FALL 2023 NEWSLETTER



NEWS & EVENTS

ISSUE 16 | SEPTEMBER 2023

CONGRATULATIONS TO OUR NEW GRADUATES FROM SUMMER 2023



Leia Gong

MSc by Coursework in One Health/ Potential pathogen transmission associated with domestic pet relocation from Central America and the Caribbean to the United States following natural disasters (Supervisor: Ketzis)

Dr. James Fairs

MSc by Research/Evaluation of High-Fidelity Models Used to Teach Small Animal Dental Skills to Pre-Clinical Veterinary Students (Supervisors: Artemiou, Conan, Gingerach)



JOURNAL CLUB SUMMER SEMESTER

If you're interested in the presenting at Journal club this semester, sign up at: POV Journal Club Fall 2023—Google Sheets Dates for Journal Club are:

DATES FOR JOURNAL CLUB ARE:

- 20th September
- 4th October
- 18th October
- 1st November
- 15th November

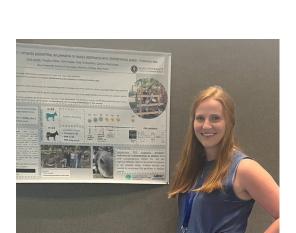
WELCOME

TO OUR NEW STUDENTS WHO HAVE RECENTLY JOINED US

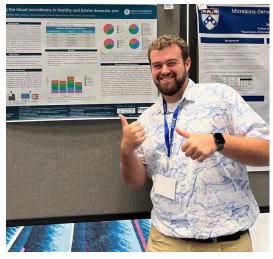
Pavly Fayek

DVM/MSc by Research/Endometrial microbiome signatures of estrous cyclity in dairy cattle (Supervisors: Chapwanya, Whiston) and our MSc by Coursework in One Health (online) new students starting September Jenna Meyer and Katia Delgado Lopez.

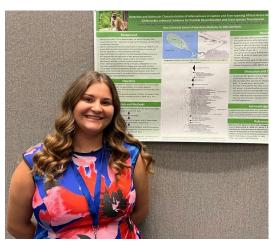
Fall 2023 Newsletter



Carla Joseph
DVM/MSc and AVMA Foundation for Food
and Agriculture Research Scholar 2023



Liam KitsonDVM/MSc and Boehringer Ingelheim
Veterinary Scholar 2023



Diane MancusoDVM/MSc and Boehringer Ingelheim
Veterinary Scholar 2023

RESEARCH HIGHLIGHTS

Four of our students were selected to present their research at the prestigious 2023 National Veterinary Student Symposium (NVSS), Puerto Rico, 3–6th August 2023.

Liam Kitson (DVM/MSc and Boehringer Ingelheim Veterinary Scholar 2023) Unravelling the blood bacterial microbiome in healthy and febrile domestic cats via 16S rRNA metagenomics (Supervisor: Dr Muller)

Carla Joseph (DVM/MSc and AVMA Foundation for Food and Agriculture Research Scholar 2023) Effect of autologous platelet-rich plasma (PRP) on the endometrial inflammatory response and fertility of jennies inseminated with donkey cryopreserved semen (Supervisor: Dr Segabinazzi)

Diane Mancuso (DVM/MSc and Boehringer Ingelheim Veterinary Scholar 2023) Hunting for Novel and Zoonotic/Anthroponotic Adenoviruses in African Green Monkeys and Bats on the Caribbean Island of St. Kitts (Supervisor: Dr Ghosh)

Dazjah Samuels (DVM and AVMA Foundation for Food and Agriculture Research Scholar 2022) You Are What You 'bat'sorbing, Using nontargeted Metabolomics to Identify Emerging Environmental Pollution Threats to Bats" (Supervisor: Dr Hooper)

Chris Biancaniello (DVM) received the Best Student Short Communication Award at the VetEd Symposium, 2023 Edinburgh, Scotland. July 6th 2023 for his project entitled 'Readability scores of postsurgical discharge instructions correlate to postoperative complications in companion animals undergoing sterilization.' #RUSVMResearch #RossVetLife

ROSSIES IN RESEARCH

Students involved in Research over the Summer 2023 semester:

Research Assistants: 21
Research Volunteers: 131

Research week (30th October-3rd November)

is where we invite our students to showcase their research with prizes for best 3 Minute Thesis, Posters and Infographic displays. Come out to show your support and cast your votes!

Mark your calendar for RUSVM Student Research Day Wednesday 1st November at 12:00 Middaqy Auditorium, for our 3 Minute Thesis competition and Keynote Speaker Dr. Temple Grandin. Watch out for more news around further events coming soon!

Contact us at **research@rossvet.edu.kn** or stop by the office (Research, Finance & Operations building)

Fall 2023 Newsletter

STUDENT PUBLICATIONS: Bergfelt, D.R., Vences, M., Smallcomb, M. Sanchez-Okrucky, R., and Canales, R.(202 concentrations of cortisol encompassing concentrations.)

Bergfelt, D.R., Vences, M., <u>Smallcomb, M.</u> (DVM), Sanchez-Okrucky, R., and Canales, R.(2023). Circulating concentrations of cortisol encompassing controlled cessation of suckling during weaning under managed care in cow and calf Bottlenose dolphins (*Tursiops truncatus*). *Aquatic Mammals* 49(4).

Corey, T.M. (DVM/MSc), Illanes, O., Lawrence, M., Perez, S.E., Liddie, S., and **Callanan, J.J.** Naturally occurring histological findings and Alzheimer's-like pathology in the brain of aging African Green Monkeys (*Chlorocebus sabaeus*). *Journal of Comparative Neurology* doi: https://doi.org/10.1002/cne.25494.

Feng, J. (DVM), de Rosayro, R., Peda, A., Alonso, F.H., and Bolfa, P. (2023). Dyspnea, nonproductive cough, and inappetence in an 8-year-old mixed-breed dog. *Journal of the American Veterinary Medical Association*, 1–4. doi: 10.2460/javma.23.05.0284.

Gainor, K. (PhD)., **Stewart, K.M.**, Picknell, A. (MSc), Russ, M. (DVM), Makela, N. (DVM), Watson, K. (DVM), Mancuso, D.M. (DVM/MSc), Malik, Y.S., and **Ghosh, S.** (2023). First report on detection and complete genomic analysis of a novel CRESS DNA virus from sea turtles. *Pathogens (Basel, Switzerland)* 12(4), 601.

King, A.M. (MSc), Rolph, K.E., Dzikiti, L., and Cavanaugh, S.M. (2023). Overall good agreement of smartphone-based and standard base-apex electrocardiography in healthy sheep. *Journal of the American Veterinary Medical Association*, 1–5. doi: 10.2460/javma.23.02.0126.

Mancuso, D.M. (DVM/MSc), Gainor, K. (PhD), Dore, K.M., Gallagher, C.A., Cruz, K., Beierschmitt, A., Malik, Y.S., and Ghosh, S. (2023). Detection and molecular characterization of adenoviruses in captive and free-roaming African Green Monkeys (*Chlorocebus sabaeus*): Evidence for possible recombination and cross-species transmission. *Viruses* 15(7), 1605.

<u>Trujillo, M.M.</u> (DVM/MSc), Conan, A., Calchi, A.C., Mertens-Scholtz, K., **Becker, A.A., Gallagher, C.**, Mau, A., **Marchi, S., Machado, M.,** André, M.R., and **Chapwanya, A., Muller, A.** (2023). *Coxiella burnetii* shedding and serological status in pregnant and postpartum ewes. *Acta Tropica*, 106962.

<u>Yang, N.</u> (PhD), <u>Matthew, M.A.</u> (PhD), and Yao, C. (2023). Roles of cysteine proteases in biology and pathogenesis of parasites. *Microorganisms* 11(6), 1397.

READABILITY AND POST-OP COMPLICATIONS



What is Readability?

Readability is a measure of how easy a text is to read. It can be assessed on a grade level basis using various programs.

More than half of Americans read below a 6th grade reading level. Which leads to the question, are pet owners able to read their pet's post operative discharge instructions?





By conducting a retrospective study of discharge instructions from RUSVM's spay lab. The Flesch Kincaid grade level software determined that the majority of discharge instructions scored higher than a 6th grade reading level.

WHAT DOES THIS MEAN FOR OUR PATIENTS?





It was found that overall there was a significant association between the readability grade level and the incidence of post operative complications when using the Chisquared test (p=0.018).

Christopher Biancaniello Dr. Kerry Rolph Dr. Andrea Peda Dr. Sarah Cavanaugh Dr. Priti Karnik Dr. Ryan Cavanaugh

Fall 2023 Newsletter 3



STUDENT PRESENTATIONS:

Benedict S., Gallardo R., **Herve-Claude L.** Laying hens in Saint Kitts: Understanding basic demographics, biosecurity and sanitary status. 2023 AAAP Annual Meeting. Jacksonville FL June 11–14 2023 (**poster**)

Gainor K., Castilo-Fortuna Y., Gonzalez W., **Ghosh S.** First Report on Detection and Complete Genomic Analysis of Porcine circovirus 2d (PCV2d) and Porcine circovirus 3 (PCV3) in Diarrheic Pigs from the Caribbean Region. ASV Annual Conference, University of Georgia, Athens GA June 24–28 2023 (**poster**)

Joesph C., Blake T., Kaplan C., Schwarzman H., Segabinazzi L. Platelet- Rich Plasma (PRP) Mitigates Endometrial Inflammation of Jennies Inseminated with Cryopreserved Semen – Preliminary data. AAVMC Veterinary Scholars Symposium. San Juan, Puerto Rico Aug 3–5, 2023 (poster)

<u>Kitson L.</u>, **Becker A.**, Hartmann K., Bergman M., Sepulve-Garcia P., Canales N., **Muller A.** Unravelling the blood microbiome in healthy and febrile domestic cats. AAVMC Veterinary Scholars Symposium. San Juan, Puerto Rico Aug 3–5, 2023 (**poster**)

Mancuso D., Gainor K., Dore K., Gallagher C., Cruz K., Beierschmitt A., Ghosh S. Detection and Molecular Characterization of Adenoviruses in Captive and Free-roaming African Green Monkeys (Chlorocebus sabaeus): Evidence for Possible Recombination and Cross-species Transmission. AAVMC Veterinary Scholars Symposium. San Juan, Puerto Rico Aug 3–5, 2023 (poster)

Rivera-Perez C., Mignucci A., Dennis M.,

Freeman M. Potential use of an endoparasite of West Indian manatees (Trichehus manatus) from Puerto Rico and Florida as a biological tag of their population and distribution. 40th Scientific Meeting Association of Marine Laboratories of the Caribbean (AMLC). St Kitts May 22–26 2023 (**poster**)

Rivers M., **Ketzis J., Bolfa P.** General survey of internal parasites collected in Rattus rattus and Rattus norvegicus in the Eastern Caribbean. 2023 AAVP Conference Lexington, Kentucky 10th–13th June 2023 **(oral)**

Samuels D., Ragland N., Hooper S. You Are What You 'Bat'sorbing, Using Non-targeted Metabolomics to Identify Emerging Environmental Pollution Threats to Bats. AAVMC Veterinary Scholars Symposium. San Juan, Puerto Rico Aug 3–5, 2023 (poster)

Segabinazzi L., Xue C., Hall A., Marchi S., Bernier P., Gilbert R., French H. Two manual methods for preparation of platelet-rich plasma in donkeys (Equus asinus). 2023 Annual Convention of the Society of Theriogenology. Alabama USA July 19–23 2023 (oral)

