

The Chair's Holiday Greeting and End of Year Message



As 2018 comes to an end and we take a few days to enjoy the holiday season with our families and friends, I want to share with you the wish that there may be peace on earth and love in the hearts of all humankind this holiday season and always. This is a time to reflect on our successes in 2018 and be thankful for all the contributions of many people along the way, and a time to commit to a productive 2019. As you will read in this newsletter, we are finishing another very successful year, and looking forward to building on this success in 2019.

Wishing you and your families much happiness during the holidays and a healthy and prosperous 2019! **Fred Kibenge**



Eugene F. Whelan Green Hat Award Winner



Dr. Pierre-Yves Daoust is the recipient of this year's Eugene F. Whelan Green Hat Award. The award was presented to him at the Recognition of Founders Ceremony on Friday, September 28, 2018, in Schurman Market Square, Don and Marion McDougall Hall. A member of AVC's founding faculty, Dr. Pierre-Yves Daoust has worked diligently to enhance the reputation of AVC regionally nationally and internationally. Throughout his career, he has shared his knowledge and expertise in morphologic pathology, and his passion for wildlife health and animal welfare, with thousands of veterinary

students and graduate students, and with people in Atlantic Canada, across the country including the north. Dr. Daoust has inspired many AVC students who have gone on to become leaders in wildlife health surveillance and management. He was instrumental in establishing the Canadian Wildlife Health Cooperative and served as the first regional director of the organization's Atlantic region node until he retired from UPEI in 2017, positioning AVC as the major centre of wildlife health expertise in the region. His leadership in wildlife welfare, particularly in connection to marine and fur-bearing animals, has left a major mark on Canada. Dr. Daoust retired from UPEI on December 31, 2017 after 30 years as an Anatomic Pathology Professor. He is now Professor Emeritus in the Department of Pathology and Microbiology.

Photo: Atlantic regional group of the Canadian Wildlife Health Cooperative (CWHC) Left to right: Grant Curtis, Fiep deBie, Dr. Dave McRuer, Dr. Megan Jones, Dr. Scott McBurney, Dr. Pierre-Yves Daoust, Jordi Segers, Darlene Weeks and Tessa McBurney. Missing from photo is Dr. Laura Bourque.

Dr. Paul Hanna Retires from UPEI



After 32 years at the Atlantic Veterinary College, **Dr. Paul Hanna** retired in June 2018. His youthful demeanor and years of working with formalin make him a difficult one to age, but, yes this fateful day arrived.

Dr. Hanna is originally from Stayner, a small rural town in southern Ontario, where his grandfather and uncle both practiced veterinary medicine. He attended the Ontario Veterinary College to obtain his Doctor of Veterinary Medicine degree from the University of Guelph in 1982. Dr. Hanna proceeded directly into a one year combined internship and Diploma of Veterinary Pathology degree course; he then moved to Prince Edward Island in 1983 to work as a pathologist with the Department of Agriculture. With the opening of the AVC in 1986, Dr. Hanna worked for 1 year as a contract pathologist, sessional lecturer and supervisor of morphologic pathology at the AVC before pursuing a Master of Science degree, which he obtained from UPEI in 1989. In 1991, he became a boarded Diplomate by passing the certifying examination from the American College of Veterinary Pathology.

Dr. Hanna's role since then included being an adjunct professor and contract pathologist with the Department of Pathology and Microbiology from 1989 until 2002, after which he was hired as an Associate Professor and earned tenure in 2005. In addition, he served as Director of Diagnostic Services from 1992 to 1996.

Paul's experienced eye and generosity of heart will be missed greatly by those of us remaining. His keen interest and genuine love of diagnostic anatomic pathology, and especially dermatopathology, have made him someone his peers greatly relied upon for opinions on difficult cases. His door was always open to discuss a case or to debate something pathological. Paul's conscientious work ethic, practical approach, dependability, and generosity with his time made him an invaluable member and cornerstone of our close-knit pathology group. He set an excellent example for the many graduate students and residents he has trained. Over the years, Paul has effectively harnessed his "pathological" enthusiasm and continues to hone his teaching skills making him an excellent instructor who has been the recipient of several teaching awards, including the 2012 Pfizer Carl J. Norden Distinguished Teacher Award, the highest teaching award given by North American veterinary colleges!

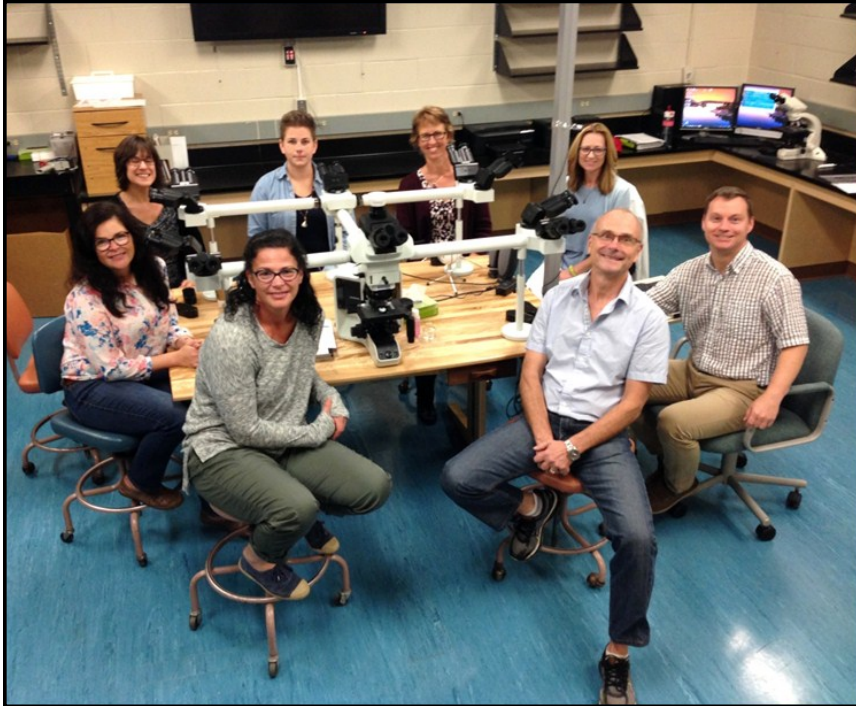
Paul's other interests include travelling, woodworking, recreational running and cycling. Paul also enjoys spending time with his family which includes his wife Ginny, his grown children Ben and Emily, as well as with his stepdaughter Gillian and her son Ethan. Paul and Ginny like walking with their 2 somewhat neurotic but lovable Yorkshire terrier dogs, Gus and Ollie. Paul is used to being teased about the manliness of sharing his life with such tiny dogs, but he insists that they are actually quite tough and think they are as big as Great Danes! A brand new grandchild arrived this summer which should prove to be an exciting retirement project. Paul is maintaining his adjunct and graduate faculty status with the department, so we hope to be able to lure him back now and then....

We wish you the best in retirement Paul and hope to see you frequently between adventures!

Contributed by Drs. Andrea Bourque and Cora Gilroy.

Dr. Paul Hanna donates Multi-head Microscope Table

Dr. Paul Hanna, a recent retiree in anatomic pathology, handcrafted a beautiful wood table built to accommodate a new multi-head microscope heavily used for diagnostic teaching. Dr. Hanna custom designed and built the table, incorporating birch and walnut in an ergonomic design featuring Craftsman elements. The cost of all materials and his time, estimated to be over 80 hours, were graciously donated as a gift to the Department and the AVC, ensuring that many present and future faculty members, staff and trainees will benefit from his generosity. Thank you Paul!



Pathologists enjoying the new table:

Left to right: Drs. Andrea Bourque, Melanie Buote, Shannon Martinson, Nicole Kaiser, Cora Gilroy, Kim Foote, Noel Clancey and Paul Hanna.

Dr. Shannon Martinson Tenured at UPEI



Congratulations to **Dr. Shannon Martinson**, Assistant Professor, Anatomic Pathology, who has obtained tenure at the University of Prince Edward Island.

Congratulations Dr. Martinson!

Dr. Dave McRuer made Associate of CWHC Atlantic Region



Congratulations to **Dr. Dave McRuer**, Wildlife Health Specialist with Parks Canada and Adjunct and Graduate Faculty in the Department of Pathology and Microbiology, who has formally been made an Associate of the Atlantic Region of the Canadian Wildlife Health Cooperative (CWHC). Our associates are valued members of the CWHC community of practice, both regionally and nationally. Indeed, we have already been working closely with Dave on many wildlife health issues of regional importance; we are very fortunate to formally add him to our team! For a list of CWHC Associates Nationally, see: <http://www.cwhc-rscf.ca/associates.php>

Karen Roche Appointed Chair's Secretary in Pathology and Microbiology



We welcome **Karen Roche** who has been hired as the permanent full time, Chair's administrative assistant Level 6 (ADS6), in the Department of Pathology and Microbiology, replacing **Rita Saunders** who retired in May this year.

Karen is no stranger to the AVC, having worked for the past 27 years in various positions at the college. Karen is moving from the Associate Dean, Academic and Student Affairs Office, where she has worked for the last 5 years as an administrative assistant. Prior to that she worked for 6 years as an administrative assistant in the AVC Dean's Office. She thus brings a wealth of experience to the position. Please drop by to say hello and make her feel welcome.

Welcome Karen!

Pathology and Microbiology says Farewell to Jolene Sturge



The Department of Pathology and Microbiology says thank you and farewell to **Jolene Sturge** who has completed her five-month Administrative Assistant term as ADS 4 in Pathology and Microbiology. Our best wishes are extended to her in future endeavors. Thank you to **Ingrid MacLeod** who has been backfilling for Rita Saunders. She will be moving back to her ADS4 position in the department.

All the best Jolene!

Recent Research Grant



Congratulations to **Dr. Pierre-Yves Daoust**, Professor Emeritus, for his recent success in getting funding from the Department of Fisheries Oceans Canada (DFO) under the Coastal Environmental Baseline Program. The total DFO funding is \$66,000. The research project is titled 'Coastal Environmental Baseline Program: Ringed Seal Health – Tracking trends in a changing world,' and is part of **Enooyaq Sudlovenick's** MSc program.

Well done Dr. Daoust!

Thesis Defenses



Congratulations to **Dr. Kim Foote** who successfully defended her MVSc thesis [Assessing Microscopic Area and Sample Volume of Equine Bronchoalveolar Lavage Fluid] on Thursday, August 23, 2018. Kim was co-supervised by **Dr. Cora Gilroy** and **Dr. Shelley Burton**. **Dr. Noel Clancey** chaired the Examination Committee.

Congratulations Dr. Foote!



Congratulations to **Alyson Brown** who successfully defended her MSc thesis [Vaccine-induced protection against furunculosis in Arctic charr (*Salvelinus alpinus*) on Tuesday, July 31, 2018. Alyson was supervised by **Dr. Mark Fast**. **Dr. Dave Speare** chaired the Examination Committee.

Congratulations Alyson!

Charles Louis Davis and Samuel Wesley Thompson DVM Foundation Award



Congratulations to **Dr. Kimberley Foote**, third-year MVSc/resident in clinical pathology, who recently received a 2018 Charles Louis Davis and Samuel Wesley Thompson DVM Foundation Award, a trainee award for excellence in diagnostic pathology. She was nominated by the department pathologists and the award was presented on November 5, 2018, in Washington, DC, at the American College of Veterinary Pathologists/ American Society for Veterinary Clinical Pathology (ACVP/ASVCP) annual meeting. Kim was among 31 student scholarship awardees from universities in North America affiliated with the foundation.

Congratulations Dr. Foote!

Scholarships and Awards



Congratulations to **Dr. Walaa Nasry**, PhD student in the Department of Pathology and Microbiology and supervised by **Dr. Chelsea Martin**. Walaa was awarded the **2018 Phyllis Pitre Bursary** worth \$500. The award is in honor of the late Phyllis Pitre, former Chair of Career Development Association of PEI, and was established in 2011. The awards go to deserving adult learners on PEI who are working towards completing a post-secondary certificate, diploma or degree.

Earlier this year, Walaa was also selected for the **Canadian Federation of University Women Charlottetown Club Graduate Scholarship in Science or Nursing**, worth \$6,260. The Canadian Federation of University Women provides its members with an opportunity to enjoy fellowship, to be stimulated and informed, to promote education through the awarding of scholarships, bursaries and grants, and to improve the status of women and human rights in general. Selection criteria for this award include academic performance, contributions and potential contributions to the field of study, and career goals and aspirations. Prior to starting her PhD, Walaa completed her MSc which was co-supervised by **Dr. Chelsea Martin** and **Dr. Juan Carlos Rodriguez Lecompte**.

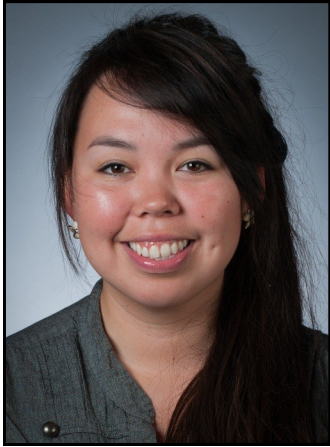
Congratulations Dr. Nasry!



Congratulations to **Ashley McKibbon**, who was the recipient of the 2018 Department of Pathology and Microbiology Seminar Series Award for Best Seminar Presentation, entitled

“Identification of virus-host receptors in Atlantic Salmon Bafinivirus, a Coronavirus of fish,” during the combined Biomedical Sciences/Pathology and Microbiology Seminar series for 2017-2018. Ashley’s MSc program in virology is supervised by **Dr. Fred Kibenge**.

Scholarships and Awards



Congratulations to **Enooqa Sudlovenick**, who was selected for the Master's Scholarship of \$15,000, from the W. Garfield Weston Award for Northern Research (<http://www.westonfoundation.org/our-initiatives/science-in-canadas-north/awards-fellowships-page/>). The topic of Enoo's research project is entitled "Assessment of ringed seal health and collection of traditional ecological knowledge." Enoo's MSc program in Wildlife Pathology is co-supervised by **Dr. Megan Jones** and Dr. Susan Kutz (University of Calgary).

Congratulations Enoo!

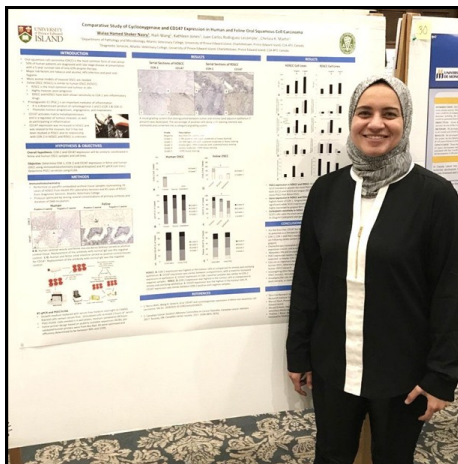
Presentation at the American College of Veterinary Pathologists/ American Society for Veterinary Clinical Pathology (ACVP/ASVCP) Annual Meeting



Dr. Kimberley Foote, third year MVSc/resident in clinical pathology, presented her MVSc research, "Effect of Microscopic Area on Differential Cell Counts in Evaluation of Equine Bronchoalveolar Lavage Fluid" recently. Her presentation was at the American College of Veterinary Pathologists/ American Society for Veterinary Clinical Pathology (ACVP/ASVCP) annual meeting in Washington, DC, on November 4, 2018. Kim is supervised by **Drs. Shelley Burton** and **Cora Gilroy**.

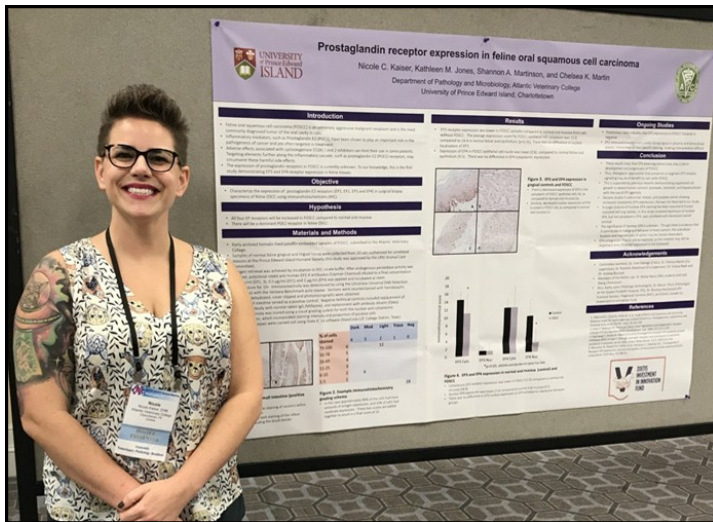
Well done Dr. Foote!

Cancer Research Conference in Atlantic Canada



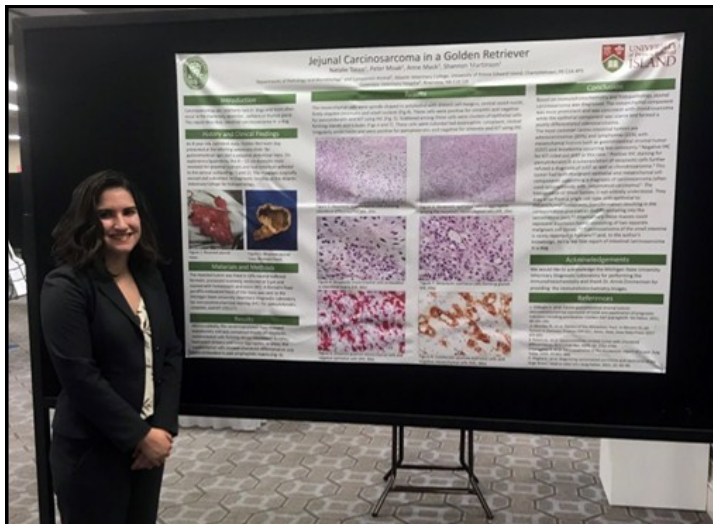
Dr. Walaa Nasry, a second-year PhD student under the supervision of **Dr. Chelsea Martin**, recently presented a research poster at the 2018 Beatrice Hunter Cancer Research Institute (BHCRI) / Terry Fox Research Institute (TFRI) Cancer Research Conference in Atlantic Canada, held November 5-6, 2018 in Halifax, NS. The title of her abstract was, "Comparative Study of Cyclooxygenase and CD147 Expression in Human and Feline Oral Squamous Cell Carcinoma". Her project was done in collaboration with **Dr. Juan Carlos Rodriguez Lecompte**, as well as with Dr. Marvin Tesch at Health PEI. Walaa received a TFRI – Atlantic Node / BHCRI travel award to present her research at this meeting.

Poster Presentations at the American College of Veterinary Pathologists/ American Society for Veterinary Clinical Pathology (ACVP/ASVCP) Annual Meeting

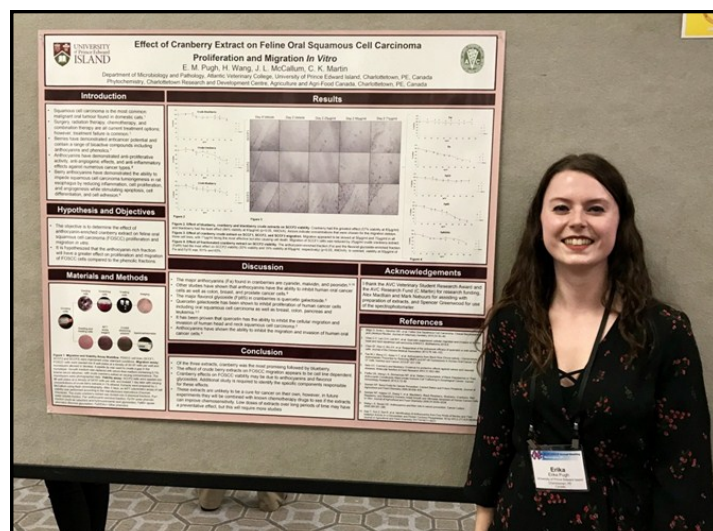


Dr. Nicole Kaiser, third-year MVSc/resident in anatomic pathology, presented her MVSc research and a case report at the American College of Veterinary Pathologists/ American Society for Veterinary Clinical Pathology (ACVP/ASVCP) annual meeting held November 3-7, 2018, in Washington, DC. Her posters were titled, "Prostaglandin receptor expression in feline oral squamous cell carcinoma" and "*Encephalitozoon pogonae*-associated vasculitis in an inland bearded dragon (*Pogona vitticeps*)". Nicole is under the supervision of **Drs. Chelsea Martin** and **Shannon Martinson**. Nicole's project was supported by a grant from the Zoetis Investment

in Innovation Fund, and she received travel funds from the Department of Pathology and Microbiology and the UPEI Office of Research.

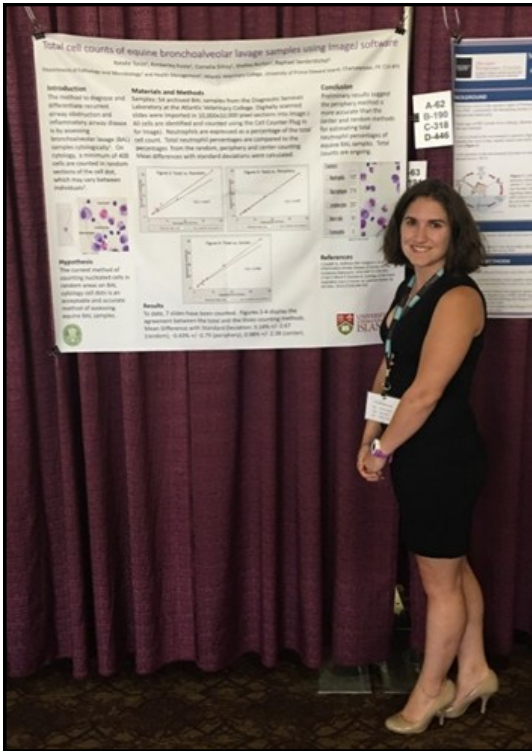


Natalie Tocco, AVC Class of 2020, presented a case report at the American College of Veterinary Pathologists/ American Society for Veterinary Clinical Pathology (ACVP/ASVCP) annual meeting held November 3-7, 2018, in Washington, DC. Her poster was titled "Jejunal Carcinosarcoma in a Golden Retriever". She was supervised by **Dr. Shannon Martinson**. Natalie received travel funding through the AVC Pathology Club and the UPEI Office of Research.



Erika Pugh, AVC Class of 2020, presented a poster at the ACVP/ASVCP annual meeting in Washington, DC. Her poster summarized the results from her summer research project, titled "Effect of Cranberry, Blueberry, and Blackberry Extracts on Feline Oral Squamous Cell Carcinoma Viability." Erika's project was supervised by **Dr. Chelsea Martin** and was done in collaboration with Dr. Jason McCallum at Agriculture and Agrifood Canada. Erika received travel funding from the AVC Pathology Club and the UPEI Office of Research.

2018 Clinical Pathology Summer Student Natalie Tocco



Natalie Tocco, AVC Class of 2020, worked as a summer research student in the Department of Pathology and Microbiology under the supervision of **Drs. Cora Gilroy** and **Shelley Burton**. Natalie was the recipient of a Veterinary Student Research Award (VetSRA) and worked closely on her project, "Total cell counts of equine bronchoalveolar lavage samples using ImageJ software," with **Dr. Kimberley Foote**. Dr. Raphael Vanderstichel, Department of Health Management, assisted with statistical evaluation and **Dr. Nicole Kaiser** participated as Natalie's mentor in the AVC Summer Research and Leadership Program. Natalie presented her poster at the *National Veterinary Scholars Symposium*, College Station, Texas from August 2-4, 2018, and at the *AVC Summer Research & Leadership Program*, Charlottetown, PE, on August 27, 2018.

Great work, Natalie!

Photo: Natalie Tocco at the *National Veterinary Scholars Symposium*, College Station, Texas.

AVC 4th Year Student Does Special Topics Course



AVC fourth year student **Ashley Powell** participated in a special topics course in pathology and microbiology in the Block C rotation June 11-29, 2018, under the supervision of **Drs. Shannon Martinson** and **Anne Muckle**. Participating faculty and staff included **Drs. Andrea Bourque, Melanie Boute, Noel Clancey, Megan Jones, Chelsea Martin, Shannon Martinson, Anne Muckle**, and Jan Giles, and Matthew Saab. Ashley received one-on-one training in interpreting histology and cytology slides, performing post mortem examinations, writing pathology reports, and attending pathology rounds. In the Diagnostic Services (DS) Bacteriology Laboratory, Ashley worked with seal fecal *Escherichia coli* isolates collected during her 2017 VetSRA research project with **Drs. Pierre-Yves Daoust** and **Anne Muckle** and tested these bacteria for patterns of antimicrobial resistance and virulence genes. Ashley has a strong interest in diagnostics and research. Last year, she worked in the DS Bacteriology Laboratory as our weekend student laboratory-

assistant and provided weekend coverage in the Post Mortem Laboratory. She plans to do a residency in pathology after she graduates in 2019.

Chinook Project 2018

The Chinook Project completed its thirteenth year of clinics in June 2018. As a charitable mobile veterinary service, the project has held 22 clinics in 12 different locations and has seen over 2000 animals. Participants have performed over 955 spay and neuter surgeries.



In June the team travelled to Nain, Labrador. This trip was the fourth visit (2012, 2014, 2016) to this Inuit based, most northern community of Labrador. Dr. Heather Gunn-McQuillan (AVC), a seasoned Chinook participant (third trip), was joined by Dr. Caitlin Matters (UPEI, Chinook alumnus 2014), **Dr. Cornelia Gilroy** and five veterinary students hailing from Quebec, Nova Scotia, Prince Edward Island and the United States. The trip also heavily depended on local coordination. In Nain, the team spent 4 clinic days seeing 153 patient visits in the local woodworking shop. Forty surgeries were completed (ovariohysterectomies, castrations, dental procedures and other soft tissue surgeries)

and 113 medical appointments were seen for a variety of conditions.

On June 16th, the team packed up and flew to Goose Bay and from there was welcomed by the Innu First Nation at Sheshatshiu. Dr. Gunn-McQuillan returned home, and Dr. Catherine Herlihy (New York, Chinook alumnus 2014) joined the team. The team spent 4 clinic days in Sheshatshiu and completed 51 surgeries (ovariohysterectomies, castrations and lump removals) and 57 medical appointments for a total of 108 patient visits.

The Chinook Project is in the process of making plans for 2019, again returning to Labrador. We plan on increasing relationships with Nain and Sheshatshiu, and possibly returning to other communities such as Natuashish and Rigolet where there have been distemper outbreaks and rabies cases this year.

The Chinook Project will continue to look for collaborative opportunities with Veterinarians without Borders (VwB) and other groups and hope to see a national strategy for access to veterinary care emerge. The team participated in VwB panel discussions in 2017 and 2018 held at national conferences, and continue to provide information and propose ideas. This year we collected swabs from dogs in order for faculty at Memorial University to ascertain the



prevalence of parvovirus and compare this to wildlife reservoirs. The

Chinook Project is also involved in Dr. Charlene VanLeeuwen's research (UPEI) into the long-term impact of community-based learning experiences on university students. We hope in the future that the Chinook Project will be able to engage in other cooperative endeavours involving public health and research.



Spanish Tour on Bovine Pneumonia



Merck, Sharp & Dohme (MSD) invited **Dr. Alfonso López**, Professor Emeritus in the Department of Pathology and Microbiology, to give a series of presentations in the Spanish cities of Madrid, Salamanca, Segovia, Lérida, and Lugo (November 20-29, 2018). These presentations aimed to update bovine veterinarians, from Cataluña to Galicia, on the diagnostic predicaments faced by the beef and dairy industries worldwide. Fifty years ago pneumonia was the number-one ("número-uno") cause of morbidity and mortality in feedlot cattle, and sadly, 50 years later, little has changed. MSD asked Dr. López to prepare a down-to-earth presentation on what to look for in

the affected lung during a field postmortem examination, what laboratory tests are helpful but most important, how to interpret necropsy and microbiological findings. During his visit to Spain, a 35-minute-film entitled "What is the weight of pathogens in the bovine respiratory disease complex?" was recorded in a Madrid studio for MSD distribution in Spanish speaking countries around the globe.

Photo: Dr. Alfonso López and Dr. Laura Elvira Partida, MSD Animal Health, Ruminants.

Dr. Fred Kibenge Appointed Editor of Journal AQUACULTURE



Dr. Fred Kibenge has been appointed Editor of the journal **AQUACULTURE** effective December 1, 2018. He is Section Editor handling all submissions related to aquatic viruses.

Publications

Awosile B, German G, Rodriguez-Lecompte JC, Saab ME, Heider LC, McClure JT. Determination of antimicrobial resistance to extended spectrum cephalosporin, quinolones, and vancomycin in selected human enteric pathogens from Prince Edward Island, Canada. *Canadian Journal Microbiol* 2018; 64:473-482. [Dx.doi.org/10.1139/cjm-2018-0014](https://doi.org/10.1139/cjm-2018-0014).

López A, McKenna S. Bovine pancreatolithiasis: case report and review of the literature. *Journal of Veterinary Diagnostic Investigation* 2018;30:760-762.

Bordeleau X, Hatcher BG, Denny S, Fast MD, Whoriskey FG, Patterson DA. Consequences of captive breeding: Fitness implications for wild-origin, hatchery-spawned Atlantic salmon kelts upon their return to the wild. *Biological Conservation* 2018; 225: 144-153.

Nasry WHS, Wang H, Jones K, Dirksen WP, Rosol TJ, Rodriguez-Lecompte JC and Martin CK. CD147 and Cyclooxygenase Expression in Feline Oral Squamous Cell Carcinoma. *Veterinary Science* 2018;5:72. [Doi:10.3390/vetsci5030072](https://doi.org/10.3390/vetsci5030072).

Nasry WHS, Rodriguez-Lecompte JC, Martin CK. Role of COX-2/PGE2 Mediated Inflammation in Oral Squamous Cell Carcinoma. *Cancers* 2018; 10: 348. [Doi:10.3390/cancers10100348](https://doi.org/10.3390/cancers10100348).

Jones MEB, Gasper D, Mitchell E. 2018. Bovidae, Antilocapridae, Giraffidae, Hippopotamidae, Tragulidae pp117-147 in: McAloose, D., K. Terio, J. St. Leger (editors). *Pathology of Wildlife and Zoo Animals* (Textbook). Elsevier, San Diego.

For comments or suggestions for our newsletter, please contact: Dr. Fred Kibenge (kibenge@upei.ca) or

Ingrid MacLeod (imacleod@upei.ca) (902) 566-0541.

Editor Dr. Alfonso López. Reviewer: Dr. Shelley Burton .

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

