Raising the bar through education on animal health and well-being

An international leader in the dairy industry, Saputo's investment in dairy animal welfare at the University of Guelph through the Saputo Dairy Care Program is helping to support training and outreach for students, veterinarians and dairy producers. We are pleased to provide an update on activities made possible with this support.
DAIRY CATTLE WELFARE ROTATION

Enrollment increased from 15 students in 2016 – 2017, to 20 in 2017 – 2018, for a total of 35. This rise may be attributed to last year’s students’ uniformly positive endorsements and promotion by word of mouth. The 2017 – 2018 rotation participants included:

- Eleven Ontario Veterinary College (OVC) students
- Eight veterinary students external to the OVC
  - One student from the Atlantic Veterinary College
  - Four from Université de Montréal Veterinary Faculty at St-Hyacinthe Campus
  - Two from the University of Calgary Faculty of Veterinary Medicine
  - One from the University of Illinois College of Veterinary Medicine
- One independent veterinarian from Halifax, working toward Board Certification in the American College of Animal Welfare

This elective rotation is aimed at final-year veterinary students and is offered two times per year with a maximum of 12 students per offering. Participation by veterinary students from outside of the OVC is made possible by travel grants from the Saputo Dairy Care Program.
The main learning objectives of the rotation are to recall existing dairy welfare standards and recognize contraventions; to practice on-farm dairy cattle welfare assessments; and to master communication with clients and colleagues about animal welfare. In addition to the core content delivered by OVC faculty — Drs. Todd Duffield, Derek Haley and Lena Levison — we were pleased to present four additional speakers with expertise on topics critical to the welfare of dairy cows:

- Researcher Dr. Stephanie Croyle presented the latest data on the prevalence and causes of lameness and injuries in dairy cows.
- Dr. David Kelton highlighted results from the National Dairy Study, the first national benchmarking study of health, management and production of dairy herds in Canada.
- Dr. David Renaud offered a lecture regarding his research on the health and welfare of veal calves and included a tour of a commercial veal facility.
- And finally, Dr. Charlotte Winder explained her research concerning pain control in the disbudding and dehorning process and how to train producers in the techniques.

A sample schedule of the week-long program conducted in February 2018 may be found in Appendix A.

Because this rotation is the **only one of its kind** offered to veterinary students in North America, it can serve as a model for advancing animal welfare training for students at other institutions. Therefore, abstracts have been submitted for conference presentations at both the International Society for Applied Ethology (ISAE) (see Appendix B) and the American Dairy Science Association (ADSA). These submissions outline our learning objectives, describe our experience and detail the feedback from the students gained during these first two years of the program.

“This was one of my favourite rotations. The opportunity to have such great, in-depth discussions about the real issues in the industry with experts (the professors) was so valuable. It really reaffirmed my commitment to wanting to keep pushing for change and not just accept the status quo. A lot of the topics, videos and visits were really tough, but it was very thought provoking. I wish there was more opportunity for this kind of learning in other vet industries (i.e. swine, equine racehorse care, etc.).”

“I am so glad I chose this rotation and I feel that these five days really helped broaden my knowledge and awareness of so much more than I had expected/hoped for and has given me a lot to think about, and I really appreciate that…”

“Thank you so much Saputo for the support of our education of animal welfare. I feel much more confident addressing and speaking to producers and consumers regarding some important welfare issues.”
CCSAW SEMINAR SERIES

The Saputo Dairy Care Program contributed to three seminars hosted by the Campbell Centre for the Study of Animal Welfare (CCSAW). These were open to members of the University of Guelph community, agricultural industries, provincial government and the general public, and were also made available by live-stream. More than 200 people attended the face-to-face events and there have been more than 230 views (and counting) on the CCSAW YouTube channel: https://www.youtube.com/channel/UCvp0GSrK0Xmo0GBIYGZbg

• On August 3, 2017, Dr. George Stilwell, University of Lisbon, presented Animal Welfare and Profitable Farming. Stilwell demonstrated that it is possible to increase animal performance while ensuring animal welfare. In so doing, he adds an economic argument to the acknowledged ethical and health reasons to promote animal welfare.

• On November 23, 2017, Ghent University’s Dr. Bart Pardon presented Opportunities to Improve Veal Calf Welfare by Reducing Antimicrobial Use. Pardon offered an overview of how the pressure to reduce antimicrobial drug use in the European veal industry can provide the impetus for improved veal calf welfare.

• On February 21, 2018, Dr. David Fraser from the Animal Welfare Program at the University of British Columbia (UBC), offered a lecture titled What Do We Mean by “One Welfare”? Fraser described the interconnectedness of people, animals and the environment and provided examples illustrating how improving animal welfare often improves human welfare (and vice versa). He also discussed the need to coordinate animal and human welfare services, and how protection of the environment is fundamental to all species.
DAIRY WELFARE FORUM

On February 20 – 21, 2018, the Saputo Dairy Care Program hosted an inaugural meeting among faculty and researchers from UBC and U of G. OVC Professor Emeritus Dr. Ken Leslie served as facilitator. The purpose was to discuss the research, extension and education needs of the Canadian dairy industry, as well as to present future work, ongoing projects and research results. Topics included calves, down cows and culling, lameness and injury, and the perceptions of processors, retailers and consumers. There was a fruitful exchange of ideas and UBC faculty were invited to return next February 20 – 21, 2019.
PARTICIPANTS:

Dr. Stephanie Croyle, PhD Candidate, Department of Population Medicine, U of G

Dr. Trevor DeVries, Associate Professor, Canada Research Chair in Dairy Cattle Behaviour and Welfare, Department of Animal Biosciences, U of G

Dr. Todd Duffield, Professor, Chair, Department of Population Medicine, U of G

Dr. David Fraser, Professor, Animal Welfare Program, UBC

Dr. Derek Haley, Associate Professor, Chair, CCSAW Steering Committee, Department of Population Medicine, U of G

Dr. David Kelton, Professor, Dairy Farmers of Ontario Chair in Dairy Cattle Health, Department of Population Medicine, U of G

Dr. Stephen LeBlanc, Professor, Research Program Director, Animal Production Systems, Department of Population Medicine, U of G

Dr. Lena Levison, Clinical Veterinarian, Animal Care Services; Saputo Dairy Care Manager, Department of Population Medicine, U of G

Dr. Dave Renaud, Contractually Limited Faculty, Department of Population Medicine, U of G

Dr. Steven Roche, Adjunct Faculty, Department of Population Medicine, U of G

Dr. Warren Skippon, Director of Animal Welfare, Saputo

Jane Stojkov, PhD Candidate, Animal Welfare Program, UBC

Dr. Marina von Keyserlingk, Professor, NSERC Industrial Research Chair, Animal Welfare Program, UBC

Dr. Mike von Massow, Associate Professor, Department of Food, Agriculture and Resource Economics, U of G

Dr. Dan Weary, Professor, NSERC Industrial Research Chair in Dairy Cattle Welfare, Animal Welfare Program, UBC

Dr. Tina Widowski, Professor, Egg Farmers of Canada Research Chair in Poultry Welfare, Department of Animal Biosciences, U of G

Dr. Charlotte Winder, Assistant Professor, Department of Population Medicine, U of G
FOOD FOR THOUGHT

Saputo Dairy Program Manager Lena Levison, along with CCSAW associated faculty David Kelton and Derek Haley of the Department of Population Medicine, spent a day filming with Chef Dan Hayes of the Aboriginal Peoples Television Network’s Moosemeat & Marmalade. They discussed animal welfare in dairy production in Canada for a web documentary in which hosts Hayes and Art Napoleon explore where food comes from. The discussion was edited to create a 23-minute video — the fourth and final episode in a series intended to encourage audience members to think about what goes into their bodies. The other videos reported on salmon, grain and wild game, and the full set is available here: https://vimeopro.com/maystreet/foodforthought

SAPUTO DAIRY CARE PROGRAM
PROMOTIONAL VIDEO

The Saputo program is prominently featured on the CCSAW homepage (https://www.uoguelph.ca/ccsaw/), including the link to a short promotional video (3:33 mins) in which Drs. Derek Haley, Todd Duffield, Tina Widowski and Lena Levison describe the Dairy Cattle Welfare Rotation for final-year veterinary students. Importantly, the film captures the assessment of two rotation participants. Made in English and available with French subtitles, the video has already proven successful as a recruitment tool, and it is posted in two locations:

- The CCSAW website at https://www.youtube.com/watch?v=p5TwxUv-hdE&t=77s
- The Saputo website at http://www.saputo.com/en/Our-Promise/Responsible-Sourcing/Partnerships
OUTREACH DISCUSSIONS

Dr. Todd Duffield, professor and chair of the Department of Population Medicine, participated in a panel discussion on the topic of cull cows at the Dairy Farmers of Ontario spring policy meeting in Alliston on March 22, 2017. Duffield also discussed the status of cull cows at meetings for veterinary practitioners in December, 2017. In total, more than 100 veterinarians attended the gatherings in Palmerston (December 11), Woodstock (December 12), South Mountain (December 13) and Port Perry (December 14).

On February 7, 2018, Dr. Lena Levison, Clinical Veterinarian in OVC’s Animal Care Services and Saputo Dairy Care Manager in the Department of Population Medicine, spoke to the Simcoe County Canadian Association of Farm Advisors in Barrie about dairy cattle welfare, proAction and the Saputo Dairy Care Program. The twelve advisors who attended were lawyers, accountants, financial consultants and agricultural account managers from two lending institutions.
APPENDIX A – DAIRY CATTLE WELFARE ROTATION
SCHEDULE – WINTER 2018

<table>
<thead>
<tr>
<th>MONDAY, FEBRUARY 12</th>
<th>TUESDAY, FEBRUARY 13</th>
<th>WEDNESDAY, FEBRUARY 14</th>
<th>THURSDAY, FEBRUARY 15</th>
<th>FRIDAY, FEBRUARY 16</th>
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<tbody>
<tr>
<td>LOCATION</td>
<td>SB 2511 / PRIVATE FARM</td>
<td>ELORA DAIRY / SB 2511</td>
<td>PRIVATE FARMS / SB 2511 UNTIL 1:00PM / PAHL 1817 AFTER 1:00PM</td>
<td>LLC 1713 / OLEX / SB 2511</td>
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<tr>
<td>8:30</td>
<td>Introductions (20 min)</td>
<td>Drive to Elora (8:00 start, meet outside SB)</td>
<td>1st farm visit to perform ACAP: Jake Bouwman – Free stall, Fergus. Departure time to be determined</td>
<td>Student presentation of key welfare issues (T.Duffield, D.Haley, L.Levison)</td>
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<tr>
<td>9:00</td>
<td>Background on animal welfare (D.Haley)</td>
<td>Orientation for the dairy ACAP (S.Croylé)</td>
<td>Practical training for the ACAP (free stall &amp; tie stall facilities)</td>
<td>Ontario Livestock Exchange. (Leave @ 9:30)</td>
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<tr>
<td>9:30</td>
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<td></td>
<td>2nd farm visit to perform ACAP: Tim May – tie stall, Rockwood</td>
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<tr>
<td>10:00</td>
<td>Break @ 10:15 am</td>
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<td>10:30</td>
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<tr>
<td>11:00</td>
<td>Key dairy welfare issues: discussion on identifying &amp; prioritizing (T.Duffield, D.Haley, L.Levison)</td>
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<td>11:30</td>
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<tr>
<td>12:00</td>
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<td>Lunch (on us)</td>
<td>Lunch (on us)</td>
<td>Lunch (on us)</td>
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<td>12:30</td>
<td>Lunch (on your own)</td>
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<td>13:30</td>
<td>Orientation for the dairy animal care assessment program (ACAP) (L.Levison)</td>
<td>Disbudding/dehorning (C.Winder)</td>
<td>Down cows, cull cows &amp; euthanasia decisions (T.Duffield)</td>
<td>Lunch w/ discussion of what we saw at OLEX (on us, ~12:30 @ Fionn MacCool’s) (T.Duffield, D.Haley, L.Levison)</td>
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<tr>
<td>14:00</td>
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<td>Break (15 min)</td>
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<td>15:00</td>
<td>Break (10 min)</td>
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<td>Break (15 min)</td>
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<tr>
<td>15:30</td>
<td>Veal farm visit (leave 15:10)</td>
<td>Client communication around animal welfare topics @ 14:45 (D.Haley)</td>
<td>National Dairy Study @ 15:15 (D.Kelton)</td>
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<tr>
<td>16:00</td>
<td>Dairy animal welfare research presentation: Veal calves (D.Renaud)</td>
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<td>16:30</td>
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<tr>
<td>17:00</td>
<td>Dinner (on us, ~17:15 at Symposium Café)</td>
<td>DCWC Webinar Series: Lameness Myths &amp; Reality w/ Dr. Cramer</td>
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Locations: Stewart Building (SB) rm 2511; Pathobiology (PAHL) rm 1817; Lifetime Learning Centre (LLC) rm 1713; Private farms; Ontario Livestock Exchange (OLEX); Livestock Research & Innovation Centre – Elora Dairy
APPENDIX B – IASE ABSTRACT


A one-week elective rotation for final-year veterinary students began in 2016 at the Ontario Veterinary College (OVC), University of Guelph, to teach current scientific knowledge and practical elements of dairy cattle welfare. The rotation was developed in part as a response to a veterinary curriculum mapping exercise that identified gaps in welfare training, but also in part from a private funding opportunity from Saputo, Inc, to train veterinary students about dairy cattle welfare. The main objectives were to train students to: 1. Recall existing dairy welfare standards and recognize contraventions, 2. Carry out practical on-farm dairy cattle welfare assessments, and 3. Communicate with clients and colleagues about animal welfare. The rotation is run twice per academic calendar with a maximum of 12 student participants for each offering. Six spaces per offering are held for OVC students, while students from other American Veterinary Medical Association accredited schools filling the remaining spaces. The week is structured as a balance of seminar style / interactive teaching, on-farm teaching, student exercises, and open discussions around key and current dairy welfare issues. The week begins with a discussion around defining welfare and understanding how facets like biological functioning and aspects of natural living relate to affective states in animals. This discussion leads to a brainstorming session to identify and prioritize welfare issues affecting dairy cattle, and results in an assignment where students provide peer-to-peer summary reports on these topics. Other seminar components include topics such as cull cow decision-making, disbudding procedures, training around Canada’s proAction® animal care assessments, management of down cows, and euthanasia decisions. Students are trained and given practice scoring hock, neck and knee lesions, lameness, and body condition. Learning experiences outside of the classroom include a tour of a veal farm, a visit and learning exercises at the Elora Livestock - Dairy Research and Innovation Center (LRIC-Dairy), and a public livestock sales facility. For each rotation, all students visit two commercial dairy farms and conduct a proAction® animal care assessment which they prepare into a report and present in class. Additionally, the reports are provided to the herd veterinarian to be shared with the herd owner. To date electives have been filled to capacity with students from each of the 5 veterinary colleges in Canada. In addition, veterinary students studying in the USA (Illinois, Michigan) have also participated. Student feedback from the first 4 offerings of the rotation over the past two years have been extremely positive. The financial support of Saputo in helping create this elective experience is gratefully acknowledged.
GETTING THE WORD OUT

The OVC marketing communications team shares information with government, industry, future and existing students, staff, faculty, alumni, colleagues at fellow universities, and the broader community through multiple integrated platforms, including active social media accounts. The Saputo Dairy Care Program was also featured on the OVC Twitter feed.

Researcher Dr. Stephanie Croyle spoke about lameness in dairy cows.