Research Highlights 2015-2016

Dairy Farmers of Canada, in partnership with Agriculture and Agri-Food Canada, the Natural Sciences and Engineering Research Council of Canada (NSERC), and provincial partners, is supporting 13 research activities in the areas of dairy cattle health, care and welfare under the Dairy Research Cluster and the NSERC Industrial Research Chairs program.

Expected Outcomes of Ongoing Research:

**Dairy Cattle Health:**
- Establish an accurate national database of dairy cattle diseases to measure and improve animal health;
- Develop management strategies and identify genetic markers to improve lactation persistency and cow longevity;
- Improve reproduction practices and performance for cow longevity;
- Identify better natural products for pest repellence and internal parasite control in dairy cattle;
- Develop best management practices to reduce mastitis in dairy herds and improve milk quality and food safety;
- Develop treatment strategies and prevention methods to fight diseases like mastitis and Johne’s on farms.

**Dairy Cattle Comfort and Welfare:**
- Improve dairy cattle comfort, calf care and welfare on farms with the development of best management practices for better feeding practices, facility and stall design, bedding and more;
- Find improved ways to integrate milking robots on farms, taking into account cow welfare issues.
**Ongoing Projects:**

1. Dairy cow management for the next generation – PI: Pierre Lacasse, AAFC-Sherbrooke
2. A national dairy cattle health and management benchmarking study – PI: David Kelton, University of Guelph
3. Canadian Bovine Mastitis and Milk Quality Research Network – Pts: Mario Jacques and Simon Dufour, Université de Montréal
4. Sustainable solutions to improve estrous detection and reproductive efficiency in dairy cows – PI: Ronaldo Cerri, University of British Columbia
5. Better animal welfare leads to improved animal health and longevity, and economic advantages to dairy producers – PI: Doris Pellerin, Université Laval
6. Innovative feeding and best management practices for the very young dairy calf to improve calf performance, welfare, and future productivity – PI: Derek Haley, University of Guelph
7. Automatic milking systems: factors affecting health, productivity and welfare – PI: Ed Pajor, University of Calgary
8. Effect of exercise and stall modifications on cow comfort and performance in tie-stall farms – PI: Elsa Vasseur, University of Guelph
9. Evaluating alternative therapies for the treatment of clinical mastitis on organic dairies – PI: David Francoz, Université de Montréal
10. Bioactive products from plants and control of internal and external parasites in large ruminants – PI: Simon Lachance, University of Guelph
11. NSERC Industrial Research Chair on Dairy Cattle Welfare (renewed for a 3rd time) – Chairs: David Fraser, Dan Weary and Marina von Keyserlingk, University of British Columbia
12. NSERC Industrial Research Chair on Infectious Diseases of Dairy Cattle – Chair: Herman Barkema, University of Calgary
13. NSERC Industrial Research Chair in Sustainable Life of Dairy Cattle – Chair: Elsa Vasseur, McGill University

**2015-2016 Research Transfer Activities:**

- 71 scientific papers were published in a peer-reviewed scientific journal
- 89 posters and abstracts were presented in scientific conferences
- 6 information and technical reports were provided to the industry
- 110 invited presentations were delivered at national and international conferences
- 16 articles were published to transfer new knowledge to dairy farmers
- 8 workshops and presentations were delivered to farmers for knowledge transfer

**For information:**

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