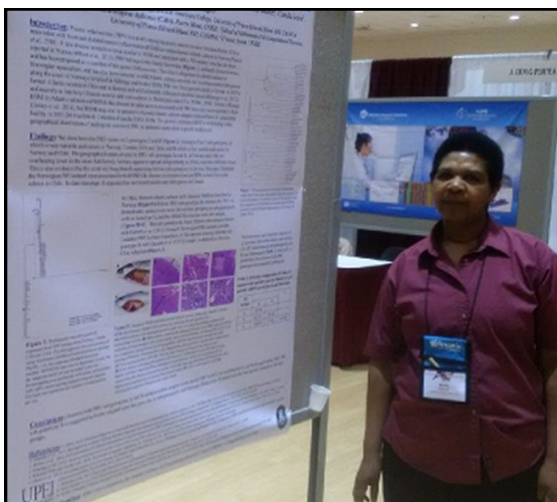
Dr. Gary Conboy was an invited speaker giving two talks at the Fourth Bayer Angiostrongylosis Forum held in conjunction with the Fifth meeting of the European Society of Dirofilariosis and Angiostrongylosis in Vienna, Austria, July 11-13, 2016. He presented, "Gastropod shedding of third-stage larvae after infection of metastrongyloid lungworms (Gary Conboy, Nicole Guselle, Roland Schaper)" and "Baermann fecal examination survey of dogs showing signs of respiratory disease in Ontario, Canada (Gary Conboy, Nicole Murphy, Tamara Hofstede).

2016 Vet Ed Symposium in Glasgow, Scotland



Dr. Cora Gilroy attended the 2016 Vet Ed symposium in Glasgow, Scotland. This is an annual symposium to promote sharing ideas and innovations in veterinary education. Dr. Gilroy had a poster presentation entitled "Diversifying Pedagogical Methods for Teaching Veterinary Clinical Pathology". Dr. Gilroy was awarded a 2016 University of Prince Edward Island Senate Committee on the Enhancement of Teaching (SCENT) Travel and Instructional Development Grant to help fund attending this educational symposium.

35th Annual Meeting of the American Society for Virology, Blacksburg, VA,



Dr. Molly Kibenge and **Dr. Fred Kibenge** attended the 35th Annual Meeting of the American Society for Virology in Blacksburg, Virginia, USA, June 18–22, 2016, and made poster presentations of their research. The presentations were entitled "Isolation and characterization of a novel salmonid coronavirus (Kibenge MJ, Wadowska D, Kibenge FS)" and "Genetic diversity of Piscine Orthoreovirus (PRV) (Kibenge FS, Godoy MG, Kibenge MJ, Wang Y, Suarez R, Leiva C, Vallejos F)".

Keynote Speaker at Seminars in Colombia, Peru and Mexico



Dr. Rodriguez-Lecompte was an invited speaker at the seminar series 'Consolidating the immune system' in Peru, Mexico and Colombia. He delivered a talk entitled 'The importance of a health immune system'. The talk focused on his work on nutritional immuno-intervention and mucosal immunity. It is part of his academic collaborative effort that has strengthened the links between North American and South American researchers.

During the XLI Annual ANECA meeting, (April 6-9, 2016), **Dr. Rodriguez-Lecompte** was a keynote speaker at the convention in Ixtapa, Mexico, where he delivered a talk entitled 'Immunity of the reproductive tract in Layers'. It is part of his academic collaborative effort that has enhanced his links between North American researchers.

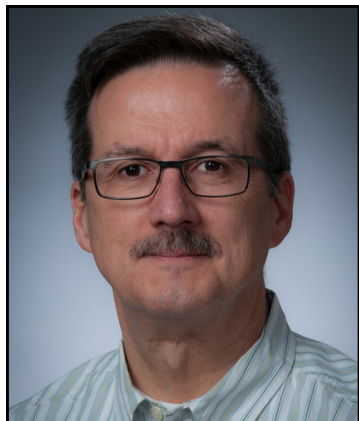


Photo: Left to right Drs. Bernardo Lorano (AVIMEX), Dr. Ricardo Cuetos (Poultry pathologist, UNAM), JC Rodriguez (AVC) and Miguel A. Marquez (Poultry consultant).

Poultry Meeting in Canada

Dr. Rodriguez was invited to participate in the Turkey Farmers of Canada: Strategic Research Forum in Alberta. All the Universities and institutions involved in Poultry Research in Canada such as: Dalhousie, Guelph, Montreal, Laval, Saskatchewan, Calgary, Alberta and UPEI (AVC) participated in this forum. The meeting was conducted in the Poultry Research Centre, University of Alberta, Edmonton, Alberta (June 7, 2016). It was a great opportunity to know and interchange opinions and ideas about the future of the turkey industry in Canada.

Canadian Poultry Research Council Grant Award



Congratulations to **Dr. Juan Carlos Rodriguez-Lecompte** for his recent success in being awarded a Canadian Poultry Research Council (CPRC) grant of \$42,000 for the project "Nutritional regulation of genes associated with avian B cell receptors involved in innate and adaptive immunity", in which he collaborates with Dr. Shayan Shariff, Ontario Veterinary College, and Dr. Bruce Rathgeber, Dalhousie University.

NSERC Discovery Grant Renewed



Congratulations to **Dr. Fred Kibenge** for his recent success in having his NSERC Discovery Grant renewed at \$145,000 over 5 years. The research program is entitled "One Fish, One Health: Biochemistry, infectivity and immunogenicity of a novel salmonid bafinivirus".

Reappointed for Another Term on the NSERC EG 1501

Congratulations to **Dr. Fred Kibenge** who has been reappointed to the NSERC Genes, Cells and Molecules Evaluation Group (EG 1501) for a one-year term ending on June 30, 2017. He last completed a three-year term on this committee on June 30, 2015.

PhD Thesis Defense



Congratulations to **Dr. Melanie Buote** who successfully defended her PhD thesis [Microscopic and metabolomic investigation of *Hematodium* sp. infections in Newfoundland snow crabs, *Chionoecetes opilio*] on Friday June 10, 2016. Melanie was co-supervised by **Dr. Rick Cawthorn** and Dr. Russ Kerr. **Dr. Gary Conboy** chaired the Examination Committee.

Well done Dr. Buote!

UK Bound



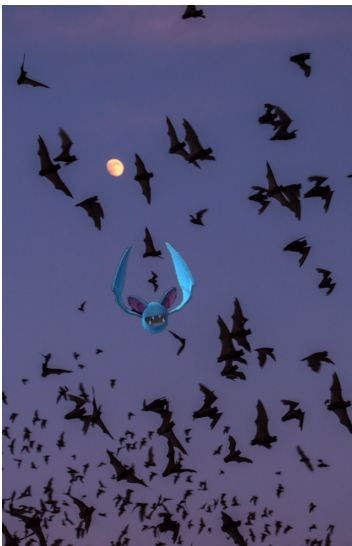
Congratulations to **Jocelyn Perez-Lazo** who has been accepted in a PhD program in Virology in the University of Liverpool in England. Jocelyn also received a full scholarship from her home country, Peru, to support her studies and living expenses. She starts October 2016. Jocelyn completed her MSc in Virology (*Improved detection of a fish virus with a segmented genome by real-time RT-qPCR*) in March 2016, under the supervision of **Dr. Fred Kibenge**.

Well done Jocelyn!

"Not another Zubat?!".

As the Bat White-Nose Syndrome scientific program coordinator for the Canadian Wildlife Health Cooperative at the AVC, **Jordi Segers** is always looking for outreach opportunities to educate people about the importance of bats and the dire situation they are in. The release of a brand new and immensely popular video game, Pokemon GO, provided the perfect opportunity for this bat and Pokémon enthusiast to write some words down on the differences and similarities between these video game bats and the real deal. In collaboration with the white-nose syndrome communication and outreach working group in the United States, Jordi wrote a lighthearted blog post for white-nose syndrome.org titled: "Not another Zubat?!". Check it out here:

<https://www.whitenosesyndrome.org/blog/not-another-z>



Recent Publications

Alizadeh M, Rodriguez-Lecompte JC, Yitbarek A, Sharif S, Crow G, Slominski BA. Effect of yeast-derived products on systemic innate immune response of broiler chickens following a lipopolysaccharide challenge. 2016 Poultry Science Association 00:1-8 <http://dx.doi.org/10.3382/ps/pew154>.

Godoy MG, Kibenge MJT, Wang Y, Suarez R, Leiva C, Vallejos F, Kibenge FSB. First description of clinical presentation of piscine orthoreovirus (PRV) infections in salmonid aquaculture in Chile and identification of a second genotype (Genotype II) of PRV. Godoy et al. Virology Journal 2016; 13:98 DOI 10.1186/s12985-016-0554-y.

Salas Y, Aburto E, Alonso RA, Márquez A, Corona H, Romero L. Asociación histológica con factores potenciales de riesgo y tiempo de sobrevida en el tumor mamario canino. Veterinaria México OA Vol. 31 No. 1 Enero-Marzo. 2016; pg. 1-13.

Poley JD, Sutherland BJG, Jones SRM, Koop BJ, Fast MD. Sex-biased gene expression and sequence conservation in Atlantic and Pacific salmon lice (*Lepeophtheirus salmonis*). Poley et al. BMC Genomics 2016; 17:483 DOI 10.1186/s12864-016-2835-7.

Kibenge FSB. Unclassified and unassigned aquatic animal viruses. In: Kibenge FSB and Godoy MM (Eds.), Aquaculture Virology. Elsevier, Amsterdam. 2016, Chapter 3, pages 35-48.

Kibenge FSB, Godoy MG, Kibenge MJT. Diagnosis of aquatic animal viral diseases. In: Kibenge FSB and Godoy MM (Eds.), Aquaculture Virology. Elsevier, Amsterdam. 2016, Chapter 4, pages 49-75.

Kibenge FSB. Determinants of emergence of viral diseases in aquaculture. In: Kibenge FSB and Godoy MM (Eds.), Aquaculture Virology. Elsevier, Amsterdam. 2016, Chapter 6, pages 95-116.

Kibenge FSB and Godoy MG. Reoviruses of aquatic organisms. In: Kibenge FSB and Godoy MM (Eds.), Aquaculture Virology. Elsevier, Amsterdam. 2016, Chapter 14, pages 205-236.

Kibenge FSB and Kibenge MJT. Orthomyxoviruses of fish. In: Kibenge FSB and Godoy MM (Eds.), Aquaculture Virology. Elsevier, Amsterdam. 2016, Chapter 19, pages 299-326.

Kibenge FSB. Nudiviruses of crustaceans. In: Kibenge FSB and Godoy MM (Eds.), Aquaculture Virology. Elsevier, Amsterdam. 2016, Chapter 27, page 415.

Kibenge FSB. Parvoviruses of crustaceans. In: Kibenge FSB and Godoy MM (Eds.), Aquaculture Virology. Elsevier, Amsterdam. 2016, Chapter 28, page 417.

Kibenge FSB. Togaviruses of crustaceans. In: Kibenge FSB and Godoy MM (Eds.), Aquaculture Virology. Elsevier, Amsterdam. 2016, Chapter 31, pages 441-442.

Kibenge FSB. Dicistroviruses of crustaceans. In: Kibenge FSB and Godoy, MM. (Eds.), Aquaculture Virology. Elsevier, Amsterdam. 2016, Chapter 33, page 473.

Villarnovo D, Burton SA, Horney BS, MacKenzie AL, Vanderstichel R. Preliminary evaluation of a gel tube agglutination major cross-match method in dogs. Vet Clin Pathol e-pub ahead of print: DOI: 10.1111/vcp.12374.

Guilherme GV, Conboy G, Manigandan L, Marron F, Hanna P, MacDonald E, Skorobohach B, Wilcock B, Kutz SJ, Gilleard JS. *Onchocerca lupi* Nematodes in Dogs Exported from the United States into Canada. Emerging Infectious Diseases. www.cdc.gov/eid. Vol.22, No. 8, August 2016.

Alizadeh M, Munyaka P, Yitbarek A, Echeverry H, Rodriguez-Lecompte JC. Maternal antibody decay and antibody-mediated immune responses in chicken pullets fed prebiotics and synbiotics. 2016 Poultry Science 0:1-<http://dx.doi.org/10.3382/ps/pew244>.

Recent Publications continued

White CL, Forzán MJ, Pessier AP, Allender MC, Ballard JR, Catenazzi A, Fenton H, Martel A, Pasmans F, Miller DL, Ossiboff RJ, Richgels KLD, Kerby JL, Amphibian : A Case Definition and Diagnostic Criteria for *Batrachochytrium salamandrivorans* Chytridiomycosis. *Herpetological Review* 2016; 47(2): 207-209.

McAlpine DF, McBurney S, Sabine M, Vanderwolf KJ, Park A, Cai HY. Molecular Detection of *Pseudogymnoascus destructans* (Ascomycota: Pseudeurotiaceae) and Unidentified Fungal Dermatitides on Big Brown Bats (*Eptesicus fuscus*) Overwintering inside Buildings in Canada. *Journal of Wildlife Diseases* 2016; 52 (4): pp 000-000.

Wille M, McBurney S, Robertson GJ, Wilhelm SI, Biehert DS, Soos C, Dunphy R, Whitney H. A Pelagic Outbreak of Avian Cholera in North American Gulls: Scavenging as a Primary Mechanism for Transmission? *Journal of Wildlife Diseases* 2016; 52(4): pp 000-000.

For comments or suggestions for our newsletter, please contact: Dr. Fred Kibenge (kibenge@upei.ca) or
Ingrid MacLeod (imacleod@upei.ca) (902) 566-0541.

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