

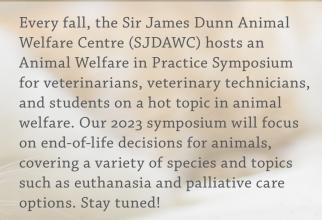
SIR JAMES DUNN ANIMAL WELFARE CENTRE Atlantic Veterinary College, University of Prince Edward Island







ANIMAL WELFARE IN PRACTICE: END-OF-LIFE DECISIONS FALL 2023





DIRECTOR'S CORNER

Spring is finally here on Prince Edward Island!

Congratulations to all our participants in the 2022 Animal Welfare Assessment Contest who brought home four awards a new record for AVC! We had a great time visiting Raleigh, North Carolina, for the contest and are looking forward to participating again this year.

We were thrilled to host another webinar series with Dr. Karen Overall this spring, which included a summary of the exciting research happening in veterinary behavioural medicine as it pertains to animal welfare.

We are happy to hear all the great stories of students who received a SJDAWC travel award over the last year. These students provide great examples of how SJDAWC can have an impact beyond PEI.

We welcome your feedback. Please contact us at *animalwelfare@upei.ca* to receive the newsletter (in full colour) by email and to be added to our email list for occasional upcoming events.

To learn how you can support the Centre, please go to *awc.upei.ca* or write to:

The Sir James Dunn Animal Welfare Centre Atlantic Veterinary College University of Prince Edward Island 550 University Avenue Charlottetown, PEI, Canada C1A 4P3

All donations are tax deductible.

2023 WEBINAR SERIES

Earlier this spring, the SJDAWC had the pleasure of hosting Dr. Karen Overall, MB, VMD, PhD, DACV for our eighth annual three-part webinar series. This series continues to attract veterinarians, technicians, and students from around the world.

APRIL 18 WEBINAR ONE

WHEN AGGRESSION IN DOGS IS A CRY FOR HELP



Gabriel and Dr. Karen Overall

In the first webinar, Dr. Overall described how aggression in dogs can be normal or pathological. In a normal setting, dogs use aggression, such as growling or lunging, as a form of communication with other dogs or humans. Dogs may show aggression to signal something (e.g., they really do not want you to take their toy away); if the aggression stops after the dog has communicated what they wanted and the problem is resolved, this is normal.

Aggression can become pathological in dogs when it is out of context, is extreme or exaggerated, or is repeated in inappropriate contexts. In many cases, dogs with pathological aggression also have an underlying anxiety disorder. To determine whether aggression is pathological, Dr. Overall has her clients fill out a form with questions about what behaviours their dogs show in different situations.

Dr. Overall ended the webinar by describing how behaviour modification and medication can help reduce pathological aggression in dogs. She stressed how important it is for owners to create a structure for these dogs and to give them accurate information so they can better understand and react to their environment.

APRIL 25 | WEBINAR TWO

UNDERSTANDING THE DAMAGING EFFECTS OF PUNISHMENT: THE CASE AGAINST FORCE AND SHOCK

In the second webinar, Dr. Overall explained that people use punishment, such as force and electric shock, to change their dog's behaviour. Owners are often desperate to find ways to stop, modulate, or enhance their pet's behaviour. However, there are many damaging effects of punishment that veterinarians should know.

Researchers have found that punishment is stressful, and dogs learn that the presence of their owners is associated with the punishment, even when the dogs are not being trained (e.g., when they are on a daily walk with their owner). Problematic behaviours or aggression can worsen when dogs are punished, putting them at higher risk of euthanasia.

Dr. Overall ended the webinar with a description of alternative ways to change dog behaviour, such as positive reinforcement, relaxation training, focus training, and cognitive and problem solving. For example, positive reinforcement can be used to train dogs with commands ("come" and "sit") by providing them with a reward for doing the behaviour correctly. Researchers have found that positive reinforcement can help dogs learn commands better than using punishing techniques such as shock collars.

MAY 2 | WEBINAR THREE

WHAT'S NEW AND HOT IN VETERINARY BEHAVIOUR LITERATURE

In the final webinar, Dr. Overall discussed novel and innovative studies in veterinary behaviour literature. Here are some highlights from the webinar:

- **The importance of mom.** Researchers have found that kittens raised with their mothers perform better on behavioural tests compared with those raised with other kittens or alone. For example, kittens raised with their moms struggled less when held and vocalized less when isolated, suggesting that they are better able to cope with stressors.¹
- **Can dogs smell fear?** Researchers have discovered evidence that dogs can smell when humans are stressed. Dogs were able to distinguish between the breath and sweat odors of humans during a baseline period and when stressed with a math test.²
- **An anxious mind.** Researchers have found that dogs with anxiety have differences in their brain networks compared to those without the condition. This finding may allow for brain imaging (e.g., MRI) to be used to help diagnose and treat anxiety in dogs.³

¹Martinez-Byer et al., Applied Animal Behaviour Science (2023), ²Wilson et al., PLOS One (2022), ³Xu et al., PLOS One (2023)

To view previous webinars hosted by the SJDAWC, please visit our YouTube channel at **www.upei.ca/youtube/awc**





Animal welfare issues in VETERINARY BEHAVIOURAL MEDICINE

With Dr. Karen Overall

If you wish to contact the Behavioural Medicine Service, email **AVCBehaviouralMed@upei.ca** or visit their website: https://awc.upei.ca/behavioural-medicine/

HIGHLIGHTS FROM THE SJDAWC

NEW GRADUATE STUDENT AT THE SJDAWC



Sherry Khoddami

Sherry Khoddami recently joined the SJDAWC to complete her master's degree. Sherry is originally from Iran but grew up in Vancouver where she obtained her bachelor's degree in applied animal biology from the University of British Columbia.

Sherry's research aims to investigate the relationship between the emotional well-being of veterinary students and the perceived quality of life of animals used for teaching. The project aligns well with her background in animal welfare and veterinary work. The unique aspect of this project is its use of a "One Welfare" approach, which recognizes the interdependence of human and animal welfare.

At AVC, veterinary students gain hands-on experience with a variety of teaching animals such as beagles, cows, and horses. The care and housing of these animals, as well as the procedures they may undergo, can affect their quality of life. It is not clear how veterinary students are affected by their interactions with these animals, and how students' well-being, in turn, can impact the lives of the animals. Veterinary students play a crucial role in the care and use of teaching animals, and their perspectives should be considered when determining how teaching animals are integrated into the veterinary curriculum. Sherry is supervised by Drs. Katy Proudfoot and Caroline Ritter.

ANIMAL PROTECTION OFFICER SPEAKS TO AVC ANIMAL WELFARE CLUB

The AVC Animal Welfare Club invited Mr. Mike Gilbertson, Animal Protection Officer with the PEI Humane Society, to speak to the club about animal welfare laws and regulations on Prince Edward Island, and his role in enforcing the Animal Welfare Act at both a provincial and national level. He discussed where his limitations lie in enforcement and what conditions must be met before he can act. Mr. Gilbertson explained the steps that have to take place when he receives a call expressing concerns about animal welfare, and noted that many cases will end with the owner agreeing to surrender their animal. He also talked about the different types of animal welfare cases he sees and how he might have to go about addressing each one.

"It was a very informative presentation allowing veterinary students to better understand what exactly occurs behind the scenes after an animal welfare concern is reported."

- Laura Groves, AVC Class of 2026.



Mike Gilbertson

PROJECTS FUNDED IN 2023

Each year, the SJDAWC provides funding to support research, integrated, and service projects that aim to improve the lives of animals in Prince Edward Island and abroad. For the 2023 cycle, we funded four projects covering diverse topics related to animal welfare. To learn more about this funding opportunity, visit our website at *https://awc.upei.ca/grant-competition/*.

THE EFFECT OF COMMON LABORATORY ULTRASOUNDS ON RAT BEHAVIOUR AND PHYSIOLOGY

P. Bernard, J. Spears, L. Bigelow



This new research project will assess the effects of ultrasound exposure on behavioural and physiological markers of anxiety in rats. Rats will be exposed to ultrasounds at frequencies commonly present within the laboratory space and tested using classic and novel assessments of anxiety. The results of this study will not only lead to improved validity of rodent research by the identification and assess of a confounding variable, but it will also be beneficial to pet owners who may be inadvertently exposing their pets to ultrasounds.

MEDICAL AND SURGICAL CARE OF HOMELESS SMALL ANIMALS

H. Gunn McQuillan, P. Foley, R. Macdonald, R. MacLean, M. MacLean



This renewed service project will see hundreds of homeless cats and dogs every year with injuries or illnesses requiring veterinary care. These animals are found wandering at large and brought in by good Samaritans, shelter staff, or volunteers. They may also be surrendered by owners who can no longer care for their pets for a variety of reasons. The animals could also be seized because of animal welfare investigations. This project is also supported by the PEI Humane Society.

ENVIRONMENTAL ENRICHMENT FOR STRESS REDUCTION IN LAND-BASED SALMONID AQUACULTURE S. Saksida, M. Fast, K. Reynolds, S. Whyte



This new research project aims to determine if specific environmental modifications have effects on salmon welfare, and whether these modifications are feasible and effective in commercial aquaculture settings. This project will help fill knowledge gaps on how salmon experience specific changes to their environment and help guide welfare-focused recommendations for those who work with salmon in various settings, both research and commercial.

MOTIVATION AND COST-EFFECTIVENESS OF IMPROVED COW COMFORT ON SMALLHOLDER DAIRY PRODUCTION SYSTEMS IN KENYA

J. VanLeeuwen, D. Hall, C. Ritter, J. Rao, E. Muunda



This new research project will include a baseline assessment of cow comfort and production on 300 smallholder farms in Kenya, along with attitudes toward motivation to improve cow comfort. The results will be disseminated to farmers and key stakeholders in dairy value chains in Kenya and globally through journal publications, conference presentations, and proceedings.

For more information about previously funded projects, please visit our website: https://awc.upei.ca/list-of-all-funded-projects/

AVC STUDENTS WIN FOUR AWARDS AT THE AVMA ANIMAL WELFARE ASSESSMENT CONTEST

AVC is proud to congratulate two teams of doctor of veterinary medicine (DVM) students and one graduate student who brought home awards from the 2022 American Veterinary Medical Association's (AVMA) Animal Welfare Assessment Contest.

The contest was held at North Carolina State University in Raleigh, North Carolina last November—the first year it was held in person since the COVID-19 pandemic began in 2020. More than 220 students and veterinarians representing 23 universities across North America participated. The AVC brought a strong contingent of 11 students supported by the Sir James Dunn Animal Welfare Centre, the AVMA, and the Universities Federation for Animal Welfare.

"We were so pleased that our students were able to participate in the contest in person this year as it is a more immersive experience and a great opportunity for networking and relationship building," said Dr. Kathryn Proudfoot, associate professor, AVC, and director, SJDAWC. "I am so proud of our students. They worked incredibly hard and spent a long time preparing for the contest this year."

Coached by Drs. Proudfoot and Michael Cockram, the DVM student teams placed second and third in the veterinary student division. The second-place team comprised first-year students Laura Groves, Rebecca Michelin, Gabrielle Doiron, Hannah Kennedy, and Tsukasa Iwamoto. The third-place team was made up of second-year students Brianna Forbes, Devyn Enwright, Lily Mitchell, Cassandra Smith, and Alyssa McGee. Hannah Spitzer, master of science student, placed first in the individual live scenario and fourth overall in the graduate student division.

The contest is open to DVM students, undergraduates, and graduate students, and provides a unique educational experience. It uses hypothetical, realistic computer-viewed scenarios and in-person site visits where students assess and evaluate animal welfare using science-based methods and reasoning. This year, participants evaluated the welfare of show chickens, dairy-beef cattle, octopus in an aquarium, and shelter dogs and cats. They then presented their findings to a panel of judges, which included animal welfare scientists and veterinarians.

"This is a unique opportunity for our students to put their skills and knowledge into practice," said Dr. Proudfoot. "It also helps increase their awareness and education about current animal welfare issues."

"We were challenged to go beyond our current knowledge and learn more about different animal species, current welfare measure for these animals, and how to make recommendations to improve their welfare. The experience will influence our approach to animal welfare in our future careers as veterinarians."

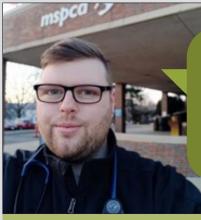
Hannah Kennedy, Class of 2026



Back row (L-R): Brianna Forbes, Rebecca Michelin, Cassandra Smith, Devyn Enwright Middle row (L-R): Lily Mitchell, Hannah Spitzer, Alyssa McGee, Tsukasa Iwamoto Front row (L-R): Laura Groves, Hannah Kennedy, Gabrielle Doiron

STUDENTS BENEFIT FROM 2022–23 TRAVEL AWARDS

Joey Buzzell received a SJDAWC student travel award for an external rotation related to animal welfare. Joey's rotation was with the Angell Boston MSPCA in their avian and exotics department. Under the guidance of three ABVP Avian certified veterinarians, he gained experience identifying animal welfare concerns in a variety of species, including rabbits, ferrets, rodents, parrots, cockatiels, snakes, lizards, and tortoises.

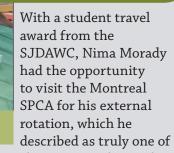


"It is my hope to one day become an exotic specialty veterinarian practicing in Boston, MA." - Joey Buzzell, Class of 2023

Joey Buzzell

Nima Morady

"As animal advocates, we have the power to make a real difference in the lives of those who cannot speak for themselves, and I am grateful to have had the opportunity to do so." - Nima Morady, AVC Class of 2023



his favourites. His experience at the SPCA emphasized the importance of advocating for animals and the impact veterinarians can have on improving animal welfare. Expensive tools or medications are not always needed to help animals. Sometimes all it takes is the willingness to think creatively and act with compassion. During the visit, Nima was split equally between surgery and animal intake, and he found both incredibly fulfilling.

2023 SJDAWC VETERINARY SUMMER REASERCH AWARD

Congratulations to Tsukasa Iwamoto, AVC Class of 2026, for receiving the 2023 SJDAWC Veterinary Summer Research Award. Tsukasa will work on a project to develop a screening tool that allows

the assessment of puppies to identify when and how "normal" behaviour in dogs begins to diverge into "abnormal" behaviour. She is very excited to be working with Dr. Karen Overall and Dr. Camille Squair, master of science student, this summer.



Luka and Tsukasa Iwamoto

2023–24 ANIMAL WELFARE EXTERNAL ROTATION AWARD

Samantha Froud was recently awarded \$500 to assist with travel for an external rotation related to animal welfare during her fourth year. Samantha will travel to a rural community in Sheshatshiu, Labrador, for a one-week rotation. The rotation will focus on the



Samantha Froud

welfare of pets and strays in the community, where they will help with population control, prevention of the spread of infectious disease, and general husbandry recommendations.

THANK-YOU TO THE CHRISTOFOR AND THE SIR JAMES DUNN FOUNDATIONS

We gratefully acknowledge the sustained financial support of **The Christofor and The Sir James Dunn Foundations**, without which the SJDAWC would not exist.

We also thank the Pegasus Family Foundation through the Silicon Valley Community Foundation, and the many generous organizations, individuals, veterinary hospitals, and other businesses—too numerous to mention—that have made donations in memory of a beloved pet. You can find a list of our donors on our webpage: *awc.upei.ca/supporting-the-centre/*

To learn how you can support the Centre, please check out our website.

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Sir James Dunn Animal Welfare Centre ATLANTIC VETERINARY COLLEGE • UNIVERSITY OF PRINCE EDWARD ISLAND

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Website: *awc.upei.ca*

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