THE SAPUTO DAIRY CARE PROGRAM

MARCH 2021

Cover photo submitted by
February 2021 rotation participant
Jean-Philippe Béliveau, Université de Montréal

Ontario Veterinary College
I was impressed with the welfare topics that were covered and the discussions that ensued. I know that I will be more prepared for a career in dairy medicine because of this opportunity and would recommend it to other students in years to come.

Submitted by February 2021 rotation participant Derek Van de Walle, OVC
The Ontario Veterinary College (OVC) and the Campbell Centre for the Study of Animal Welfare (CCSAW) are grateful to Saputo for its renewed and increased support of the Saputo Dairy Care Program. We will continue to provide the Dairy Welfare Practice Workshops and three, rather than two, one-week elective rotations for Phase 4 Doctor of Veterinary Medicine students. Further, we look forward to offering the new Saputo Dairy Welfare Scholars Program — a second week of immersive training for up to two rotation graduates or dairy veterinarians in their first year of practice.

In this report, we are pleased to update you on our activities during the 2020 – 2021 academic year, an extraordinary time dominated by the world-wide pandemic and associated travel restrictions. Putting aside the challenges presented by COVID–19, we offer details regarding what we have accomplished:

- A new Director was appointed to lead the Campbell Centre for the Study of Animal Welfare (CCSAW), Dr. Georgia Mason.
- When the second Dairy Cattle Welfare Rotation scheduled for March 2020 was canceled, the faculty set to work to re-imagine the rotation for remote learning. The July 6 to 10, 2020, rotation was one of the first presented virtually at OVC. It also marked the kick-off of the first academic year the Saputo Dairy Care Program would offer three one-week rotations. A silver lining of the new format was that it made it possible for students from the U.K. to participate for the first time.
- Similarly, the Dairy Welfare Discussion Forum proceeded virtually with many more registrants participating from around the country than in previous years.
- Finally, a detailed plan has been devised to implement the new Saputo Dairy Welfare Scholars Program with the launch scheduled for 2022.
NEW DIRECTOR FOR CCSAW

Dr. Georgia Mason

CCSAW is thrilled with Saputo’s decision to continue and even to increase funding for the further enrichment of rotation participants — an additional week of learning with various dairy industry partners.

The mission of the Campbell Centre for the Study of Animal Welfare (CCSAW) is to promote the welfare of animals through research, outreach and education. In April 2020, Dr. Georgia Mason was announced as the new Director of CCSAW. A graduate of the U.K.’s Cambridge University, and a former research fellow at Oxford University, she moved to Guelph as a Canada Research Chair in 2004. She has more than 200 publications, including articles in *Nature*, *Science* and *TREE* and co-authored a textbook on stereotypic behaviour.

Georgia has served on numerous working groups that have turned welfare science into policy for the European Union, the U.K., the U.S. National Academy of Science, the Canadian Council on Animal Care and National Farm Animal Care Council.

“CCSAW is home to the largest group of welfare scientists in North America — possibly the world. And I was surprised to discover that ours is one of only two welfare rotations in the whole world too. Certainly, Guelph is a leader in dairy welfare veterinary training and expertise, making for an exciting synergy,” said Georgia.
DAIRY CATTLE WELFARE ROTATION

In the summer of 2020, the rotation pivoted to an online format. Students were offered the opportunity to view recorded lectures, followed by virtual check-ins with faculty and students, to ask questions and discuss the topics introduced. Extensive case studies took the place of on-farm visits. Students were presented raw data including animal-based measures, farm photos, and the farm’s history and standard operating procedures, and tasked with offering recommendations in keeping with the ever-evolving advisory role of veterinarians on farms.

For the first time this year, three rotations were offered. The online 2020 – 2021 rotations were scheduled for July 6 – 10, 2020, February 8 – 12, and March 22 – 26, 2021. Across the three rotations, there were 25 registrants. All five Canadian veterinary colleges were represented and, for the first time, students attended from the Royal Veterinary College and University of Bristol Veterinary School in the U.K.

There were 13 participants from OVC and another 12 from the following institutions:

- 4 Université de Montréal – Faculté de Médecine Vétérinaire
- 3 Royal Veterinary College
- 1 Atlantic Veterinary College
- 1 University of Calgary – Faculty of Veterinary Medicine
- 1 Western College of Veterinary Medicine
- 1 University of Bristol Veterinary School

The slide pictured below is taken from a student assignment to create a short presentation for producers on welfare issues.

**Body condition scoring**

- A visual assessment of energy balance
- Proaction: 95% need to be acceptable to be excellent (2.25 or greater is acceptable)
- No population data on BCS of cattle - not well documented by farmers (sample size)

**Difficult to assess how BCS will make a cow feel**
- Studies analysing welfare look at animals in a normal range of BCS, or look at population of animals not individuals - research area for the future!
- Is a parameter used frequently in studies for on farm welfare assessment protocols
- Needs to be analysed in conjunction with natural variation in BCS and markers of hunger such as DMI to determine it’s welfare effect
The above screen shot is of the first virtual meeting of the February 2021 offering of the Dairy Cattle Welfare Rotation including students from three provinces and the U.K.

Guest speaker Dr. Kelly Barratt, Dairy Farmers of Ontario, joined the rotation in February and March. Dr. Barratt discussed proAction and delivered training specific to the Animal Care section with emphasis on animal-based measures with presentation slides on a shared screen.

The rotation’s principal faculty, Dr. Todd Duffield, Chair, Population Medicine, lectured on cull cows, down cows and euthanasia, and Dr. Derek Haley, Associate Professor, detailed the key issues in dairy welfare and concerns regarding communication.

The other OVC faculty who contributed to the rotation are as follows:

- Dr. Charlotte Winder, Assistant Professor, discussed disbudding/dehorning pain management;
- Dr. David Renaud, Assistant Professor, presented on issues with male dairy calves; and
- Dr. David Kelton, Professor, lectured on the topic of the National Dairy Study and key steps in working with knee/hock lesions.

The rotation maintains a private Facebook page solely for current and past participants of the rotation to stay connected beyond the timeline of the study week. The Facebook platform is also used to promote dairy welfare related talks and publications and as a forum for discussion of welfare challenges in practice.
The additional support provided by Saputo will expand the scope of our program through the creation of the Saputo Dairy Welfare Scholars Program. At this time, a detailed implementation plan has been devised with the launch scheduled for the spring of 2022. This program will underwrite a second week of practical experiences with dairy industry partners for up to two rotation graduates or veterinarians in their first year of dairy practice. There will be an open and online application process closing each year on April 1 when submissions will be adjudicated by a committee of three animal welfare faculty at U of G.

Thanks to Saputo, applicant travel, accommodation and incidentals will be reimbursed. As part of the program, there will be plant tours and discussions concerning animal welfare and the dairy industry from a variety of points of reference, tailored in part to the students’ areas of interest.

Participants could expect to shadow and hear from members of the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) animal welfare team, including veterinarians and inspectors in the chain of production and sales. They may tour a meat processing plant and talk with proAction Field Service Representatives and/or Holstein Canada assessors, deadstock operators, and local dairy veterinarians. It will be an immersive, one-week experience guided and enriched by Dairy at Guelph faculty for the purpose of fostering welfare leaders among early career veterinarians.
The fourth annual meeting of dairy welfare researchers from across Canada was held February 17 and 18, 2021, in an abbreviated two-hour virtual format. The forum is a tremendous opportunity to engage and connect prominent researchers within Canada. This was an opportunity for a structured yet informal discussion on current and emerging priority issues in animal welfare facing the Canadian dairy industry. Day One focused on a discussion of surplus calves from Canadian dairy farms. On Day Two, we revisited the question of how best to support the advancement of dairy welfare in Canada. The final consensus was to maintain the composition and purpose of the group — to include and support early career dairy welfare researchers in Canada — and explore the idea of inviting international guests to offer their perspectives. Participants voiced the value of the small group, enabling safe, open, high-level discussion about key dairy welfare issues.

The virtual format enabled a larger number of participants to attend. This year, 24 researchers took part and we welcomed new representatives from the Atlantic Veterinary College, Dalhousie University, Université de Montréal, University of Manitoba, and the British Columbia Government.

The forum was greatly appreciated by all for the open exchange of ideas. The 5th annual meeting is tentatively scheduled for February 16 – 17, 2022, at the Ontario Veterinary College.
LIST OF FORUM PARTICIPANTS

Dr. Renée Bergeron, Associate Professor, Chair, CCSAW Steering Committee, Animal Biosciences, University of Guelph (U of G)*
Dr. Sébastien Buczinski, Professor, Département de sciences cliniques, Université de Montréal*
Dr. Kate Creutzinger, Post-Doctoral Researcher, Population Medicine, U of G*
Dr. Trevor DeVries, Professor and Canada Research Chair in Dairy Cattle Behaviour and Welfare, Animal Biosciences, U of G
Dr. Todd Duffield, Professor and Chair, Population Medicine, U of G
Dr. Derek Haley, Associate Professor, Population Medicine, U of G
Dr. David Kelton, Professor, Dairy Farmers of Ontario Chair in Dairy Cattle Health, Population Medicine, U of G
Dr. Meagan King, Assistant Professor, Animal Science, University of Manitoba*
Dr. Stephen LeBlanc, Professor, Research Program Director, Animal Production Systems, Population Medicine, U of G
Dr. Ken Leslie, Professor Emeritus, Population Medicine, U of G
Dr. Lena Levison, Saputo Dairy Care Program Manager, Population Medicine, U of G
Dr. Kerry Lissemore, Associate Professor, Population Medicine, U of G*
Dr. Georgia Mason, Director, Campbell Centre for the Study of Animal Welfare, Professor, Integrative Biology, U of G*
Dr. Rebecca Meagher, Assistant Professor, Animal Science & Aquaculture, Dalhousie University*
Dr. Kathryn Proudfoot, Associate Professor and Director of the Sir James Dunn Animal Welfare Centre at the Atlantic Veterinary College, University of Prince Edward Island
Dr. David Renaud, Assistant Professor, Population Medicine, U of G
Dr. Caroline Ritter, Assistant Professor and Canada Research Chair in Social Epidemiology for Healthy Animals at the Atlantic Veterinary College, University of Prince Edward Island*
Dr. Warren Skippon, Director of Animal Welfare, Saputo
Dr. Jane Stojkov, Traceability Programs Specialist, British Columbian Ministry of Agriculture
Dr. Elsa Vasseur, Assistant Professor, Research Chair in Sustainable Life of Dairy Cattle, McGill University
Dr. Marianne Villettaz Robichaud, Assistant Professor of Animal Welfare and Sustainable Production, Université de Montréal
Dr. Marina von Keyserlingk, Professor, NSERC Industry Research Chair, Animal Welfare Program, University of British Columbia
Dr. Charlotte Winder, Assistant Professor, Population Medicine, U of G
Emily Yeiser Stepp, Senior Director, National Dairy FARM Program, Arlington, VA
(*New attendees in 2021)
Driving towards 2050 – Some of the issues and possible approaches

This slide opened the Dairy Welfare Forum discussion on the future of the Canadian Dairy Industry and how research can help drive and support refinement while taking into consideration the needs of producers, industry, society and the cattle.