



2020 Canadian Society of Animal Science Award Recipients



CANADIAN SOCIETY OF ANIMAL SCIENCE FELLOWSHIP

Dr. Christiane Girard, *Agriculture and Agri-Food Canada*
Sponsored by Canadian Science Publishing

For decades, dietary requirements for B vitamins have not been acknowledged in ruminants, claiming sufficient synthesis by the rumen microflora to prevent deficiency symptoms. However, these recommendations had never been updated to today's production levels. Dr. Christiane Girard's work on B vitamins has challenged and led to the revision of this generally accepted concept. Dr. Girard's work mainly focuses on how increased supply of B vitamins improves the metabolic efficiency of lactating cows while reducing the incidence of metabolic disorders in early lactation and improving reproductive performance. In addition, improved metabolic efficiency reduces environmental footprint of dairy farms. Providing an adequate supply of B vitamins is achieved either through vitamin supplements or nutritional strategies promoting the synthesis of these vitamins. Moreover, her studies aiming to increase the vitamin B₁₂ content of animal products, especially milk and milk products, respond to the human health concerns about the risks posed by mandatory supplementation with folic acid of flours and cereal products for people whose vitamin B₁₂ status is suboptimal. Her area of expertise was recognized as one of the top 10 research areas at the 2006 ADSA Annual Meeting. Indeed, due to the determination of Dr. Girard, B vitamin supplementation is now a common practice in many high producing dairy herds. Dr. Girard's work has clearly led the path and truly made an outstanding contribution to improve estimations of supply and requirements of B vitamins. In a perspective of precision farming to optimize metabolic efficiency, meeting dairy cow requirements for B vitamins cannot be overlooked.





TECHNICAL INNOVATION IN ENHANCING PRODUCTION OF SAFE AFFORDABLE FOOD

Dr. Martin Nyachoti, *University of Manitoba*

Sponsored by Semex Alliance

Dr. Martin Nyachoti is a Full Professor and Department Head in the Department of Animal Science at the University of Manitoba. Dr. Nyachoti holds a B.Sc. (Agric) from the University of Nairobi and a M.Sc. and Ph.D. degrees in animal nutrition (majoring in poultry and pig nutrition) from the University of Guelph. Dr. Nyachoti's current research focuses on nutrition and gut health in the non-ruminant, energy and nutrient (mainly nitrogen and phosphorus) utilization, and feed ingredient evaluation. Much of his research is industry driven, and industry partners have requested him to work with them in research and development of novel and innovative feeds and feed supplements. Since 2010, Dr. Nyachoti has mentored nine PhD and 17 MSc students and attracted over \$9.8M in research funding (\$4.5M as Principal Investigator). His current publication record includes 253 peer-reviewed journal articles and he has given 87 invited presentations in 19 countries. He has served on Editorial Boards of several journals including *Journal of Animal Science* and *British Journal of Nutrition*. In 2005 and 2013, Dr. Nyachoti won the Canadian Society of Animal Science Pfizer Young Scientist Award and Award for Excellence in Nutrition and Meat Sciences, respectively, as well as Merit Awards for Research excellence from the University of Manitoba in 2006, 2010 and 2013. He has also served in the Executive Committee of the Canadian Society of Animal Science, and was in the organizing committee of the Western Nutrition Conference for many years. Dr. Nyachoti's research program is generating critical scientific data that has helped the livestock industry improve the efficiency, profitability and sustainability of animal production by developing novel and innovative feeds and feed supplements. His significant contributions to enhancing the production of safe and affordable food merit recognition and make him a most deserving candidate for the CSAS Technical Innovation in Enhancing the Production of Safe and Affordable Food award.





EXCELLENCE IN NUTRITION AND MEAT SCIENCES

Dr. Chaouki Benchaar, *Agriculture and Agri-Food Canada*

Sponsored by Trouw Nutrition

Dr. Benchaar is a research scientist at the Sherbrooke Research and Development Centre (Quebec) of Agriculture and Agri-Food Canada. He received (with distinction) a Ph.D. from Institut National Polytechnique of Toulouse in France. Since he joined AAFC in 2000, Dr. Benchaar has made several outstanding contributions to the dairy producers and the livestock feed industry. He conducts the only methane mitigation research program in Canada for dairy cattle and this program is one of few worldwide. He is also recognized as an international authority in the area of using plant-extracts (i.e., essential oils) as rumen modifiers in dairy cow nutrition. Since he joined AAFC in 2000, Dr. Benchaar has conducted 58 research projects (16,500,000 \$). He has established a wide research collaborative network both nationally (e.g., Alberta, Manitoba, Guelph, Quebec, etc.) and internationally (e.g., France, USA, Brazil, Netherlands, Spain, etc.). He has authored/co-authored 102 publications in peer-reviewed scientific journals, 5 book chapters, 136 scientific conference communications, and 130 technology transfer/technical papers. He is co-leader of the “*Technical Advisory Group on Feed Additives*” of the “*Livestock Environmental Assessment and Performance (LEAP) Partnership*” of the Food and Agriculture Organisation (FAO) of the United Nations (Rome, Italy) and has greatly contributed for the development of “*Guidelines for Assessment of Environmental Performance of Feed Additives in Livestock Supply Chains*”. Dr. Benchaar has made significant contribution to the Canadian Society of Animal Science having served as Eastern Director and as Associate Editor to the Canadian Journal of Animal Science.





CANADIAN INDUSTRIES AWARD IN EXTENSION AND PUBLIC SERVICE

Dr. Derek Anderson, *Dalhousie University*

Sponsored by Canadian Pork Council, Chicken Farmers of Canada, Beef Cattle Research Council, and Dairy Farmers of Canada

Dr. Derek Anderson started the extension and teaching components of his career with Alberta Agriculture as the monogastric nutritionist in 1978.

He received training in Animal Science, specifically Swine Nutrition, with studies at the Universities of Manitoba, Saskatchewan, and Alberta. When with Alberta Agriculture, he participated in the delivery of the Alberta Pork Production Home Study Course and was a regular contributor to the *Western Hog Journal*. A majority of Dr. Anderson's time was spent providing nutrition consultation to producers. His focus was to integrate laboratory feed analysis with ration balancing for pork, poultry and rabbit producers. In 1982, Dr. Anderson accepted a teaching position with the Nova Scotia Agriculture College (NSAC), which laterally became part of Dalhousie University. In this position he developed an integral relationship with regional poultry and swine producers and Atlantic provinces provincial swine extension specialists. Regional coordination and communication were vital in support of these industries. Derek Anderson developed and delivered a Swine Nutrition Home Study Course to producers in the Atlantic pork industries. Teaching ranged from vocational short courses through technical, undergraduate and graduate programs. He delivered an average of 238 hours of student (laboratory/classroom) contact time annually for 33 years in these programs. Courses included swine production, basic and applied nutrition, fish and fur animal nutrition, protein metabolism, vitamin nutrition, many special topics courses, as well as components of many other courses. He supervised technical, degree and graduate student projects numbering over 219. Experiencing the growth of students through teaching interactions was an honour. Dr. Derek Anderson retired at the end of December 2015.



Canadian Pork Council
Conseil canadien du porc





YOUNG SCIENTIST AWARD

Dr. Katie Wood, *University of Guelph*

Sponsored by the employees of Masterfeeds LLP, in memory of Shane Carson, Director of Nutrition

Dr. Katie M. Wood is an Assistant Professor in ruminant nutrition and physiology (beef and small ruminants) in the Department of Animal Biosciences at the University of Guelph. After completing an NSERC Post-Doctoral Fellowship focusing on gut health and barrier function at the University of Saskatchewan, Dr. Wood joined the faculty at University of Guelph in 2016 and has since secured over \$4.5 million dollars in funding. Her research program integrates both basic and applied scientific approaches with the goal of improving feed efficiency in feedlot and cow/calf operations. Some of these approaches include: understanding molecular mechanisms influencing metabolism and cost of maintenance, novel feeding strategies and feed additives, improving gut health, and using management practices like developmental programming to improve animal growth, health, and feed efficiency. Dr. Wood has over 23 peer-reviewed publications and over 50 conference abstracts. In addition to a robust research program, Dr. Wood has a large teaching commitment, teaching ~400 undergraduates students per year, with excellent teaching reviews. She has completed 3 MSc thesis, 5-MSC coursework students, and 2 PDFs and her current graduate students include 6 MSc thesis and 2 PhD students. In addition to research and teaching activities, Dr. Wood is active on numerous industry advisory groups/boards and on the CSAS board of directors. Dr. Wood continues to keep one foot in the livestock industry, raising and marketing purebred Simmental cattle and Polled Dorset sheep.



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HONOURARY LIFETIME MEMBERSHIP

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Jennifer Aalhus, *Agriculture and Agri-Food Canada*
Laurie Connor, *University of Manitoba*
Brian McBride, *University of Guelph*
John McKinnon, *University of Saskatchewan*
Helene Petit, *Agriculture and Agri-Food Canada*
Julie Small, *Agriculture and Agri-Food Canada*
Karin Wittenberg, *University of Manitoba*

UNDERGRADUATE ACADEMIC ACHIEVEMENT AWARD

Sponsored by Canadian Science Publishing

Hannah Spitzer, *University of British Columbia*
Taylor Ward, *University of Alberta*
Claire Bertens, *University of Saskatchewan*
Ash Liu, *University of Manitoba*
Wanrong Chen, *University of Guelph*
Victor Dagenais-Martin, *McGill University*
Raphaëlle Sénéchal, *Université Laval*
Emilie Davison, *Dalhousie University*



GRADUATE STUDENT TRAVEL FELLOWSHIP

Sponsored by Canadian Society of Animal Science and Canadian Centre for Swine Improvement

Kortney Acton, *University of Guelph*
Sarah Adams, *University of Guelph*
Sydney Banton, *University of Guelph*
Christine Bone, *University of Guelph*
Jiali Chen, *University of Guelph*
Yanhong Chen, *University of Manitoba*
Guoyu Hu, *Dalhousie University*
Bonjin Koo, *University of Manitoba*
Jinyoung Lee, *University of Manitoba*
Peng Lu, *University of Manitoba*
Lucas Rodrigues, *University of Saskatchewan/Prairie Swine Centre*
Riani Soares, *University of Guelph*
Jichen Song, *University of Manitoba*
Hannah Sweett, *University of Guelph*
Rhea Teranishi, *University of Manitoba*
Emma Thornton, *University of Guelph*
Melissa Williams, *University of Guelph*

