

# SJDAWC News

NUMBER 31—SPRING 2015

## SIR JAMES DUNN ANIMAL WELFARE CENTRE *at the Atlantic Veterinary College*



PROMOTING ANIMAL WELFARE THROUGH RESEARCH, SERVICE, AND EDUCATION



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### ANIMAL WELFARE IN PRACTICE 2015— **APPLIED EQUINE BEHAVIOUR** **SEPTEMBER 18 & 19**

(Please see page 8.)



### NEW ANIMAL WELFARE GRADUATE SCHOLARSHIP

The SJDAWC is very pleased to announce the **Sir James Dunn Animal Welfare Graduate Scholarship**. The scholarship will support the training of researchers at the masters or doctoral level to pursue animal welfare research at the University of Prince Edward Island. Both applied or more fundamental approaches to research pertaining to animal welfare are welcome. Applications for 2015-2016 will be accepted until May 25, 2015, with decisions expected by the end of June. Students may take up their award at any time of the year but must do

so within 12 months of the date of the letter of offer. Application and selection guidelines are at [www.upei.ca/awc](http://www.upei.ca/awc).

Since 1994, generous support from the Sir James Dunn and Christofor Foundations has provided a stable foundation for the Sir James Dunn Animal Welfare Centre (SJDAWC) at the Atlantic Veterinary College, UPEI. The Centre is very grateful to the Christofor Foundation for its renewed commitment for 2015 to 2020, which includes funding for the new scholarship.



## FROM THE COORDINATOR'S DESK

Welcome to the Spring 2015 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, we are very pleased to introduce our new graduate scholarship in animal welfare. You will also find summaries from several projects that were completed since the last newsletter, and information about a newly funded project to improve dairy cow comfort. There are key messages from our 2014 conference on farmed mink welfare, as well as information about our upcoming conference on applied equine behaviour (September 2015). We also celebrate award-winning AVC students, as well as recent graduate student activities, and more.

Please let us know at [animalwelfare@upei.ca](mailto:animalwelfare@upei.ca) if you would like to receive the newsletter by email (in full colour!) and be on our email list for upcoming events. To send feedback or learn how you can support the Centre, please go to [upei.ca/awc](http://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

*All donations are tax deductible.*

**ABOUT 50 MINK PRODUCERS, VETERINARIANS, INDUSTRY REPRESENTATIVES, AND VETERINARY AND ANIMAL SCIENCE STUDENTS** gathered at the AVC in early October for the tenth annual "Animal Welfare in Practice" conference. Participants heard presentations about the welfare of farmed mink, with reference to the new NFACC *Code of Practice for the Care and Handling of Farmed Mink 2013*. The keynote speaker was Dr. Georgia Mason (Canada Research Chair in Animal Welfare, University of Guelph). Other speakers were Dr. Kirsti Rouvinen-Watt (Dalhousie, Faculty of Agriculture), Dr. Jim Goltz (Manager, NB Veterinary Laboratory and Pathology Services), Mr. Kirk Rankin (Chair, NFACC Farmed Mink Code Development Committee and mink farmer, St. Mary's, ON), and Dr. Dave MacHattie (mink medicine and production, Middleton Veterinary Services, NS). The speakers' presentations may be viewed at [www.upei.ca/awc](http://www.upei.ca/awc).



# ANIMAL WELFARE IN PRACTICE—OCTOBER 2014

## MINK FARMING

### KEY MESSAGES FROM THE CONFERENCE



Speakers at the 2014 Animal Welfare in Practice conference: Mr. Kirk Rankin, Dr. Kirsti Rouvinen-Watt, Dr. Dave MacHattie, Dr. Georgia Mason, and Dr. Jim Goltz

On Friday evening, Dr. Mason began her talk, entitled “Mink Farming: (Welfare) Myths and Realities,” with a contextual framework for looking at animal welfare. She then gave an overview of Canadian mink farming and the life of a farmed mink from birth to death, followed by a discussion of welfare issues in mink farming. Dr. Mason concluded that the welfare of farmed mink compares favourably to other types of intensive systems in several key areas, such as litters remaining with their mothers as long as the kits are dependent on milk, and animals living their entire lives on site, with less than three minutes between removal from home cage and death.

Environmental enrichment for mink, on farm and in the research lab: What does it show us?  
Georgia Mason, University of Guelph



There are, however, some important welfare issues on mink farms that need to be addressed, such as infant losses and nursing sickness in mothers.

Dr. Mason began Saturday's programme with “Environmental enrichment for mink, on farm and in the research lab: What does it show us?” Basing much of the talk on her own research<sup>1</sup>, she discussed the negative effects of barren environments on mink and other carnivores, enrichment effects in a research setting, and how practical enrichments on farms affect welfare and productivity. She showed that simple, cheap enrichment objects make mink more playful, less prone to fur-chewing, and calmer (indicating enhanced welfare); they also improve mink reproduction enough to increase profits. These results led to changes in the requirements for environmental enrichment in the NFACC *Code of Practice for the Care and Handling of Farmed Mink* 2013.

Dr. Rouvinen-Watt then spoke on “Mink health and management-related diseases.” A practical problem for producers is that large pelts receive a premium price; however, selection for large body size and heavy feeding results in obese animals. Mink nursing sickness and fatty liver disease are common

causes of mortality in mink—both are metabolic diseases linked to non-ideal conditioning (loss of appetite and rapid weight loss, or obesity)<sup>2</sup>. The focus is on prevention as there is no effective treatment. Urinary tract infections and bladder stones are another cause of mortality in mink that can best be addressed by good management.

Other speakers included Mr. Kirk Rankin, long-time mink farmer and chair of the Farmed Mink Code Development Committee, who spoke about the importance of the new *Code of Practice for the Care and Handling of Farmed Mink* 2013, and the necessity of accepting the changes. Dr. Jim Goltz reflected on the role of the veterinarian in fur farming and other intensive animal production. Dr. Dave MacHattie then gave his perspective as a mink veterinarian, who deals on a clinical basis with health issues mentioned above. He has seen improvements over the last several years, including better options for pain management, and welcomes the new Code of Practice.

The conference ended with an interactive session (audience and speakers) entitled “Meeting the Challenges.” We were pleased with the number of farmers and producers who attended the conference, mostly from Nova Scotia. Feedback was very positive. The conference was co-hosted by the SJDAWC and the AVC Animal Welfare Club, with generous support from the Animal Welfare Foundation of Canada.

<sup>1</sup> E.g., Meagher RK, Mason, GJ. 2012. Enrichment reduces signs of boredom in caged mink. *PLOS ONE* 7(11):e49180

<sup>2</sup> E.g., Rouvinen-Watt K. et al. 2010. Rapid development of fasting-induced hepatic lipidosis in the American mink (*Neovison vison*): Effects of food deprivation and re-alimentaion on body fat depots, tissue fatty acid profiles, hematology and endocrinology. *Lipids* 45(2):111-128.



# COMPLETED PROJECTS 2014

Below are brief summaries for three SJDAWC-funded research projects completed in 2014. Publications since the last newsletter are listed on page 12. Further publications will be listed on the SJDAWC website as they become available ([awc.upei.ca/research\\_papers\\_and\\_presentations](http://awc.upei.ca/research_papers_and_presentations)).

## RESEARCH

### ENVIRONMENTAL ENRICHMENT TO REDUCE STRESS IN SHELTER CATS

M Cockram, J Spears, H Stryhn, JJ Ellis

This project investigated whether environmental enrichment can reduce stress in shelter cats and whether the responses of the cats to enrichment were influenced by temperamental characteristics. The responses of cats from the local humane society to single caging were assessed using behaviour and non-invasive measurement of the major stress hormone (cortisol). Feces were collected daily, and the concentration of the metabolites of cortisol (glucocorticoids) was measured using an ELISA test. The location, posture, and behaviour of the cats were quantified from 24-hour video recordings made under infra-red lighting over a 30-day period. Each day, each cat was given a qualitative Cat-Stress-Score using an established set of descriptors. Raised fecal glucocorticoid metabolite concentrations and Cat-Stress-Scores together with increased grooming and reduced eating indicated a stress response to caging that tended to decrease with time. As the efficacy of different types of environmental enrichment may be reliant on whether a cat is bold or shy, a test was developed to discriminate between bold and shy cats. An analysis of the results from several studies showed that latency to emerge from a cat carrier with a cut-point of ten seconds was the most appropriate test for discriminating between bold and shy cats in a shelter setting. It correctly classified a high percentage of cats overall, was quick and easy to administer, and was best suited to identify shy individuals (that arguably could derive greatest benefit from identification and extra attention).

Cats' preferences for different types of environmental enrichment were assessed using a plus-shaped choice chamber, in which each external

compartment contained a different type of environmental enrichment. Entrance to each chamber was gained through a cat-flap door monitored remotely using a data-logger that recorded the door movement. Usage of a compartment containing a shelf was not significantly different from any other compartment. A compartment containing a hiding box was significantly preferred to a compartment containing a toy and to an empty control compartment, suggesting a hiding box may be a valued resource. A final study housed bold or shy cats singly in cages enriched with either a hiding box or a shelf or in an empty control cage. The amount of food eaten and the percentage of time spent eating increased across time, and the percentage of time spent grooming decreased over time. Cats in the hiding box group had significantly lower fecal glucocorticoid metabolite concentrations and greater food intake than cats in the control group, indicating that the preferred type of environmental enrichment reduced stress. Shy cats used the hiding box significantly more than bold cats and had a significantly higher Cat-Stress-Score until day 5. There was no evidence that bold and shy cats benefited from different types of environmental enrichment. The results indicated that the stress of caging is experienced more intensely by shy cats, but it can be reduced by the inclusion of a hiding opportunity in cats expressing either mode of this behavioural style.

These results have practical applications for improving the quality of life for singly housed cats. The study supports a strong recommendation for including hiding opportunities in enclosure design for all singly housed cats. Jackie Ellis received her PhD for this work, which has been presented at international conferences. Manuscripts are in various stages of preparation and publication in scientific journals. *(Please see page 11.)*

### ASSOCIATION BETWEEN AIRWAY CYTOLOGY AND PULMONARY FUNCTION IN MARITIME RACING STANDARDBREDS AT HIGH RISK FOR INFLAMMATORY AIRWAY DISEASE

M Wichtel, D Gomez, S Burton, A Hoffman, J Wichtel

Inflammatory airway disease (IAD) is defined as a non-infectious lower respiratory tract disorder of horses characterized by poor performance, chronic coughing, or both, but without clinical signs of labored breathing at rest. It may occur in horses of any age, breed, or athletic discipline; however, young Thoroughbred and Standardbred racehorses appear to be at particularly high risk. In this population, the most common presenting complaint is poor performance. In contrast, non-racing sport horses diagnosed with IAD are generally older and are often presented for chronic cough. The condition is thought to result from repeated exposure of the airways to large burdens of aerosolized particulate matter, gases, and other irritants, leading to non-septic lower airway inflammation, airway hyperreactivity, or both.

Equine airway researchers recommend that the diagnosis of IAD be made using two criteria, both of which must be satisfied. The first is a history of poor performance, exercise intolerance, and/or cough, with or without excess tracheal mucus. The second is presence of nonseptic inflammation detected by bronchoalveolar lavage (BAL) cytology and/or evidence of pulmonary dysfunction. Assessing the first criterion is relatively straightforward. Assessing the second criterion can be difficult in the field. Pulmonary function testing (PFT) is relatively underused due to the unavailability of portable equipment for field use, leading to reliance on BAL for diagnosis of IAD. However,

BAL is a relatively invasive procedure, and results may vary depending on the lung site sampled. Further, whereas certain changes in BAL cell populations have been associated with abnormal pulmonary function, test agreement is generally not close enough for one test to substitute for the other in a diagnostic setting. With the availability of portable flowmetric plethysmography (Open Pleth™), it is possible for veterinarians to test airway reactivity in the field with favorable reproducibility. However, there is no published study examining the relationship between BAL cytology and airway reactivity, as measured by flowmetric plethysmography, in specific groups of horses (based on age, gender, or profession) suspected of having IAD (i.e., horses presenting for otherwise unexplained poor performance and/or chronic cough without clinical signs of labored breathing at rest).

The objective of this study was to examine associations between airway reactivity and specific indicators of airway inflammation, including degree of pharyngitis, tracheal mucus accumulation, tracheal wash (TW) cytology and culture, and BAL cytology in horses suspected of having IAD. Sixty-one horses were included in the study. Of 45 horses with a valid histamine bronchoprovocation test measured by flowmetric plethysmography, 33 (73%) had either abnormal BAL cytology or airway hyperreactivity (AHR), and were diagnosed with IAD on this basis. Of horses diagnosed with IAD, 9 (27%) had an abnormal BAL, 11 (33%) had AHR, and 13 (39%) had both. Airway reactivity was not associated with signalment, presenting complaint, pharyngeal or tracheal mucus scores, or results of TW or BAL cytology.

The conclusion was that airway reactivity and BAL cytology did not show concordance in this population of horses presenting for unexplained poor performance and/or chronic

cough. Given that AHR is considered a key indicator of IAD, failure to include tests of airway reactivity will lead to significant under-diagnosis of IAD in young Standardbred racehorses which present with clinical signs of IAD.

The short-term benefit to the animals involved in the project was an accurate diagnosis following a comprehensive respiratory work-up. The owners/trainers had the opportunity to elect optimal therapy (enabling horses to return to their previous level of performance/activity), and perhaps more importantly, as a result of early identification and intervention, the chances of these horses developing more severe lung pathology were reduced.

In the broader picture, because of the widespread nature of IAD (73% of this population), this research has the potential to improve the welfare of a large sector of the equine population, both racing and non-racing. Use of portable flowmetric plethysmography (Open Pleth™) will provide an easier and more accurate means of identification of animals that would benefit from therapy, and it can identify horses currently being treated unnecessarily. Early intervention will prevent the possible progression of IAD to heaves, one of the most debilitating non-infectious respiratory diseases of horses. This research will also increase awareness and understanding of IAD among veterinarians and horse owners, provide evidence for the efficacy of pulmonary function testing (PFT) in the regional horse population, and encourage uptake of this promising technology in regional practices. Ultimately, further prospective studies using this platform technology will allow us to better understand and prevent the more common, crippling respiratory disease of horses known as heaves. The work was presented at two conferences in 2014 (*please see page 11*), and publication of results is pending.

## EFFECT OF BUFFERS USED WITH FISH ANESTHETICS—PILOT PROJECT

J Spears, D Stevens

Tricaine methane sulfate (also called TMS or MS222) is the most frequently used anesthetic in fish, including research zebrafish. The solution of this anesthetic in freshwater is acidic and thus, in practice, must be buffered with another chemical to reduce stress on the fish and prevent possible gill damage. Most frequently, the acidity of the anesthetic is buffered using sodium bicarbonate, although more recently the commonly used laboratory buffer TRIS is being used for zebrafish studies. When sodium bicarbonate is added to a solution, it dissolves and produces bicarbonate, carbonate, protons, and carbon dioxide. The hypothesis for the current pilot study was that the carbon dioxide from bicarbonate can have an additive effect on TMS anesthesia and may be preferable as a buffer over TRIS.

The study was designed to separate the anesthetic properties of the added bicarbonate or TRIS from those of the anesthetic itself. To test these ideas, different combinations and concentrations of the two buffers (bicarbonate and TRIS base) were used, and the standard measures of anesthesia in fish were recorded. While no differences were discovered between the anesthetic efficacy of TMS when using either of the two buffers, the study showed that the buffering effect of sodium bicarbonate is shorter than with TRIS. This indicates the need to continually monitor pH or refresh anesthetic baths more frequently in order to diminish stress to the fish. This lays some groundwork for further work in refining anesthetic techniques in fish to enhance their welfare. (*Please see publication, page 11*).



## RESEARCH FUNDED 2015

### ACHIEVING MEANINGFUL IMPROVEMENTS IN DAIRY COW WELFARE BY REDUCING LAMENESS: EVALUATING THE EFFECTIVENESS OF HERD PERFORMANCE BENCHMARKING AND INTEGRATED, WEB-BASED RISK MANAGEMENT

G Keefe, M Cameron, M Cockram, S McKenna, J Sanchez

Lameness in dairy cattle is a significant animal welfare issue for the Canadian dairy industry. Estimates for within-herd lameness prevalence range from 0 to 50%, with an average of 20%. Previous research has demonstrated that an important barrier to reducing lameness and improving dairy cow welfare is that farmers underestimate the level of lameness on their farm. Through this project, a web-based benchmarking and risk management tool will be created that will enable dairy farmers to view their own farm's lameness outcome data; make comparisons to farms of similar size, region, and type; and obtain recommendations for improvement that are specific to their situation. Baseline lameness prevalence information on 80 herds in the Maritimes will be obtained to develop the benchmarking system. Participating farmers will be given access to the benchmarking and to a risk management tool that will outline management changes tailored to their specific situation. Lameness audits will be conducted one and two years after the initial assessment, and the data from these audits will be used to determine the effectiveness of these tools at reducing lameness in dairy cows in the Maritime provinces, with potential for wider application to the Canadian dairy industry.

## SERVICE PROJECTS

Please visit [awc.upei.ca/Service\\_projects](http://awc.upei.ca/Service_projects) for more information about these and other service projects.

The SJDAWC supports several ongoing service projects. Each project is carried out in cooperation with an Island community group, and provides direct benefits for animals and educational benefits for veterinary students. Current service projects include:

- Medical and surgical care of homeless animals (P Moak, with the PEI Humane Society)
- Health management services for Handibear Hills Equine Sanctuary, Inc. (W Duckett)
- Health management services for PEI Equine Retirement Society, Inc. (W Duckett)
- AVC humane dog training programme (AM Carey, with the PEI Humane Society)
- Clinical care of wildlife at AVC (J Spears)
- Chinook Project (M Hopson and L Miller) (*multiple funding partners are listed on page 12*)
- Two complementary feral cat neutering programmes (P Foley, PEI Cat Action Team), one funded through the SJDAWC and the other by the Pegasus Family Foundation through the Silicon Valley Community Foundation.



Dr. Marti Hopson, Veterinary Coordinator, Chinook Project

### CHINOOK 2015

This summer, Chinook will travel from June 3 to 13, visiting the Innu communities of Natuashish (last visited in 2011) and Sheshatshiu (last visited in 2014). The Chinook team plans to hold a total of 7.5 clinic days. Two AVC alumni veterinarians, Dr. John Ruffino (AVC 2010, Newfoundland and Labrador) and Dr. Chris McLaughlin (AVC 2012, North Carolina) will lead the team along with AVC veterinary technician Andrea Jack. Five AVC students will complete the team (from NL, NS, QC, and the US).

The Chinook Project would not exist without the generous support of our partners and donors, including local community organizers who provide supplies, accommodation, food, and volunteers to help with administrative duties, as well as a clinic facility. In Sheshatshiu, for example, local organizers and the Sheshatshiu Band Council constructed a clinic for the Chinook team inside the town garage that normally houses the fire truck. Travel and shipping of supplies to the North is very costly. We gratefully acknowledge the generous funding partners and donors listed on page 12.



## CHINOOK PROJECT 2014

by Marti Hopson

The Chinook Project continues to travel each summer at the invitation of remote communities in Canada's North to provide free veterinary services, including vaccinations, deworming, wellness checks, spaying and castration surgeries, and medical treatments as needed. Between June 21 and July 5, 2014, two different teams of veterinarians and veterinary students went to three separate locations, Nain (second visit), Sheshatshiu, and Rigolet, Labrador, and attended to approximately 300 animals.

Nain is the northernmost community in Labrador, with a population of approximately 1000 people of Inuit and European descent. Like all of the coastal towns of Northern Labrador, it can only be reached by air or sea. It is part of Nunatsiavut, meaning "our beautiful land," which is a region of land of northern Labrador claimed by the Inuit and under partial autonomy and self-governance since 2005. In Nain, the Chinook team saw 27 animals for spay/neuter surgery and 81 for wellness and medical appointments.

Vaccination is crucial because rabies transmitted from wildlife is a real risk in these northern communities.

Moving on to Sheshatshiu, population 1400, the first veterinary team overlapped with the second, so there were fourteen people running a very busy clinic. There were four full days of clinics in Sheshatshiu, an Innu First Nations community located just outside Goose Bay. There is a need here to control the dog population, as roaming dogs can cause problems. Fighting and unwanted litters of puppies are animal welfare issues. When a female is in heat, the male dogs will form groups and can fight and injure each other, or people. An increased number of roaming

dogs affects humans as well, with increased incidence of dog bites and other public health issues. Eighty-six dogs received veterinary care in Sheshatshiu, including 52 spay or neuter surgeries.

The second team next visited Rigolet, the southernmost Inuit town in the world, which is in a beautiful coastal location with a population of just 300. The Chinook team set up a clinic in the community centre, and in just 2.5 days attended to 86 animals and performed 31 spay or neuter surgeries. The team also helped in a home with a serious overpopulation of cats, and attended to three large working sled dog teams.



Rhonda Stone with patient



AVC students Jason Gray, Rhonda Stone, Sarah Dixon, and Leighann Diehl outside Rigolet, NL



# ANIMAL WELFARE IN PRACTICE CONFERENCE—SEPTEMBER 18 & 19, 2015 APPLIED EQUINE BEHAVIOUR

**GEMMA PEARSON, BVMS, MRCVS, WILL BE THE KEYNOTE SPEAKER AT THE ELEVENTH ANNUAL ANIMAL WELFARE IN PRACTICE CONFERENCE** this fall at the Atlantic Veterinary College. Dr. Pearson runs the Equine Behaviour Service at the Dick Vet Equine Hospital, University of Edinburgh. She has over fifteen years of experience working with equine behaviour cases and is currently undertaking an MSc through research investigating horse-veterinarian interactions. She holds an Associate Diploma in Equitation Science, a new discipline that combines equine learning theory, biomechanics, and ethology. Equitation science promotes an objective evidence-based understanding of the welfare of horses during training and competition by applying quantitative scientific methods to identify what training techniques are ineffective or result in suffering.

Dr. Pearson is particularly interested in the application of learning theory to deal with difficult horses in the veterinary environment. Says Dr. Pearson, “I have seen some great results in our equine hospital after teaching staff and students about the application of learning theory, and I am keen to spread this knowledge further.”

Dr. Pearson will give a talk (open to all) on Friday evening, September 18: “Demystifying the horse whisperer—how horses really learn.” The programme on Saturday, September 19, will include talks on equitation learning theory and its application to everyday veterinary practice using case-based examples. Dr. Pearson will be joined by Dr. Laurie McDuffee, Professor of Large Animal Surgery at AVC, who is currently on sabbatical leave studying equine learning theory and its incorporation to promote humane handling of equine patients.



*Dr. Gemma Pearson working with horse and clicker*

On Saturday afternoon, there will be a practical session with a demonstration by Dr. Pearson, and opportunities for conference participants to try some simple positive training techniques with horses. Registration is required for the programme on Saturday.

The conference is co-hosted by the SJDAWC and the AVC Animal Welfare Club, with generous additional support from the Animal Welfare Foundation of Canada.

**Registration information is at [upeil.ca/awc](http://upeil.ca/awc).**

## UPDATE — PEI COMPANION ANIMAL WELFARE INITIATIVE (CAWI)

CAWI undertook a new initiative in early 2015 spearheaded by the PEI Humane Society. CAWI partners developed and delivered an 8-week course on “Companion Animal Welfare” for PEI Seniors College. There were sessions on the aging pet, positive training for dogs and cats, pet first aid, animal abuse and animal protection, and activities of non-profit charitable groups that promote animal welfare in the

community (CAT, SpayAid, and 4-H). Recent CAWI media columns include “Electric Underground Fencing: A Dog’s View” and “Feeding the Family Pet,” *The Guardian*, April 18 and March 21, respectively. All features to date can be found at [gov.pe.ca/agriculture/CAWI](http://gov.pe.ca/agriculture/CAWI).

CAWI was formed in January 2012 at the initiative of the PEI Department of Agriculture and Forestry to raise

awareness about good companion animal care practices and encourage members of the public to think critically about animal welfare in their communities. Additional CAWI members are the Sir James Dunn Animal Welfare Centre, PEI Humane Society, SpayAid PEI, PEI Cat Action Team, the PEI Veterinary Medical Association, and PEI 4-H.



## 2014 ANIMAL WELFARE JUDGING AND ASSESSMENT CONTEST

Congratulations to the AVC student team—Tim Cashin, Ashley Scholten, and Jessica Rock, Class of 2015; and Jessie Dowe and Alden West, Class of 2016—that participated in the 2014 Animal Welfare Judging and Assessment Contest held at Michigan State University in November. The team finished second in the team assessment of a beef cow and calf farm, and fourth overall in the veterinary division of the competition. Tim was the third highest performing individual student in the veterinary division.

Each student was provided with contrasting video scenarios for the management of swine, captive seals, and shelter cats. They were required to assess and evaluate the welfare of

the animals in each situation and present their reasoning to a judge. There was also a live animal team assessment of a beef cow/calf operation. Dr. Michael Cockram was the team coach with additional specialty coaching at AVC from Drs.

Pierre-Yves Daoust and Dan Hurnik.

Twelve teams from ten veterinary schools in North America and Ireland participated in the annual competition. 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.

## 2014 CHRISTOFOR AWARD IN ANIMAL WELFARE

Fourth-year student Melissa Parsons received the 2014 Christofor Award in Animal Welfare at the AVC Fall Awards and Recognition Night on October 8. Melissa has been actively and consistently involved in animal shelter and rescue work since the age of 10, when she began walking dogs at her local animal shelter in Grand Falls-Windsor, Newfoundland and Labrador. As she grew older, she volunteered as an animal care attendant, animal protection officer, and educator, providing humane education in classrooms. Her dedication to the welfare of animals continued once she came to PEI, where she volunteers with the PEI Humane Society and is a long-serving board member of the PEI Cat Action

Team (CAT) and SpayAid PEI. Besides her activities as a board member (in particular fund-raising, public education, and veterinary liaison), she has been very active with care of feral cat colonies and as student coordinator for AVC feral cat neuter days. Melissa is also an executive member of the AVC Teaching Animal Enrichment and Shelter Medicine Clubs. In his glowing letter of recommendation, Dr. Peter Foley stated, "Melissa's passion is helping animals that have no one looking out for them. It is a key part of who she is, and how she defines herself."

Melissa's solid track record, dedication, and hard work to promote animal welfare make her a very deserving recipient of the 2014



Christofor Award. There is no doubt that she will carry this determination into her veterinary practice.

*Congratulations, Melissa!*



# GRADUATE STUDENT NEWS

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**JACKLYN ELLIS**

- Congratulations to Jackie Ellis who received her PhD from UPEI in 2014. Thesis title: Environmental enrichment to reduce stress in shelter cats.

Oral presentation: Ellis JJ, Stryhn H, Spears J, Cockram MS. Effect of environmental type on the behavioural and glucocorticoid responses of bold and shy cats to single caging. *Proceedings of the 48<sup>th</sup> Congress of the International Society for Applied Ethology*, July/August 2014, Vitoria-Gasteiz, Spain (ed. I Estevez, X Mantenca, RH Marin, X Averos). Wageningen Academic Publishers, The Netherlands. p234.



**DANIA VILLARNOVO**

- Congratulations to Dania Villarnovo who received her MVSc degree from UPEI in 2014. Thesis title: Enhancing animal welfare by potentially improving ease of predicting transfusion reactions in dogs, cats and horses.



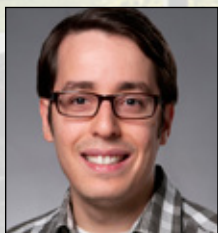
**CYRIL ROY**

- Oral presentation: Roy RC, Cockram MS, Dohoo IR. Welfare of horses transported to slaughter in Canada: assessment of welfare and journey risk factors.

Oral presentation: Roy RC, Cockram MS, Dohoo IR, Ragnarsson S. Welfare of horses transported to slaughter in Iceland.

Oral presentation: Roy RC, Cockram MS. Analysis of owner/shipper certificates for transport of horses from the USA for slaughter in Canada

Abstracts for each of the above are in *Proceedings of the 6th International Conference on the Assessment of Animal Welfare at Farm and Group Level*, September 2014, Clermont-Ferrand, France. (ed. L Mounier, I Veissier). Wageningen Academic Publishers, The Netherlands. p172, 173, and 248, respectively.



**MATTHEW SAAB**

- Poster presentation: Saab M, Weese JS, Muckle CA, McClure JT. 2014. Comparing traditional and selective culture methodology for the detection of methicillin-resistant *Staphylococcus pseudintermedius* in clinical canine specimens. American Society for Microbiology 114<sup>th</sup> General Meeting, Boston, MA.

Poster presentation: Saab M, Weese JS, Muckle CA, McClure JT. 2014. Comparing traditional and selective culture methodology for the detection of methicillin-resistant *Staphylococcus pseudintermedius* in clinical canine specimens. Canadian Animal Health Laboratorians Network Annual Meeting, Ottawa, ON.

## VISITING POST-DOCTORAL FELLOW



**DR. ESTER BARTOLOMÉ MEDINA**

- Department of Agro-forestry Sciences, University of Seville, Spain. June and July, 2014. Dr. Medina's work with Dr. Michael Cockram included discussions of her research on stress in horses in relation to performance in sport. She gave a talk at AVC in July on "Infrared thermography and stress assessment in horses during sport competitions."



## RECENT PUBLICATIONS

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- Cockram MS. 2014. Sheep Transport. In: Grandin T, ed. *Livestock Handling and Transport*. 4<sup>th</sup> edition. CABI Publishing, Wallingford, Oxon, UK, 228-244.
- Vanderstichel R, Forzán MJ, Pérez GE, Serpell JA, Garde E. 2015. Changes in blood testosterone concentrations after surgical and chemical sterilization of male free-roaming dogs in southern Chile. *Theriogenology* 83(6):1021-1027.
- Fernandes AF, Fenton H, Martinson S, Desmarchelier M, Ferrell ST. 2014. Absolute polycythemia in a bald eagle (*Haliaeetus leucocephalus*). *J Zoo Wildlife Med* 45(4):958-60.
- Ellis JJ, Protopapadaki V, Stryhn H, Spears J, Cockram MS. 2014. Behavioural and faecal glucocorticoid metabolite responses of single caging in six cats over 30 days. *Veterinary Record Open*; 1:e000056. doi:10.1136/vropen-2014-000056
- Spears J, Kamunde C, Stevens ED. 2014. Effect of TRIS and bicarbonate as buffers on anesthetic efficacy of tricaine methane sulfonate in zebrafish (*Dania rerio*). *Zebrafish* 11(6):590-596.
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## PRESENTATIONS

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- Cockram MS. Sleep in sheep. Sleep seminar. Department of Animal Nutrition and Management, Faculty of Veterinary Medicine and Animal Science, Swedish University of Agricultural Sciences, Uppsala, Sweden. December 2014.
- Wichtel M, Gomez D, Burton S, Wichtel J, Hoffman A. Relationships between equine airway reactivity and specific indicators of airway inflammation in horses suspected of having inflammatory airway disease. Veterinary Comparative Respiratory Society annual meeting, New Bolton Center, Pennsylvania. October 2014.
- Wichtel M. Diagnosis of inflammatory airway disease: a comparison between old and new modalities. *Proceedings of the 2014 CVMA Convention*, St. John's, NL. July 2014. p333-338.

## RECENT ANIMAL WELFARE TALKS AT AVC

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- Ross L. Working through welfare: a large animal perspective. April 2015.
- Crook A. Animal welfare in the shelter environment. January 2015.
- Daoust P-Y. Animal welfare and the Canadian harp seal hunt. October 2014.

The above talks were hosted by AVC student clubs.

# SJDAWC

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

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- AVC Classes of 2011 and 2001 (Pegasus Helping Hand Fund)
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- Mr. Glenn Loranger
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- Dr. Lara Jamieson
- Universities Federation of Animal Welfare, UK
- Nutrience Pet Foods
- Nova Scotia Veterinary Medical Association
- The late Mr. David Madren
- The late Ms. Kay Alexandor
- Emerald Island Hunt
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