

SIR JAMES DUNN ANIMAL WELFARE CENTRE at the Atlantic Veterinary College







ALSO IN THIS ISSUE



Feline hehaviour & welfare



*Thriving not merely surviving....*p6

2018 AVC WINTER WELFARE WEBINARS: SMALL ANIMAL BEHAVIOUR FEBRUARY 27, MARCH 6, & MARCH 13, 2018

The Sir James Dunn Animal Welfare Centre invites veterinarians, veterinary technicians, and veterinary and AHT students to participate in the 2018 AVC Winter Webinars with Karen L. Overall, MA, VMD, PhD, DACVB. Dr. Overall, author of the texts Clinical Behavioral Medicine for Small Animals and Manual of Clinical Behavioral Medicine for Dogs and *Cats*, and Editor-in-Chief of the *Journal of* Veterinary Behaviour: Clinical Applications *and Research*, will provide key practical information about preventing behaviour problems, which will benefit veterinary professionals, clients, and, above all, patients.

To register: www.upei.ca/awc

FEBRUARY 27

Behavioural and neurodevelopment in kittens: What you have to know to give them the best start and minimize risk.

MARCH 6

Behavioural and neurodevelopment in puppies: What you have to know to give them the best start and minimize risk.

MARCH 13

Emergent data in behavioural medicine: 20 findings that will change the way you think and practice.

Registrants unable to attend the webinar at the scheduled time will receive a link to view it after the live event has taken place. Veterinarians and veterinary technicians will receive credit for one hour of CE per lecture.



Chinook Project update.....p7



COME TO BEAUTIFUL PEI FOR ISAE 2018 THIS SUMMER!

See page 6 for more details.

FROM THE COORDINATOR'S DESK

Welcome to the 2018 edition of the SJDAWC News, the newsletter of the Sir James Dunn Animal Welfare Centre at the Atlantic Veterinary College, University of Prince Edward Island. In this issue, you will find information about our Winter Welfare Webinars (February/March) and the International Society of Applied Ethology's 2018 conference, which we are excited to host at UPEI this summer only the second time the conference will be held in Canada in its 50 years. The newsletter also contains highlights from our recent conference to promote feline welfare through better understanding of behaviour, and from New Zealand animal welfare scientist Dr. David Mellor's visit to AVC in October. There are brief reports from two SJDAWC-funded projects that were completed since our last newsletter, an update on the Chinook Project, and information on award winners and recent student activities. We welcome your feedback at animalwelfare@upei.ca

Please let us know at

animalwelfare@upei.ca if you would like to receive a full-colour version of the newsletter by email and be added to our email list for upcoming events. To learn how you can support the Centre, please go to *upei.ca/awc* or write to:

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

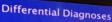
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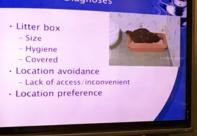
FELINE BEHAVIOUR

The thirteenth annual conference focussed on feline behaviour, with keynote speaker Lynne Seibert DVM, MSc, PhD, Diplomate American College of Veterinary Behaviorists, who has a behaviour referral practice in Roswell, Georgia. Additional speakers were Drs. Alice Crook and Kathy Ling ("Welfare-Friendly Feline Veterinary Practice"), both of AVC.

Dr. Seibert gave a public talk on Friday night on preventing behaviour problems in cats. On Saturday, she spoke to veterinarians, veterinary technicians, and students on the topics of feline social behaviour and intercat aggression, feline house soiling, and over-grooming in cats. Dr. Seibert discussed strategies of environmental and behavioural modification and pharmacological therapy in approaching various concerns about feline behaviour.

ANIMAL WELFARE IN PRACTICE: FELINE BEHAVIOUR SEPTEMBER 22-23, 2017





Help! My Cat is Peeing all over the House Dr. Lynne Seibert

Below is some general advice on two of the more common issues cat owners may face.

INTRODUCING A NEW CAT TO A RESIDENT CAT

When introducing a new cat into the home, do not simply put the cats together and hope things will work out. Either cat, or both, may become anxious or aggressive, or a combination. Do not force interactions—a gradually phasedin introduction will have the most chance of success. Separate the cats in different rooms initially, at enough of a distance that they are relaxed. Focus on treats and play (i.e., pleasurable experiences) as you gradually move the cats closer to each other over days or weeks. That might mean feeding them closer and closer together on different sides of a closed door, then maybe separating them by means of stacked child-gates or a slightly open door, then having them together in the same room with one person responsible for each cat (again focusing on treats and play).

Scent swapping is a good trick—for example, exchange bedding between cats. Since cats generally love a good face rub, use the same soft towel to rub the faces of both cats. With a particularly anxious or fearful cat (which may manifest as aggression), anti-anxiety medication may be required for a time. With patience and perseverance, a civil relationship can generally be achieved, even if the cats never become fast friends.

LITTERBOX ISSUES

There are many reasons why a cat may start urinating or defecating outside the litterbox. It is always important to rule out medical causes such as a urinary tract infection, or osteoarthritis in an older cat that may make getting in and out of the box more difficult.

Consider the environment. We generally choose a litterbox, location, and cleaning schedule that suit us, and cats put up with our choices most of the time. However, cats may start avoiding their litter box if it is particularly soiled, if a new and different litter is provided (texture, odour, location), or if there is too much activity in the area. Commercially available litterboxes are often too small—large plastic storage boxes are ideal. In multi-cat households, provide enough boxes that cats don't have to share. Most cats prefer finetextured, unscented, clumping litter, which should be scooped at least once a day. Cats are fastidious, which is one reason we love them.

A word of caution: training a cat to use the toilet is possible—and maybe even makes a clever YouTube video—but this requires completely unnatural elimination behaviours from your cat, and is a disaster waiting to happen as far as future problems.

FURTHER...

With intercat aggression, litterbox, and other behavioural problems, it is crucial to figure out what is going on with your cat as soon as possible, before the problem becomes chronic. Your veterinarian will work with you to develop a treatment plan that will include environmental and behavioural modification, and may include medication to address underlying anxiety during the retraining period.

The conference was co-hosted by the SJDAWC and the AVC Animal Welfare and Feline Clubs, with support from the Animal Welfare Foundation of Canada. There were about 70 registrants, primarily veterinary students, veterinary practitioners, and animal health technicians.

FALL 2018 ANIMAL WELFARE IN PRACTICE— MARINE MAMMAL STRANDING

Initial planning is underway for this fall's conference. Expert speakers will consider welfare issues associated with marine mammal stranding and best practices for a successful and humane response. Watch *upei.ca/awc* for further information.

COMPLETED PROJECTS 2017

Below are brief summaries for two SJDAWC-funded research projects completed in 2017. Scientific publications since the last newsletter are listed on page 11. Publications are also listed on the SJDAWC website as they become available (*awc.upei.ca/research_papers_and_presentations*).

RESEARCH

RESEARCH AND TRAINING TO IMPROVE STALL DESIGN AND MANAGEMENT FOR BETTER COW WELFARE AND PRODUCTIVITY ON SMALLHOLDER DAIRY FARMS IN KENYA

J VanLeeuwen, G Gitau, J Aleri, S McKenna, S Richards

The overall objective was to obtain locally derived data from smallholder dairy farms regarding perspectives, and the costs and benefits of proper stall design and management, to promote cow welfare.

The specific objectives were to:

- determine the relationship between smallholder dairy farmer attitudes/ empathy toward their cows, stall design and management, and cow welfare indicators—the outcomes of interest (observational study);
- determine the costs and benefits (animal welfare and productivity outcomes) of enhancements to

stall design and management on smallholder dairy farms (randomized controlled trial);

• determine if cow welfare training can alter smallholder dairy farmers' attitudes and empathy towards their cows (related to the clinical trial).

Using a randomized controlled field trial, a welfare-based intervention was evaluated on smallholder dairy farms in Kenya. Fifty farms were randomly allocated to be either intervention or control farms, with cow comfort measures taken pre-intervention, as well as one month and one year post-intervention. The intervention

> included training on best management practices for good cow comfort and low-cost improvements to cow stalls. Objective measurements at each visit included daily milk production and lying behaviours of all cows (n=75). Subjective measures included stall base hardness and wetness, cow hygiene, and injury scoring. Factors associated with the subjective and objective measures of cow welfare were compared between groups at each time period.

Results showed that soft stalls were associated with an additional 45 minutes/day of lying time, an extra o.63 lying bouts/day in shorter bout durations, and o.76 kg/day higher daily milk production than cows with hard stalls. Cows with dry stalls had o.47 more lying bouts/day compared to cows with wet stalls. Hygiene scores on hocks and udders of intervention cows were significantly better than for control cows at one month post-intervention, and this result was maintained one year postintervention.

These results indicate the benefits of low cost interventions on smallholder dairy farms in Kenya. Drs. John VanLeeuwen and Shauna Richards, with the help of veterinary students funded through Vets Without Borders–Canada and Farmers Helping Farmers, conducted the project, resulting in better welfare of cows (and their owners) in Kenya, and elsewhere in the world with similar management systems.

A journal article is in progress. There have also been multiple presentations, seminars, and workshops because of this project, which have been widely distributed to veterinary students (Canada, UK, and Kenya); dairy farmers, veterinarians, and dairy extension staff in Kenya; epidemiologists; and others. More information, including a manual for dairy farmers, is available at *farmershelpingfarmers.ca/projects/dairy/.*



Dr. Shauna Richards with a cow in a stall that will undergo low-cost improvements.

NEW RESEARCH PROJECTS FUNDED 2018

FREQUENCY, DISTRIBUTION, DETERMINANTS AND IMPROVEMENTS OF CALF AFFECTIVE WELFARE STATUS ON SMALL HOLDER DAIRY FARMS IN KENYA (OBSERVATIONAL AND CLINICAL TRIALS) L Heider, J VanLeeuwen, S McKenna, G Gitau, P Kimeli RECOGNITION OF STRESS LEVELS IN HOSPITALIZED EQUINE PATIENTS DURING VARIOUS VETERINARY PROCEDURES: ADAPTATION OF A STABLED HORSE STRESS SCALE TO A COHORT OF HOSPITALIZED HORSES L McDuffee, W Montelpare, K Overall ASSESSMENT OF WELFARE OF SABLE ISLAND HORSES THROUGH MORPHOMETRIC AND RADIOGRAPHIC HOOF EVALUATION M Mellish, P-Y Daoust, R Vanderstichel

INVESTIGATION OF THE PREVALENCE AND CLINICAL SIGNIFICANCE OF EUCOLEUS BOEHMI IN DOMESTIC DOGS ON PRINCE EDWARD ISLAND, CANADA O Raab, P Foley, E Milley Service projects are generally carried out in cooperation with a community group, and provide direct benefits for animals as well as educational benefits for veterinary students. Please visit *awc.upei.ca/Service_projects* for more information.

INTRODUCTION OF POSITIVE REINFORCEMENT THEORY AND TECHNIQUES TO PROMOTE HUMANE HANDLING OF EQUINE PATIENTS IN THE ATLANTIC VETERINARY COLLEGE'S LARGE ANIMAL CLINIC

L McDuffee

The goals of this project were to:

- obtain knowledge in learning theory;
- develop practical competency in the application of positive reinforcement techniques in rehabilitation of mature horses;
- introduce the techniques into the AVC Large Animal Clinic while handling equine patients.

In its various stages, the project involved a complete literature review of equine cognition and higher-level learning; the practical application of positive reinforcement by clicker training on seven horses with certain aversions associated with minor veterinary procedures and treatments; and the introduction of these techniques for use on clientowned equine patients for behaviour modification. Examples include getting horses on trailers, into stocks, and on the scale; and administration of medications. The knowledge gained is disseminated to fourth-year veterinary

students on clinical rotations, and to other large animal clinicians. Students, faculty, and staff have enjoyed learning the techniques.

This project has been successful in introducing and incorporating behaviour modification through positive reinforcement into the Large Animal Clinic of the Veterinary Teaching Hospital for equine patients. This is a more humane method of handling patients compared to mechanical restraint. It is also safer for the horse and handler. This service project has been effective in introducing a shift of attitude in faculty, staff, and students toward our equine patients, and has resulted in easier handling during treatments, with a decrease in the use of mechanical and chemical restraint

Resources purchased with funds from this project ensure that there will be continued learning in equine behavior and welfare at the AVC.



Early training for horse and trainer—teaching the horse to touch the cone with his nose.

FUNDING RENEWED FOR SERVICE PROJECTS 2018

MEDICAL AND SURGICAL CARE OF HOMELESS ANIMALS (2018–2020)

H Gunn McQuillan, P Foley, R MacDonald, M MacLean, R MacLean, P Moak; with the PEI Humane Society

YOUTH TRAINING IN ANIMAL WELFARE IN KENYA AND CANADA—PART 3 I Van Laguran S Pichards

J VanLeeuwen, S Richards

OTHER CURRENT SERVICE PROJECTS

AVC HUMANE DOG TRAINING (2017–2019) AM Carey, C Kenny; with the PEI Humane Society

HEALTH MANAGEMENT SERVICES FOR HANDIBEAR HILLS EQUINE SANCTUARY INC (2017–2019)

T Muirhead, G Conboy, K MacMillan

FINANCIAL AID FOR SPAY OR NEUTER OF COMPANION ANIMALS OF OWNERS ON FIXED INCOME (2016–2018) P Foley; with SpayAid PEI

CLINICAL WILDLIFE CARE AT AVC (2016–18) J Spears, P-Y Daoust, H Gelens

TWO COMPLEMENTARY FERAL CAT NEUTERING PROGRAMMES

P Foley, K Ling; with the PEI Cat Action Team One project is funded through the SJDAWC, and the other by the Pegasus Family Foundation through the Silicon Valley Community Foundation.

PEGASUS HELPING HAND FUND H Gunn McQuillan, A Crook



PRESENTATIONS AT AVC BY DAVID MELLOR, OCTOBER 2017

The SJDAWC was very pleased to host eminent animal welfare scientist Dr. David Mellor during his Canadian tour in October. Dr. Mellor is Professor in the Institute of Vet, Animal and Biomedical Sciences, University of Massey, New Zealand, where he holds chairs in applied physiology and bioethics, and in animal welfare science. Much of Dr. Mellor's pioneering and well-recognized work in the field of animal welfare is on animal emotions and behaviour, and the promotion of positive welfare states in companion animals, farm animals, and others. He led the development and subsequent refinement of the Five Domains Model, which covers all aspects of animal welfare including nutrition, environment, health, behaviour, and the animal's mental state, and is now widely used in assessment.

In 2015, Dr. Mellor received the Universities Federation for Animal Welfare Medal, an international award that recognizes the exceptional achievements of an individual scientist who has made fundamental contributions to the advancement of animal welfare science over a number of years.

While at AVC, Dr. Mellor met with faculty and undergraduate and graduate students, and gave the following talks:

- Development of survival-critical behaviours in newborn mammals: Postnatal onset of behavioural flexibility in groups of young with different levels of brain maturity at birth;
- The Five Domains Model for animal welfare assessment;
- Introducing breathlessness as a significant animal welfare issue;
- Equine welfare during exercise: Do we have a "bit" of a problem?
- Thriving, not merely surviving: A fresh perspective on animal welfare.

Pdfs of Dr. Mellor's presentations are available at *upei.ca/awc*. Titles and abstracts for his many scientific publications are available at *www.massey.ac.nz/massey/ learning/colleges/college-of-sciences/staffprofile.cfm?stref=*547030

ISAE 2018 July 30 to August 3, 2018

PRINCE EDWARD ISLAND, CANADA isge2018.com

ISAE 2018 • JULY 30 TO AUGUST 3, 2018 • PRINCE EDWARD ISLAND, CANADA ISAE2018.COM

The International Society for Applied Ethology (ISAE) is the leading scientific society for the study of the behaviour and welfare of confined or domesticated animals, including companion, farm, zoo and managed wild animals. The *Congress* provides an international forum for the presentation and discussion of advances in applied animal behaviour science and animal welfare.

Last held in Canada in 1996 at the University of Guelph, the conference comes to North America this year for only the fifth time since the formation of the ISAE in 1966. Two hundred-plus international delegates (ethologists, veterinarians, animal scientists, and graduate students) are expected to attend the conference, which will be held at the University of Prince Edward Island. Go to *isae2018.com* for information.

NATIONAL ANIMAL WELFARE CONFERENCE—CANADIAN FEDERATION OF HUMANE SOCIETIES CALGARY, ALBERTA APRIL 22–23, 2018

The CFHS National Animal Welfare Conference (NAWC) is an annual professional development and community-building event for Canada's animal welfare sector. The two-day conference addresses topics such as new animal welfare initiatives, emerging animal welfare science, best practices in animal sheltering, and making the link between animal cruelty and other crimes. AVC students Jessica D'Amico and Aron Nichols attended the 2017 conference in Ottawa, and Jessica provided the summary below.

"The 2017 NAWC was filled with enlightening lectures on subjects such as farm animal welfare, community influence, homelessness and companion animals, and investigating crimes against animals. The conference broadened my general knowledge

of animal welfare topics, and introduced me to opinions and solutions from other students, veterinary professionals, and specialized experts. In a lecture about domestic violence and pets, I learned that a significant number of women in abusive relationships don't leave their spouse because of fear for their pet's safety. Increasingly, veterinarians and humane societies are working together with domestic violence workers to help people in these situations by temporarily taking their pets.

In another lecture, I learned about controversies surrounding keeping birds in captivity, especially the illegal pet trade and how certain birds, reptiles and even fish are obtained through inhumane practices. The speaker addressed the right ways to keep these animals as pets, and how we can help make the breeding and shipping processes more humane.

I recommend this conference to every DVM student who wants to broaden their knowledge on the issues animals and their people face in Canada."



CHINOOK PROJECT UPDATE

MARTI HOPSON, VETERINARY COORDINATOR, CHINOOKPROJECT.CA

The Chinook Project, founded in 2005 by Dr. Lisa Miller (AVC) and Dr. Jane Magrath (past professor of English, UPEI), is a unique interdisciplinary project that provides veterinary care at no cost to remote communities in the Canadian North, with the generous support of partners and donors. The Chinook Project travels each summer at the invitation of remote communities to provide free veterinary services, including vaccinations, deworming, wellness checks, spay and castration surgeries, and medical treatments as needed.

The Chinook Project completed its twelfth year of clinics in June 2017. This charitable mobile veterinary service has held 20 clinics in 12 different locations, attended to over 1,800 animals, and performed over 875 spay and neuter surgeries. Sixtyseven fourth-year veterinary students from all over Canada and the United States have participated in this AVCrun project. Eighteen veterinarians and two veterinary technicians have led the clinics—hailing from Ontario, Quebec, North Carolina, Massachusetts, the Maritimes, Australia, and New Zealand.

NATIONAL EFFORTS

In July, Drs. Hopson and Miller gave a presentation, "Chinook Project: Remote veterinary care in rural Canadian communities," at the 2017 Canadian Veterinary Medical Association (CVMA) Convention in Charlottetown, where they also participated in a panel discussion on accessible veterinary care with Dr. Michelle Lem (Community Veterinary Outreach, Ottawa) and Dr. Greg Wolfus (Tufts, Massachusetts). Veterinarians Without Borders also arranged a full afternoon panel and workshop on Sustainable Veterinary Service in Northern Canada, in which the Chinook Project participated as a stakeholder. A number of key themes emerged from the workshop, the purpose of which was to gather information from groups already active in the North.

PUBLIC HEALTH

The Chinook Project has participated in a surveillance project organized by the Government of Newfoundland and Labrador to ascertain whether dogs carry the pathogenic bacteria MRSA. The organizers hope the project will be able to engage in other cooperative endeavours involving public health and research. Drs. Miller and Magrath recently stepped away from the Chinook Project. The project welcomes Dr. Mila Profit (AVC 2017 graduate and past Chinook student) and Dr. Cora Gilroy (Department of Pathology and Microbiology) as new coordinators to work with Dr. Hopson.

Please visit *chinookproject.ca* to read students' personal reflections about their experience. The Chinook Project also maintains an active Facebook Page *www.facebook.com/The-Chinook-Project-204497686255411/*

The Chinook Project is making plans for 2018 to return to Nain, Labrador, for the fourth time, and the Innu community of Sheshatshiu for the third time.



AWARDS

2017 SIR JAMES DUNN ANIMAL WELFARE GRADUATE SCHOLARSHIP AWARD

Peter Kimeli

The 2017 scholarship was awarded to Peter Kimeli (Kenya), BVM, MVS. Dr. Kimeli, who received three years of funding as an international PhD student, began his studies at AVC in September, working with Dr. John VanLeeuwen on the project, "Cohort and controlled trial studies of dairy calf welfare and its factors within smallholder zero-grazing farms in Kenya."

The SJD The Friends of the Chr



2017 CHRISTOFOR AWARD IN ANIMAL WELFARE

Fourth-year student Ellen Boyd received the 2017 Christofor Award in Animal Welfare at the AVC Fall Awards Night in October for her activities to improve the welfare of animals, with particular interest in pain mitigation and management. While working in wildlife management at an oil company prior to attending AVC, she established humane protocols for managing oiled waterfowl, including a euthanasia protocol when necessary to avoid a slow death due to fatal ingestion or hypothermia.

While at AVC, Ellen has taken a strong interest in the welfare of all species including wildlife, aquatic species, and laboratory animals. She has a good knowledge of the regulatory requirements for animal used in teaching, research, and testing, which she gained while serving on animal care committees during her

undergraduate degree. Showing thoughtful concern for all the animals used in teaching at AVC, Ellen has demonstrated initiative in providing



constructive reviews of the animal care methodologies used in the animal-based teaching programs.

Given her varied interests, Ellen is not sure what career path she will follow with her veterinary degree. She is very clear, however, that she will continue to use her knowledge and experience to advocate for animals.

DR. TOM A. W. TAYLOR SCHOLARSHIP

The 2017 scholarship was awarded to third-year student Emma Gillis. The scholarship is awarded in memory of Dr. Tom A. W. Taylor to a student who is well rounded and academically proficient and has demonstrated initiative and interest in research activities. Emma has a particular interest in anatomic and clinical pathology, which she plans to pursue following receipt of her DVM degree in 2019.



2016 ATLANTIC AWARD OF EXCELLENCE IN VETERINARY MEDICINE AND ANIMAL CARE

Dr. Alice Crook was very pleased to receive this award in July 2016 for her work in furthering animal welfare on PEI, in the Atlantic region and across Canada. More information is available at:

www.upei.ca/communications/ news/2017/09/avcs-2016-atlantic-awardexcellence-awarded-dr-alice-crook

DR. CAROL MORGAN MEMORIAL AWARD

This award, open to practicing veterinarians in Canada, was established in memory of Dr. Carol Morgan. A tireless advocate for animal welfare and ethical veterinary practice, Dr. Morgan was active as a member of the BCSPCA board and of the Animal Welfare Committee of the Canadian Veterinary Medical Association. Sadly, Dr. Morgan passed away in 2015. In her honour, friends and colleagues established this award, administered through the Animal Welfare Foundation of Canada, for use in continuing education and trainingrelated costs in the areas of ethics and/ or animal welfare for veterinarians working to increase the application of these subjects within the profession.

Equine veterinarian Dr. Susi Cienciala of Enderby, BC, received the first Dr. Carol Morgan Memorial Award to continue her studies in equine behaviour and welfare. Dr. Cienciala's goal is to bring the science of how horses learn to veterinary students in Canada, to improve the welfare of their patients, and to improve their safety as veterinary practitioners.

All information is at *awfc.ca/grants/the*dr-carol-morgan-memorial-award/



OTHER NEWS

2017 ANIMAL WELFARE JUDGING AND ASSESSMENT CONTEST

First-year student Hanna Hone and second-year students Colleen Griffin and Melanie Stuart participated in the veterinary division of the 2017 Animal Welfare Judging and Assessment Contest held at Iowa State University in November. Below is a condensed report from the students:

"The contest was an incredible opportunity to engage and develop our analytical skills in regards to animal welfare assessments. There was a team assessment of a group of finisher pigs on the Iowa State teaching farm, and then, individually, we evaluated the welfare of contrasting scenarios for farmed fish, meat rabbits, and racing greyhounds. We were then required to develop a well-thought-out argument and a short speech to present to some of the very professionals who have advanced the understanding and application of welfare for these species. The competition challenged our critical thinking, communication, and public

speaking abilities while giving us the chance to interact with other students from across North America who share the same passion for animals and their welfare. We were able to network and pick the brains of specialists and advisors from during mixers



and breaks. Our participation would not have been possible without the guidance of our supervisor Dr. Michael Cockram, our student mentor Jolene Vermeulen, and specialist coaches Drs. Jonathan Spears, Larry Hammell, and Jennifer Brown, who helped us prepare for the contest. In addition, we thank all the staff and faculty who dedicated their time and knowledge to creating the scenarios and setting up and running the event. We walked away with a vastly improved knowledge of animal welfare and current developments in the field, as well as an amazing experience in developing indepth opinions on welfare."

Funding for the students' expenses was provided through the SJDAWC Student Project Fund, the American Veterinary Medical Association, and the Universities Federation for Animal Welfare, UK.

PROVINCIAL LEGISLATION—PEI ANIMAL WELFARE ACT

PEI's new Animal Welfare Act and accompanying regulations were proclaimed in 2017, following a comprehensive review of existing legislation in PEI and other provinces by the PEI Department of Agriculture and Fisheries, in consultation with the PEI Humane Society, Sir James Dunn Animal Welfare Centre, PEI Veterinary Medical Association, and livestock industry, with additional input from other groups. The goals were to reduce procedural delays, improve the protection afforded to animals in the province, and modernize the legislation. The most significant change in the new act is a move away from a "distress-based trigger," as in the previous PEI Companion Animal Protection Act. This meant that an animal had to be demonstrably sick, injured, or in need of care before intervention could occur. The new act moves to a "standard of care" model, which uses established codes of practice to set the minimum care an animal needs to live a healthy and comfortable life, allowing animal welfare inspectors to intervene *before* an animal is sick or in distress if it is determined that the owner of the animal is not providing the care that is required according to the relevant code of practice.

The new act also prohibits cosmetic surgeries, specifically tail docking in dogs, horses, and cattle; ear cropping in dogs; and tail nicking and setting for horses. This affirms the policy adopted by the PEI Veterinary Medical Association in 2009.

The Animal Welfare Act may be viewed at http://www.assembly.pe.ca/bills/pdf_ chapter/65/1/chapter-2.pdf



CONTRIBUTION TO SPANISH-LANGUAGE TEXTBOOK ABOUT ANIMAL WELFARE

Dr. Alfonso Lopez, Professor Emeritus, Pathology and Microbiology, and Dr. Julio Martinez-Burnes (PhD, AVC 2001), University of Tamaulipas, Mexico, have contributed to the third edition of *Bienestar Animal*, a 500-page book written in Spanish concerning issues of animal welfare. Mexico was the first market for earlier editions, but the demand grew rapidly in Spanishspeaking countries. Published by Elsevier, this third edition is the standard reference book for DVM students, veterinarians, animal organizations, and governments in Latin America and Spain.

The book is edited by Dr. Daniel Mota, Universidad Metropolitana, Mexico, and chapter contributors include authors from seven Latin American countries, Spain, Portugal, and Canada. Dr. Lopez and Dr. Martinez-Burnes coauthored the chapter entitled "Animal welfare of neonatal pigs." For the last 15 years, Dr. Lopez has been part of a team investigating the pathophysiology of stress, perinatal diseases, and mortality in piglets.

PEI COMPANION ANIMAL WELFARE INITIATIVE (CAWI)

CAWI exists to improve the welfare of companion animals on PEI through various strategies, including raising public awareness about good animal care practices. There are bi-monthly articles ("Animal Talk") in *The Guardian* newspaper, and occasional features on CBC radio ("Pets and People"). Recent topics include "Counting Community Cats" (January 15, 2018) and "Is your horse ready for winter?" (November 20, 2017). Articles and radio features are available at *www.princeedwardisland.ca/CAWI*. Members of CAWI are the PEI Department of Agriculture and Fisheries, Sir James Dunn Animal Welfare Centre, PEI Humane Society, SpayAid PEI, PEI Cat Action Team, PEI Veterinary Medical Association, and PEI 4-H.

DR. ANDREW ROWAN SPEAKS AT AVC

Dr. Andrew Rowan, Executive Director of the Humane Society Veterinary Medical Association (HS VMA), gave two talks at AVC in November.

SHELTER DEMOGRAPHICS

Dr. Rowan discussed the significant change in the proportion of dogs and cats entering shelters in the United States since 1970. He proposed that a change in veterinary behavior—in particular, an increase in spaying and neutering—was the main element underlying the change. Dr. Rowan also looked at dog bites as a way to assess dog management effectiveness.

MANAGING HUMAN WILDLIFE CONFLICT VIA FERTILITY CONTROL

Dr. Rowan described the development and testing of the pZP vaccine for ungulate management and then looked at the examples of urban deer in North America, bison on Catalina Island, and African elephants in South Africa as examples of non-lethal wildlife management using fertility control.

Dr. Rowan's visit was sponsored by the HS VMA and co-hosted by the Animal Welfare Club, Shelter Medicine Club, and Exotics, Lab Animal, and Wildlife Club.

GRADUATE STUDENT NEWS

Congratulations to the following students who defended their theses in 2017 and will receive their graduate degrees in May 2018.



FRÉDÉRIC CHATIGNY

- Masters dissertation: Assessing the efficacy and side effects of lidocaine used as an analgesic on rainbow trout (Oncorhynchus mykiss).
- Received the Zoetis Graduate Student Award at AVC Graduate Studies and Research Days, May 2017.

KETAN JUNG DULAL

 Masters dissertation: Risk factors affecting wing injuries of broiler chickens at a slaughter plant in New Brunswick, Canada.



SHAUNA RICHARDS

- Doctoral dissertation: Productivity and welfare of cows on smallholder dairy farms in Kenya.
- Multiple oral presentations on research and results thereof to improve cow comfort to dairy farmers, extension workers, veterinary students, epidemiologists, primarily in Kenya and Canada but also Mexico and Edinburgh. See also farmershelpingfarmers.ca/projects/dairy/

STUDENT POSTER PRESENTATIONS

• COURTENAY M, SPEARS J, DEBIE F. 2017

An evaluation of non-anthropomorphic rearing of baby birds in the Atlantic Veterinary College Wildlife Service. AVC Summer Research and Leadership Program.

 JEWELL M, CAMERON M, SANCHEZ J, COCKRAM M, KEEFE G, MCKENNA S, SPEARS J. 2017

On-line benchmarking of welfare assessments on dairy farms to help producers to improve welfare. *Proceedings of the 7th International Conference on the Assessment of Animal Welfare at Farm and Group Level.* Ede, The Netherlands, September 5-8, 2017. Eds: De Jong IC, Koene P. Wageningen Academic Publishers, The Netherlands. 174.

- MILLS M, MCDUFFEE L, MCNIVEN M, MONTELPARE W. 2017 Reliability of equine heart rate variability. AVC Summer Research and Leadership Program.
- NORTHRUP J, MCDUFFEE L, MCNIVEN M. 2017

A comparison of the effectiveness of positive and negative reinforcement for behaviour modification of equids with aversion to administration of oral medications. AVC Summer Research and Leadership Program.

10 SJDAWC News

RECENT PUBLICATIONS

Caffrey NP, Dohoo IR, Cockram MS. 2017. Factors affecting mortality risk during transportation of broiler chickens for slaughter in Atlantic Canada. *Preventive Veterinary Medicine* 147:199-208.

Chatigny F, Kamunde C, Creighton C, Stevens ED. 2017. Uses and doses of local anesthetics in fish, amphibians, and reptiles. *Journal of the American Association for Laboratory Animal Science* 56(3):1-10.

- Chatigny F, Groman DB, Martinson SA, Stevens ED. 2018. Evaluation of tissue changes following intramuscular infiltration of lidocaine in rainbow trout *Oncorhynchus mykiss*. *Journal of Fish Biology*. doi:10.1111/jfb.13539.
- Cockram MS. 2017. Understanding the effects of handling, transportation, lairage and slaughter on cattle welfare and beef quality. In: Dikeman M, ed. Ensuring Safety and Quality in the Production of Beef. Vol 2. Cambridge, UK: Burleigh Dodds Science Publishing Limited 135-179.
- Crook A. 2017. Maltraitance animale: une intervention vétérinaire efficace (Animal abuse: Effective veterinary response). *Le Veterinarius* 33(2):67–71 (translated by the OMVQ). *https://www. omvq.qc.ca/DATA/DOCUMENT/*421_fr~v~avril-2017-vol-33-no2.pdf
- Ellis JJ, Stryhn H, Spears J, Cockram MS. 2017. Environmental enrichment choices of shelter cats. *Behavioural Processes* 141: 291-296.
- Saab M, Muckle CA, Stryhn H, McClure JT. 2017. Comparison of culture methodology for the detection of methicillin-resistant *Staphylococcus pseudintermedius* in clinical specimens collected from dogs. *Journal of Veterinary Diagnostic Investigation* 1-6. *http://journals.sagepub.com/doi/10.1177/1040638717729396*
- Saab ME, Weese JS, McClure JT. 2017. Direct repeat unit (dru) typing and antimicrobial resistance of methicillin-resistant *Staphylococcus pseudintermedius* isolated from dogs in Atlantic Canada. *Canadian Journal of Veterinary Research* 81:192-198.
- National Farm Animal Care Council. 2017. Code of Practice for the care and handling of veal cattle. *http://www.nfacc.ca/pdfs/codes/veal_cattle_code_of_practice.pdf*

PRESENTATIONS

- Caffrey NP, Dohoo IR, Cockram MS. 2017. Factors affecting mortality risk during transportation of broiler chickens for slaughter in Atlantic Canada. Canadian Association of Veterinary Epidemiology and Preventative Medicine Conference, University of Calgary, Calgary, June.
- Cockram M. 2017. Transport of sheep. PEI Sheep Breeders Association, Charlottetown. January.
- Cockram M. 2017. Oral presentation as witness representing CVMA at the Standing Committee on Agriculture and Agri-Food (AGRI) for session on Amendments to Health of Animals Regulations (Humane Transportation), Ottawa, April.
- Cockram M. 2017. Animal Welfare: Large Animals—Fitness for Transport. 2017 Canadian Veterinary Medical Association Convention Scientific Proceedings. Charlottetown, PEI. July. pp 199-203.
- Cockram M. 2017. Animal Welfare: Large Animals—Welfare of Veal Calves. 2017 Canadian Veterinary Medical Association Convention Scientific Proceedings. Charlottetown, PEI, July. 204-209.
- Cockram MS. 2017. Livestock transport and slaughter: Fitness for transport. Book of Abstracts of the 68th Annual Meeting of the European Federation of Animal Science, 28 August/September, Tallinn Estonia. Wageningen Academic Publishers, The Netherlands. 381.
- Cockram M. 2017. National Farm Animal Care Council, Transportation Code of Practice, Scientific Committee report presentation on equine transport. National Farm Animal Care Council, Ottawa, December.
- Cockram M. 2017. National Farm Animal Care Council, Transportation Code of Practice, Scientific Committee report presentation on sheep transport. National Farm Animal Care Council, Ottawa, December.
- Crook A, Ling K. 2017. Welfare-Friendly Feline Veterinary Practice. Feline Behaviour conference, Charlottetown, September.
- Crook A. 2018. Animal Welfare—A Life Worth Living. Students of the Canadian Veterinary Medical Association Conference, Charlottetown, January.

AVC ANIMAL WELFARE CLUB

Jessica D'Amico, AVC Class of 2020, President, AVC Animal Welfare Club

The AVC Animal Welfare Club promotes animal welfare at the AVC and beyond by providing veterinary students, veterinarians, producers, and community members with opportunities to expand their knowledge of animal welfare. We had a very successful year in 2017. In collaboration with the SJDAWC and the Feline Club, we co-hosted the 13th annual Animal Welfare in Practice Conference on feline behaviour with keynote speaker Dr. Lynne Seibert (pp 2-3). We also awarded seven grants to support AVC students who were pursuing external rotations related to animal welfare. Throughout the year, the AVC Animal Welfare Club hosted or co-hosted several lunchtime lectures on topics such as shelter demographics, human/wildlife conflicts, breathlessness in racehorses and brachycephalic dogs, and The Five Domains Model. There are currently 93 members, with events and lectures open to all students. The club is very grateful to the *Animal Welfare Foundation of Canada* for its ongoing support. You can find the club's page on Facebook. *https://www.facebook.com/groups/409882742536253/*



SJDAVC PROMOTING ANIMAL WELFARE THROUGH RESEARCH, SERVICE, AND EDUCATION UPEI.CA/AWC

Many thanks to our supporters!

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 following organizations and individuals who have supported the SJDAWC within the last three years (and some for much longer than that):

- Pegasus projects: The Pegasus Family Foundation, through the Silicon Valley Community Foundation
- Pegasus Helping Hand Fund: Dr. Christine Savidge, AVC Classes of 2011 and 2001
- The Atlantic Veterinary College
- Chinook Project: Government of Newfoundland and Labrador, Ann McCain Evans, • Rathlyn Foundation, Iqaluit Humane Society, First Air, Zoetis Animal Health, Boehringer-Ingelheim, Air Labrador, Veterinarians Without Borders-Canada, the Victoria City Kennel Club
- Feral cat neutering projects: Zoetis Canada; Iams and Eukanuba
- Gladys Ascah and friends •
- Glenn Loranger and Luke •
- Andrea and Arthur Hill •
- in memory of clients' companion animals: Halifax Veterinary Hospital group . (Halifax Veterinary Hospital, Spryfield Animal Hospital, and Fairview Animal Hospital); Vetcetera Animal Hospital
- Universities Federation of Animal Welfare, UK
- The late David Madren •
- The late Kay Alexandor
- Anonymous

We are also grateful to the many generous individuals, veterinary hospitals, and other businesses, too numerous to mention, who have made a donation in memory of a beloved pet.

All donations are fully tax deductible.

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

Dr. Alice Crook The Sir James Dunn Animal Welfare Centre Atlantic Veterinary College, UPEI 550 University Avenue, Charlottetown, Prince Edward Island, Canada C1A 4P3

