

# Pathology & Microbiology Newsletter Atlantic Veterinary College University of Prince Edward Island Issue 70 December, 2024



# Chair's Holiday Message



It's hard to believe how quickly 2024 has flown by in the Department of Pathology and Microbiology! Under new leadership of AVC Dean Griffon and UPEI President Rodgers, we saw the DVM class of 2024 become newly minted veterinarians, and helped welcome the class of 2028. Our department's significant teaching and diagnostic service contributions, as well as our research and graduate training programs, helped AVC shine during the recent AVMA accreditation site visit. Achievements of our students, staff and faculty in 2024 are too numerous to list here, but include over 40 publications, numerous presentations and invited speaking engagements, successful funding competitions, and various recognitions for excellence in teaching, research, service and leadership. Details can be found in this and past newsletters. Here, I wish to congratulate our entire team for their collective efforts that help make these achievements possible. Having recently passed the 6 month point in the role of department chair. I would like to specifically thank Karen Roche and Ingrid MacLeod for all they do to help the department run smoothly. As 2024 comes to a close, I

hope everyone finds a moment to rest and recharge. I will be thinking of our members who are missing friends and loved ones during the holidays. See you all in the new year! (Photo: **Dr. Chelsea Martin,** Chair Pathology & Microbiology.)



# **ACVP Leadership Award**



**Dr. Shelley Burton**, along with Dr. Ryan Jennings from The Ohio State University, jointly received a Wendy Coe Leadership Award from the American College of Veterinary Pathologists (ACVP). The award was presented in at the ACVP annual meeting in Seattle on November 19, 2024. Wendy Coe was a past ACVP Executive Director. Drs. Burton and Jennings received the award in recognition of their leadership as Co-Chairs of the ACVP Certifying Examination Board.

Photo L-R: Drs. Shelley Burton, Lauri Diehl (ACVP President) and Ryan Jennings.

©2024 American College of Veterinary Pathologists

## **Appointments**

Congratulations to **Dr. Fred Kibenge** who has been re-appointed to a third 3-year term as a Section Editor for *Aquaculture* effective December 1, 2024. 2023 Journal Impact Factor is 4.37. Ranked 5 among the top 15 journals in fisheries and aquatic research by Web of Science.



Congratulations to **Dr. Fred Kibenge** was appointed to the International Committee for Taxonomy of Viruses (ICTV) *Spinareoviridae* Study Group starting August 2024. Each ICTV Study Group's goal is to taxonomically classify new and existing viruses within a virus family using genetic identity and/or phylogenetic inference. Taxonomy proposals are submitted once a year in June. The proposals can be anything from placing a new virus in a species, or higher-level creation of demarcation criteria for subfamilies or genera.

Congratulations to **Dr. Fred Kibenge** has been re-appointed to a second 3-year term as an Associate Editor for *Journal of the American Veterinary Medical Association (JAVMA)* and *American Journal of Veterinary Research (AJVR)* effective November 1, 2024. JAVMA and AVJR are scientific journals published by the AVMA, which has a membership of more than 105,000 veterinarians.

# **Funding**



Congratulations to **Dr. Nina Germitsch** on receiving funding from the Prince Edward Island Wildlife Conservation Fund. Nina has received \$7,500. for her project "The spread of invasive lung parasites in Prince Edward Island's wild canids."

# **CWHC Travels to Bat Research Conference in Guadalajara**



Darrian Washinger and Jordi Segers of the Canadian Wildlife Health Cooperative's bat team travelled to Guadalajara, Mexico in October for the annual North American Symposium for Bat Research. This symposium promotes the study and conservation of bats by facilitating communication and collaboration among scientists, educators, and the public. Annual meetings are held throughout North America. Attendees come from all over the continent, as well as some travelling from off-continent. The southern location of this year's meeting brought many more attendees from Central and South America to the symposium. The symposium lasts four days and consists of days of optional local tours (visiting an iconic bat friendly tequila distillery, assisting local bat researchers), workshops (building your own bat tracker, conducting wildlife disease surveillance), and three days of plenary sessions.

Jamaican fruit bats (*Artibeus jamaicenis*) are a common bat species of Mexico (photo by Jordi Segers).

The plenary sessions are chock full of interesting presentations on the latest in bat science, outreach, conservation and much more. As the Atlantic Bat Conservation Project Technician and the National Bat Health Program Coordinator, respectively, Darrian and Jordi were primarily interested in presentations relating to bat health and conservation in Canada, but various close partners from Mexico and the US provided valuable presentations as well. From cat predation on bats, age specific survivorship in bats, bat ecology and the renewable energy future, to tropical bat ecology and global bat conservation, there was something for everyone.



While Darrian and Jordi did not get the chance to join any of the conference-organized tours, they did do some sightseeing of their own. With Mexico's Día de los Muertos approaching on November 2 there were lots of festivities to partake in. They also travelled south to climb the dormant volcano Nevado de Colima. They spent two nights in the crater of the volcano and did a hike through the jungle, a night hike, and eventually scaled the steep peak and made it to the top at 4200 meters above sea level. The views were stunning, especially in the direction of the adjacent and very active Volcán de Fuego.

A Día de los Muertos display. (photo by Darrian Washinger)

Next year, the annual symposium will not be in such an exotic place, but will be held in Edmonton, Alberta. Fortunately, there are plenty of mountains to climb in Canada's west as well.

Volcán de Fuego as seen from the slopes of Nevado de Colima. (photo by Jordi Segers)



### **Publications**

Gautam H, Ahmad Shaik N, Banaganapalli B, Popowich S, Subhasinghe I, **Ayalew LE**, Mandal R, Wishart DS, Tikoo S, Gomis S. Elevated levels of butyric acid in the jejunum of an animal model of broiler chickens: from early onset of *Clostridium perfringens* infection to clinical disease of necrotic enteritis. Journal of Animal Sciences and Biotechnology 2024: 15;144 https://doi.org/10.1186/s40104-024-01105-5

**Veltman CV, Whyte SK, Purcell SL, Groman DB**, Jia B, Andrew S, **Poley JD, Fast MD**. Exposures to hydrogen peroxide impact healing, redox and oxygen transport differentially from immune mechanisms in the gill of Atlantic Salmon (*Salmo salar*). Aquaculture 2025:598;742007. <a href="https://doi.org/10.1016/j.aquaculture.2024.742007">https://doi.org/10.1016/j.aquaculture.2024.742007</a>

Giacinti JA, Signore AV, **Jones MEB**, **Bourque L**, [...] Soos C. Avian influenza viruses in wild birds in Canada following incursions of highly pathogenic H5N1 virus from Eurasia in 2021-2022. mBio. 2024 Aug 14;15(8): https://doi.org/10.1128/mbio.03203-23. Epub 2024 Jul 16.

Erdelyan CNG, Kandeil A, Signore AV, **Jones MEB**, [...] Yason C, [...] **Bourque L**, [...] Berhane Y. Multiple transatlantic incursions of highly pathogenic avian influenza clade 2.3.4.4b A(H5N5) virus into North America and spillover to mammals. Cell Rep. 2024 Jul 23;43(7):114479. <a href="https://doi.org/10.1016/j.celrep.2024.114479">https://doi.org/10.1016/j.celrep.2024.114479</a>. Epub 2024 Jul 13.

Cormier TL, Barychka T, Beaumont M, Burt TV, English MD, Giacinti JA, Giroux J-F, Guillemette M, Hargan KE., **Jones M.**, [...] Avery-Gomm, S., 2024. Seabird and sea duck mortalities were lower during the second breeding season in eastern Canada following the introduction of highly pathogenic avian influenza A H5Nx viruses. Bird Study, 1- 13. https://doi.org/10.1080/00063657.2024.2415161

Avery-Gomm S, Barychka T, English M, Ronconi RA, [...] **Jones M**, [...] Wight J. 2024. Wild bird mass mortalities in eastern Canada associated with the Highly Pathogenic Avian Influenza A(H5N1) virus, 2022. Ecosphere 15:e4980. https://doi.org/10.1002/ecs2.4980

McPhail GM, Collins SM, Burt TV, Careen NG, Doiron PB, Avery-Gomm S, [...] **Jones MEB**, [...] Montevecchi WA (2024). Geographic, ecological, and temporal patterns of seabird mortality during the 2022 HPAI H5N1 outbreak on the island of Newfoundland. Canadian Journal of Zoology, (ja). https://doi.org/10.1139/cjz-2024-0012

Adams AM, Trujillo LA, Campbell CJ, Akre KL, Arroyo-Cabrales J, Burns L, Coleman JTH, Dixon RD, Francis CM, Gamba-Rios M, Kuczynska V, McIntire A, Medellín RA, Morris KM, Ortega J, Reichard JD, Reichert B, **Segers JL**, Whitby MD, & Frick WF (2024). The state of the bats in North America. Ann NY Acad Sci., 1–14. https://doi.org/10.1111/nyas.15225



For comments or suggestions for our newsletter, please contact: Ingrid MacLeod (<a href="macleod@upei.ca">imacleod@upei.ca</a>) (902) 566-0541. Editor/ Reviewer Dr. Fred Kibenge and Dr. Shivani Ohja

