



Western Canadian Dairy Seminar

2020 Posters

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These posters are located in the Exhibition Hall and will be available for viewing throughout the Seminar

Booth #	Poster Title, Author(s) and Affiliation(s)
Separate Poster Boards	Impact of Concentrate Allowance on the Behavior and Production of Dairy Cows Milked in a Free Traffic Automated Milking System. A.J. Schwanke ¹ , K.M. Dancy ¹ , G.B. Penner ² and T.J. DeVries ¹ . ¹ Department of Animal Biosciences, University of Guelph, ² Department of Animal and Poultry Science, University of Saskatchewan. STUDENT PRESENTATION
	The Effects of Neomycin in Milk Replacer on the Health and Performance of Dairy Calves. L. N. Buss ¹ , T. T. Yohe ¹ , L. R. Cangiano ¹ , A. Keunen ² , D. L. Renaud ³ , L. L. Guan ⁴ , M. A. Steele ¹ . ¹ Department of Animal Biosciences, University of Guelph; ² Mapleview Agri. Ltd., Mapleton, ON, ³ Department of Population Medicine, University of Guelph, ⁴ Department of Agricultural, Food, and Nutritional Science, University of Alberta. E-mail: mastelee@uoguelph.ca
	Effect of dietary Selenium source on animal performance during immune challenge in lactating Holstein cows. K.M. Cruickshank and M.A. Steele. Department of Animal Biosciences, University of Guelph. Email: mastelee@uoguelph.ca
	Associations between herd management, barn design, lameness, and production in farms with robotic milking systems. M.T.M King ¹ , R.D. Matson ¹ , T.F. Duffield ¹ , D.E. Santschi ² , K. Orsel ³ , E. A Pajor ³ , G.B. Penner ⁴ , T. Mustvangwa ⁴ , and T.J. DeVries ¹ . ¹ University of Guelph, ² Lactanet, ³ University of Calgary, ⁴ University of Saskatchewan. Email: tdevries@uoguelph.ca
	Mental health of dairy farmers using robotic milking systems. M. T. M. King, R. D. Matson, and T. J. DeVries. Dept. of Animal Biosciences, University of Guelph. *Email: mking08@uoguelph.ca
	Herd-level management and housing of Canadian robotic milking herds. R.D. Matson ¹ , M.T.M King ¹ , T.F. Duffield ¹ , D.E. Santschi ² , K. Orsel ³ , E. A Pajor ³ , G.B. Penner ⁴ , T. Mustvangwa ⁴ , and T.J. DeVries ¹ . ¹ University of Guelph, ² Lactanet, ³ University of Calgary, ⁴ University of Saskatchewan. Email: tdevries@uoguelph.ca
	Associations of milk production and quality with management and housing of Canadian robotic milking farms. R.D. Matson ¹ , M.T.M King ¹ , T.F. Duffield ¹ , D.E. Santschi ² , K. Orsel ³ , E. A Pajor ³ , G.B. Penner ⁴ , T. Mustvangwa ⁴ , and T.J. DeVries ¹ . ¹ University of Guelph, ² Lactanet, ³ University of Calgary, ⁴ University of Saskatchewan. Email: tdevries@uoguelph.ca
Booth #34	Effects of Feeding Hay and Calf Starter as a Mixture or as Separate Components to Holstein Calves on Intake and Growth. L.E. Engelking ¹ , T. Matsuba ² , K. Inouchi ² , T. Sugino ³ , M. Oba ¹ . ¹ Department of Agricultural, Food and Nutritional Science, University of Alberta; ² Dairy Technology Research Institute, Fukushima, Japan; ³ Graduate School of Integrated Sciences for Life, Hiroshima University, Japan. STUDENT PRESENTATION
	The Effects of Concentrate Feeding Level and Rate of Increase When Offered Through an Automatic Milking System on Fresh Cow Performance. J. Haisan ¹ , M. Oba ¹ and G. B. Penner ² . ¹ Department of Agricultural, Food, and Nutritional Science, University of Alberta, ² University of Saskatchewan. STUDENT PRESENTATION
	Heifers with short ano-genital distance conceive sooner and require fewer inseminations. J.E. Carrelli ¹ , M. Gobikrushanth ¹ , M.G. Colazo ² and D.J. Ambrose ^{1,2} . ¹ Department of AFNS, University of Alberta; ² Alberta Agriculture and Forestry, Edmonton. Email: carrelli@ualberta.ca
	How does Low Blood Calcium close to Calving Relate to Health, Production and Reproduction in Dairy Cows? M. Gobikrushanth ³ , K. Macmillan ² and M.G. Colazo ¹ . ¹ Alberta Agriculture and Forestry; ² University of Alberta; ³ University of Saskatchewan. Email: marcos.colazo@gov.ab.ca
	How does the eSense Ear Tag Activity Monitor Perform in Dairy Heifers? K. Macmillan ² , M. Gobikrushanth ³ , G. Plastow ² and M.G. Colazo ¹ . ¹ Alberta Agriculture and Forestry; ² University of Alberta; ³ University of Saskatchewan; Email: marcos.colazo@gov.ab.ca
	Optimizing the Performance of the SCR eSense Activity Monitor in Heifers with Timing of AI. K. Macmillan ² , M. Gobikrushanth ³ , G. Plastow ² and M.G. Colazo ¹ . ¹ Alberta Agriculture and Forestry; ² University of Alberta; ³ University of Saskatchewan; Email: marcos.colazo@gov.ab.ca
	Business Analysis of Visual Observation, IRT and Ovsynch as Reproduction Strategies in Alberta Dairies. H.J. Perez Marquez ^{1*} , E. Goddard ² , C. J. Bench ¹ . ¹ Department of Agriculture, Forestry and Nutritional Science, University of Alberta. ² Resource Economics and Environmental Sociology, University of Alberta. Email: perezmar@ualberta.ca
	Ano-genital distance is not affected by the estrous cycle stages in dairy cows. I.Rajesh ¹ , M. Gobikrushanth ¹ , J.E. Carrelli ¹ , D.J. Ambrose ^{1,2} . ¹ Department of AFNS, University of Alberta; ² Alberta Agriculture and Forestry, Edmonton. Email: iswarya@ualberta.ca
	Higher embryo quality and viability in heifers with short anogenital distance. I.Rajesh ¹ , J.E. Carrelli ¹ , M. Gobikrushanth ¹ , D.J. Ambrose ^{1,2} . ¹ Department of AFNS, University of Alberta; ² Alberta Agriculture and Forestry, Edmonton. Email: iswarya@ualberta.ca
Booth #35	The Diversity of Bovine Digital Dermatitis Bacteria: How to Work Around the Complexity. Benjamin Caddey, Karin Orsel, Jeroen De Buck. Department of Production Animal Health University of Calgary. Emails: benjamin.caddey@ucalgary.ca ; karin.orsel@ucalgary.ca ; jdebuck@ucalgary.ca
	Mastitis-related antimicrobial use: Current practices on Canadian dairy farms. E. de Jong ^{1,2} , K.D. McCubbin ^{1,2} , S. Dufour ^{2,3} , M. Fonseca ⁴ , L.C. Heider ⁴ , G. Keefe ^{2,4} , D.F. Kelton ^{2,5} , D. Léger ⁶ , C. Luby ^{2,7} , J. McClure ³ , R.R. Smith ⁶ , D. Renaud ⁵ , A. Ravel ³ , J.-P. Roy ^{2,3} , J. Sanchez ⁴ , K. Tahlan ⁸ , and H.W. Barkema ^{2,1} . ¹ Dept. of Production Animal Health, University of Calgary. ² Mastitis Network, St-Hyacinthe, QC. ³ Université de Montréal. ⁴ University of Prince Edward Island. ⁵ University of Guelph. ⁶ Centre for Food-borne, Environmental & Zoonotic Infectious Diseases. ⁷ University of Saskatchewan. ⁸ Memorial University of Newfoundland.
	Communication between veterinarians and dairy farmers: Effect of communication training on communication skills and mental wellbeing in veterinarians, farmer satisfaction and herd health outcomes. L. Dorrestein ¹ , H.W. Barkema ¹ . ¹ Department of Production Animal Health, University of Calgary. Email: Linda.Dorrestein@ucalgary.ca
	Developing and testing a live attenuated Johne's disease vaccine as a JD control measure. Raziieh EshraghiSamani ¹ , Jeroen De Buck ¹ , Rakel Arrazuria Fernandez ¹ , Grace Marie Hudson ² . ¹ Dept of Production Animal Health, Uni. of Calgary. ² Dept of Physiology and Pharmacology, Uni. of Calgary. Emails: gmhudson@ucalgary.ca , raziieh.eshraghisamani@ucalgary.ca , rakel.araazuriaferna@ucalgary.ca , jdebuck@ucalgary.ca

	The voice of dairy farmers: Implementation of ethnographic field methods to address antibiotic use. Jennifer A. Ida and Herman W. Barkema. Dept of Production Animal Health, Faculty of Veterinary Medicine, University of Calgary. Email: Jennifer.ida1@ucalgary.ca
	Development of an alternative therapeutic method for the control of Bovine mastitis in dairy cows. Wendy Kawenga, Jeroen de Buck, and Herman Barkema. Production Animal Health, University of Calgary.
	Communication is the Key – Mitigating Lameness is Only Possible When Working Together. Marlina Knauss ¹ , Cindy L. Adams ² , Herman W. Barkema ¹ , Karin Orsel ¹ . ¹ Dept of Production Animal Health, University of Calgary. ² Dept of Veterinary Clinical and Diagnostic Sciences, University of Calgary. Email: marlina.knauss@ucalgary.ca
	Developing Novel Therapeutic Alternatives for Bovine Digital Dermatitis. Priyoshi Lahiri, Makaela Douglas, Karin Orsel, Herman W. Barkema and Eduardo R. Cobo. Dept. of Production Animal Health, University of Calgary. Email: priyoshi.lahiri@ucalgary.ca
	Effective and economic Johne's disease control using new early disease detection assays. Larissa Martins ^{1,2} , Jeroen De Buck ¹ , Herman W. Barkema ¹ . ¹ Department of Production Animal Health, University of Calgary. ² larissa.martins@ucalgary.ca
	Cattle Health Surveillance System (CHeSS): Monitoring major infectious diseases and antimicrobial resistance in the Western provinces. Kayley D. McCubbin ¹ , Ellen de Jong ¹ , Jeroen De Buck ¹ , Karin Orsel ¹ , Frank van der Meer ¹ , Herman W. Barkema ¹ . ¹ Department of Production Animal Health, University of Calgary. Email: kayley.mccubbin@ucalgary.ca
	Rapid detection of antibodies against bovine leukemia virus by bacterial surface complementation assay. Sonia Mukherjee, Jeroen De Buck. Department of Production Animal Health, University of Calgary. Emails: sonia.mukherjee@ucalgary.ca ; jdebuck@ucalgary.ca
	Deep learning improves mastitis detection in automated milking systems. S. Ali Naqvi ¹ , Meagan T.M. King ² , Marc Champigny ² , Trevor J. DeVries ² , Rob Deardon ¹ and Herman W. Barkema ^{1,3} . ¹ Dept. of Production Animal Health, University Calgary. ² Dept. of Animal Biosciences, University Guelph. ³ Email: barkema@ucalgary.ca
	Underlying genetic architecture of mastitis: A systematic review, meta and gene prioritization analysis of GWAS results. Saranya G. Narayana ^{1,2} , Ellen de Jong ¹ , Flavio Schenkel ² , Pablo Fonseca ² , Paul Ronskley ³ and Herman W. Barkema ^{1,3} . ¹ Department of Production Animal Health, University of Calgary; ² Center for Genetic Improvement of Livestock, University of Guelph; ³ Department of Community Health Sciences, University of Calgary. Email: saranya.narayana@ucalgary.ca
	Investigating virulence factors of <i>Treponema</i> spp. with newly developed molecular tools. Colton Scott. University of Calgary. Email: colton.scott@ucalgary.ca
	Bovine Leukemia Virus control in dairy cows: Effect of selective removal of high-risk animals on herd prevalence. Sulav Shrestha ^{1*} , Karin Orsel ¹ , Herman Barkema ¹ , Guido van Marle ² , Faizal Abdul Careem ¹ , Frank van der Meer ¹ . ¹ Faculty of Veterinary Medicine, ² Cumming School of Medicine, University of Calgary. Email: sulav.shrestha1@ucalgary.ca
	Motives and barriers to providing outdoor access for dairy cows. A.M.C. Smid ¹ , H.W. Barkema ¹ , D.M. Weary ² , and M.A.G. von Keyserlingk ² . ¹ Department of Production Animal Health, University of Calgary. ² Animal Welfare Program, University of British Columbia, Vancouver, BC. Email: annemarieke.smid@ucalgary.ca
	Accumulating bacteriocin genes in a non-aureus <i>Staphylococcus</i> strain to make it protective against bovine mastitis pathogens. Dennis Vu. University of Calgary. Email: Devu@ucalgary.ca
Booth #36	Early Identification of Cows at Risk of Metritis Using Calving Factors and Activity Monitors. J.W. Bauer ¹ , T.A. Burnett ¹ , A.M.L. Madureira ¹ , W. Heuwieser ² , R.L.A. Cerri ¹ . ¹ University of British Columbia. ² Clinic for Animal Reproduction, Freie Universität Berlin, Germany. Email: janet.bauer@ubc.ca STUDENT PRESENTATION
	Marketing of Male Dairy Calves – Findings and Consensus of an Expert Consultation. Devon J. Wilson ^{*1} , David Fraser [*] . [*] Animal Welfare Program, University of British Columbia, 2357 Main Mall, Vancouver, BC, Canada, V6T 1Z6. ¹ Corresponding author: devon.wilson@ubc.ca
Booth #37	Dairy Production Performance Replacing Corn and Barley Silages with Whole Crop Faba Bean Silage in Western Canada. Víctor H. Guevara-Oquendo [*] , David Christensen, John McKinnon, Bunyamin Tar'an, Peiqiang Yu [*] . College of Agricultural and Bioresources, University of Saskatchewan, Saskatoon [*] vhg019@mail.usask.ca ; peiqiang.yu@usask.ca . STUDENT PRESENTATION
	Effects of lipopolysaccharide on the metabolic function of ruminal epithelial cells. Kent-Dennis, C. and G.B. Penner. Department of Animal and Poultry Science, University of Saskatchewan. Email: greg.penner@usask.ca
	Nutritional management practices in Manitoba and Saskatchewan farms with automatic milking systems. Julianne Lavoie ¹ , R. Matson ² , T. J. DeVries ² , G. B. Penner ¹ . University of Saskatchewan ¹ , University of Guelph ² , jel829@mail.usask.ca
	Effects of Steam Pressure on the Chemical and Rumen Degradation Characteristics of Faba Bean in Dairy Cattle. María E. Rodríguez Espinosa, Dave Christensen, Rex Newkirk, Yongfeng Ai, Victor H. Guevara Oquendo ^a , and Peiqiang Yu ^{a*} . ^a Dept of Animal and Poultry Science, University of Saskatchewan. [*] Email: peiqiang.yu@usask.ca
	The effect of intestinal Ca-gluconate and Ca-butyrate on ruminal short-chain fatty acid (SCFA) absorption and SCFA concentrations in the gastrointestinal tract of heifers. D.H.M. Watanabe ¹ , J. Doelman ² , G.B. Penner ¹ ¹ Department of Animal and Poultry Science, University of Saskatchewan, ² Trouw Nutrition Research and Development, Amersfoort, the Netherlands. Email: dhw929@mail.usask.ca
	Association between Protein Molecular Spectral Profiles and Metabolizable Protein Supply, Protein Rumen Degradation Characteristics and Estimated Intestinal Protein Digestion to Dairy Cattle Before and After Rumen Incubation of Faba Bean Partitions and Faba Bean Silage. Ming Yan, David Christensen, Herbert (Bart) Lardner, Víctor H. Guevara-Oquendo, and Peiqiang Yu [*] . Department of Animal and Poultry Science, University of Saskatchewan. [*] peiqiang.yu@usask.ca
	Association between Carbohydrate Related Molecular Structure Spectral Profiles and Chemical Profiles, Energy Profiles, CNCPS Profiles and Rumen Degradation Parameters to Dairy Cattle Before and After Rumen Incubation of Faba Bean Partitions and Faba Bean Silage. Ming Yan, Herbert (Bart) Lardner, David Christensen, Víctor H. Guevara-Oquendo, and Peiqiang Yu [*] . Department of Animal and Poultry Science, University of Saskatchewan. [*] Email: peiqiang.yu@usask.ca
	Determining the optimal dosage of an innovative fibrolytic enzyme on NDF and DM degradability and kinetics of whole crop faba bean silage in western Canada. Jenchieh Yang ¹ , David Christensen ¹ , Herbert (Bart) Lardner ¹ , Víctor H. Guevara-Oquendo ¹ , Basim Refat ¹ , Ousama AlZahal ² , and Peiqiang Yu ^{1*} . ¹ Dept of Animal and Poultry Science, University of Saskatchewan. ² AB Vista, Marlborough, United Kingdom. [*] Email: peiqiang.yu@usask.ca