2015 CSAS Meeting

May 5-7, 2015
The Westin Ottawa
Ottawa, Ontario, Canada
EXECUTIVE COMMITTEE

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GENERAL MEETING INFORMATION

Registration
The registration desk will be located in the Governor General III foyer, Level 4. Pre-registration packets and onsite registration will be available during the hours listed below.

Tuesday, May 5       6:30 pm – 9:00 pm
Wednesday, May 6     7:30 am – 6:00 pm
Thursday, May 7      6:30 am – 5:00 pm

Meeting Location
The conference venue is the The Westin Ottawa, located in Ottawa, Ontario. As the country’s capital city, Ottawa is best known as being home to the seat of federal government. But behind that façade lies an architecturally stunning city with a unique combination of urban and rural experiences.

Transportation
Ground transportation options available from the Ottawa International Airport and The Westin Ottawa include:

- Public Transit http://www.octranspo1.com/splash
- Limousine Service 1-888-901-6222

Important Phone Numbers
The Westin Ottawa        (613) 560-7000
Ottawa International Airport    (613) 248-2125

Important Addresses
Ottawa International Airport       The Westin Ottawa
1000 Airport Parkway             11 Colonel By Drive
Ottawa, ON K1V 9B4               Ottawa, ON K1N 9H4

Presentation Guidelines
Oral
Only PowerPoint presentations will be accommodated (i.e., no slides, no overheads, no alternative programs allowed).

1. All session rooms will have Master PCs running PowerPoint 2007/2010 in Windows 7.
2. Individual laptops may not be connected to the projectors in the session rooms.
3. Oral presenters must upload their presentation no later than one hour prior to the start of their session. The upload computer will be available at the registration area starting 2 hours prior to the first session of the day. Presentations for upload should be on flash drives.

**Poster**
Posters should be placed on the appropriate poster board by 7:00 am Thursday, May 7 and remain up until 5 pm. Poster presenters should be at their poster for presentation from 7:30 am – 9:00 am on Thursday, May 7. Posters may be attached to the board using tacks or velcro. Posters may be a maximum size of 44 in x 45 in (w x h).

**SPONSORS**
American Society of Animal Science
ASAS Foundation
SCHEDULE OF EVENTS

All events will meet at the Westin – Governor General III, Level 4
(unless otherwise noted)

TUESDAY, MAY 05, 2015
1:00 – 5:00 pm Annual Executive Meeting – Alberta, Level 4

WEDNESDAY, MAY 06, 2015
8:00 – 8:45 am Coffee
8:45 – 9:00 am Opening Remarks
9:00 – 10:00 am Farm-to-Fork Food Safety Symposium I
10:30 – 11:00 am Coffee Break
11:00 am – 12:00 pm Farm-to-Fork Food Safety Symposium II
12:00 – 1:30 pm Annual General Meeting & Lunch
1:30 – 2:30 pm Farm-to-Fork Food Safety Symposium III
2:30 – 2:45 pm Q&A with speakers
2:45 – 3:15 pm Coffee Break
3:15 – 4:15 pm Graduate Student Oral Competition Session I
8:00 – 11:00 pm Mix and Mingle (TBD)

THURSDAY, MAY 07, 2015
7:30 – 9:00 am Poster Presentations – Ballroom Foyer Level 4
9:15 – 10:15 am Graduate Student Oral Competition Session II
10:15 – 10:45 am Coffee Break
10:45 am – 12:15 pm Graduate Student Oral Competition Session III
12:15 – 1:30 pm Lunch Break & Posters
1:30 – 3:00 pm Oral Presentations
3:00 – 3:30 pm Coffee Break
6:30 – 11:00 pm Reception and Banquet Dinner
8:45 AM  Opening Remarks
Farm-to-Fork Food Safety Symposium I
Chair: Trevor Alexander, Agriculture and Agri-Food Canada

9:00 AM  Defining the role of *Escherichia coli* O157:H7 super-shedders in on-farm food safety and pathogen dissemination.
*T. A. McAllister*, Agriculture and Agri-Food Canada, Lethbridge, AB, Canada

11:00 AM  Prevalence and characterization of Verotoxin-producing *Escherichia coli* in the Canadian agri-food sector.
*R. Johnson*, Public Health Agency of Canada, Ottawa, ON, Canada

12:00 PM  Annual General Meeting & Lunch

1:30 PM  Title to come
*L. Goodridge*, McGill University, Montreal, QC, Canada

2:30 PM  Question and Answer with Symposia Speakers
Chair: Kees Plaizier, Department of Animal Science, University of Manitoba

3:15 PM  001-GS  Evaluation of blood plasma metabolites reflects presence or absence of liver abscess in beef cattle.
A. G. C. Macdonald*1, J. J. M. Kim1, S. Lam1, J. P. Cant1, S. Bourgon2, S. P. Miller3, and Y. R. Montanholi2,
1Department of Animal and Poultry Science, University of Guelph, Guelph, ON, Canada, 2Department of Plant and Animal Sciences, Dalhousie University, Truro, NS, Canada, 3AgResearch, Invermay, New Zealand

3:30 PM  002-GS  Storage characteristics, nutritive value and in vivo digestibility of large round bales of alfalfa hay treated with fibrolytic enzymes.
I. A. Aboagye*1,2, J. P. Lynch2,3, J. S. Church1, J. Baah2,4, and K. A. Beauchemin1, 1Thompson Rivers University, Kamloops, BC, Canada, 2Agriculture and Agri-Food Canada, Lethbridge Research Centre, Lethbridge, AB, Canada, 3Teagasc Crops Research, Oak Park, Carlow, Ireland, 4Best Environmental Technologies Inc., Edmonton, AB, Canada

3:45 PM  003-GS  Associations of blood hormones and metabolites with age, feed efficiency and fatness in young beef bulls.
S. L. Bourgon*1, S. P. Miller2,3, F. S. Schenkel1, M. Diel de Amorim4, and Y. R. Montanholi1,3, 1Department of Plant and Animal Sciences, Dalhousie University, Truro, NS, Canada, 2AgResearch, Invermay, Mosgiel, New Zealand, 3Centre for Genetic Improvement of Livestock, University of Guelph, Guelph, ON, Canada, 4Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK, Canada

4:00 PM  004-GS  Evolutionary correlations between individual genes, partial and full-coding regions of the Aleutian mink disease virus genome.
F. Kharazyan* and A. H. Farid, Department of Plant and Animal Sciences, Dalhousie University Faculty of Agriculture, Truro, NS, Canada
POSTER PRESENTATIONS

Thursday, May 7, 2015
Ballroom Foyer
Presentation Time: 7:30 AM – 9:00 AM

Posters should be placed on poster boards by 7:00 PM and remain up until 5:00 PM

ANIMAL HEALTH AND BEHAVIOR

P01-GS  Investigating the source of the recent aleutian mink disease virus outbreak in Nova Scotia using phylogenetic analysis.
F. Kharazyan*, A. H. Farid, and P. P. Rupasinghe, Department of Plant and Animal Sciences, Dalhousie University Faculty of Agriculture, Truro, NS, Canada

P02-GS  The effect of two direct fed microbials on calf’s performance and oxidative burst capacity during the early period of growth.
B. Fomenky*1,2, J. Chiquette1, P. Y. Chouinard2, and M. Ibeagha-Awemu1, 1Agriculture and Agri-Food Canada, Dairy and Swine Research and Development Centre, Sherbrooke, QC, Canada, 2Département des sciences animales, Université Laval, Québec, QC, Canada

P03  Ameliorative effects of Bacillus subtilis ANSB060 on aflatoxicosis in broilers.
L. Zhao*, China Agricultural University, BEIJING, China

P04  Motility of Boer buck Spermatozoa stored fresh for 72 hours.
O. A. Ajao*, UNIVERSITY OF VENDA, THOHOYANDOU, South Africa

P05  Probiotics administration enhances calves’ lymphoproliferation responses to vaccination during the early weeks of growth.
M. Ibeagha-Awemu*, F. Beaudoin, J. Chiquette, G. Talbot, N. Bissonnette, and M. Lessard, Agriculture and Agri-Food Canada, Dairy and Swine Research and Development Centre, Sherbrooke, QC, Canada
P06 Identification of the anatomical location on the pig body ensuring the most efficient use of infrared thermography for the assessment of body temperature variation in response to physical stress. L. Moura Rocha¹,²,³, L. Saucier*¹,³, X. Maldague¹, J. Fleuret¹, and L. Faucitano¹,², ¹Université Laval, Quebec City, QC, Canada, ²Agriculture and Agri-Food Canada, Sherbrooke, QC, Canada, ³Institute of nutrition and functionnal foods, Quebec City, QC, Canada

BREEDING AND GENETICS

P07-GS isomiR selection and cross detection will affect accurate quantification of miRNA expression. R. Li*, P. L. Dudemaine, and E. M. Ibeagha-Awemu, Agriculture and Agri-Food Canada, Dairy and Swine Research and Development Centre, Sherbrooke, QC, Canada

P08-GS Genome-wide LD estimates in the Frizarta dairy sheep of Greece. A. Kominakis*¹, G. Antonakos², A. Saridaki³, G. Tsiamis³, and K. Bourtzis³, ¹Department of Animal Science & Aquaculture, Agricultural University of Athens, Athens, Greece, ²Livestock Association of Western Greece, Agrinio, Greece, ³Department of Environmental and Natural Resources Management, University of Patras, Agrinio, Greece

P09 Genetic association of Johne’s disease susceptible cows through transcriptome profiling of MAP infected macrophages. O. Ariel*¹,², N. Gévry², G. Fecteau³, E. M. Ibeagha-Awemu⁴, N. Karrow⁵, and N. Bissonnette²,⁴, ¹Dairy and Swine Research and Development Centre, Agriculture and Agri-Food Canada, Sherbrooke, QC, Canada, ²Department of biology, Université de Sherbrooke, Sherbrooke, QC, Canada, ³Faculté de médecine vétérinaire, Université de Montréal, Saint-Hyacinthe, QC, Canada, ⁴Agriculture and Agri-Food Canada, Dairy and Swine Research and Development Centre, Sherbrooke, QC, Canada, ⁵Department of Animal and Poultry Science, University of Guelph, Guelph, ON, Canada
P10  Genome-wide association study of milk protein percent in Canadian Holstein cows.
E. M. Ibeagha-Awemu1, S. O. Peters2, I. G. Imumorin3, and X. Zhao4, 1Agriculture and Agri-Food Canada, Dairy and Swine Research and Development Centre, Sherbrooke, QC, Canada, 2Berry College, Mount Berry, GA, 3Cornell University, Ithaca, NY, 4McGill University, St Ann De Bell, PQ, Canada

P11  Mammary gland transcriptome profiling of cows fed safflower oil reveals a potential modulatory role for SREBP1 in fatty acid synthesis.
E. M. Ibeagha-Awemu1, R. Li1, P. L. Dudemaine1, A. A. Ammah1, N. Bissonnette1, C. Benchaar1, and X. Zhao2, 1Agriculture and Agri-Food Canada, Dairy and Swine Research and Development Centre, Sherbrooke, QC, Canada, 2McGill University, St Ann De Bell, PQ, Canada

CARCASS QUALITY AND CARCASS EVALUATION

P12-GS  Understanding the quality of atypical dark cutting beef.
S. Mahmood1, B. C. Roy1, J. L. Aalhus2, and H. L. Bruce1, 1Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, AB, Canada, 2Agriculture and Agri-Food Canada, Lacombe, AB, Canada

FOOD SAFETY

P13  Characterization of seven shiga toxin-producing Escherichia coli serogroups in a closed herd of beef cattle from weaning to feedlot placement.
J. Hallewell1, T. Reuter2, K. Stanford3, E. Topp3, and T. W. Alexander4, 1Agriculture and Agri-Food Canada, Lethbridge Research Centre, Lethbridge, AB, Canada, 2Alberta Agriculture and Rural Development, Lethbridge, AB, Canada, 3Agriculture and Agri-Food Canada, London, ON, Canada, 4Agriculture and Agri-Food Canada, Lethbridge, AB, Canada

P14-GS  Competition among pathogenic Escherichia Coli during enrichment.
C. Conrad1, University of Lethbridge, Lethbridge, AB, Canada; Agriculture and Agri-Food Canada, Lethbridge Research Centre, Lethbridge, AB, Canada
P15  Extraction and characterization of gelatin from bovine lung.
B. C. Roy*, D. A. Omana, and H. L. Bruce, Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, AB, Canada

P16  Sensory evaluation of cooked pork meat (M. biceps femoris) with and without ractopamine-HCl by non-trained judges associated to age and gender.
M. Juarez_Silva*, S. Carlin1,2, D. Martinez_Gomez3, A. Verdugo-Rodríguez4, J. Martinez_Alvarez5, and F. Rebollo5, 1INSTITUTO NACIONAL DE CIENCIAS MEDICAS Y NUTRICION SALVADOR ZUBIRAN (Animal Nutrition Department), Mexico City, Mexico, 2PAFFA S.A. de C.V.- Research and Development Department, ATLAUTLA, STATE OF MEXICO, Mexico, 3Universidad Autónoma Metropolitana (UAM), Campus Xochimilco, Laboratory of Agricultural Microbiology, Mexico City, Mexico, 4Universidad Nacional Autónoma de México [UNAM], Facultad de Medicina Veterinaria y Zootecnia [FMVZ], Microbiology and Immunology Department, Laboratory of Molecular Microbiology, Mexico City, Mexico, 5PAFFA S.A. de C.V.- Research and Development Department, ATLANTA, GA

P17  Pasture management and strategic supplementation on beef cattle productivity grazing Brachiaria brizantha pasture.
J. F. W. Koscheck*, L. Maneck Delevatti1, A. C. Ferrari1, C. J. Mousquer2, W. L. D. Silva1, A. L. D. S. Valente1, G. D. O. Rincão1, B. A. Gottardi1, R. A. Gasparin1, and R. A. Reis1, 1UNESP, Jaboticabal, Brazil, 2UFMT, Cuiabá, Brazil
P18  Impact of the genetic potential for RFI and diet fed during early- to mid-gestation in beef heifers on carcass characteristics of their castrated male offspring.
S. J. Meale*1, F. Paradis1,2, M. Juarez3, J. L. Aalhus3, C. Li1,2, H. Block3, M. G. Colazo4, C. Straathof1, B. Yaremcio4, H. L. Bruce5, and C. Fitzsimmons1,2,  
1Department of Agriculture, Food and Nutritional Science, University of Alberta, Edmonton, AB, Canada,  
2Agriculture and Agri-Food Canada, Edmonton, AB, Canada,  
3Agriculture and Agri-Food Canada, Lacombe, AB, Canada,  
4Alberta Agriculture and Rural Development, Edmonton, AB, Canada,  
5Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, AB, Canada

P19  A comparison of energy content of pregnant uterus and mammary gland in goats and sheep throughout pregnancy.
C. J. Härter*1, J. L. Ellis (St-Pierre)2, J. France3, and I. A. M. A. Teixeira4,  
1UNESP, Univ Estadual Paulista, Department of Animal Science, Jaboticabal, Brazil,  
2Centre for Nutrition Modelling, Animal and Poultry Science, University of Guelph, Guelph, ON, Canada,  
3University of Guelph, Guelph, ON, Canada,  
4UNESP, Univ Estadual Paulista, Department of Animal Science, Jaboticabal, SP, Brazil

P20  Protein content of pregnant uterus and mammary gland of goats and sheep throughout pregnancy.
C. J. Härter*1, J. L. Ellis (St-Pierre)2, J. France3, and I. A. M. A. Teixeira4,  
1UNESP, Univ Estadual Paulista, Department of Animal Science, Jaboticabal, Brazil,  
2Centre for Nutrition Modelling, Animal and Poultry Science, University of Guelph, Guelph, ON, Canada,  
3University of Guelph, Guelph, ON, Canada,  
4UNESP, Univ Estadual Paulista, Department of Animal Science, Jaboticabal, SP, Brazil
L. Zhao*, China Agricultural University, BEIJING, China

P22-GS  Carnosine levels in the porcine longissimus muscle and its association with meat quality traits and carnosine-related genes expression.
J. D’Astous-Page*, C. Gariépy², R. Blouin¹, S. Cliche², B. Sullivan³, and M. F. Palin⁴, ¹Université de Sherbrooke, Sherbrooke, QC, Canada, ²Agriculture and Agri-Food Canada, St-Hyacinthe, QC, Canada, ³Canadian Centre for Swine Improvement, Ottawa, ON, Canada, ⁴Agriculture and Agri-Food Canada, Sherbrooke, QC, Canada

NONRUMINANT NUTRITION

P23  Effect of Biscuit waste on growth performance of finishing broilers.
O. A. Anjola*, M. A. Onigemo¹, L. A. Tijani¹, K. K. Agbalaya¹, P. F. Agbaye¹, F. A. Fakunmoju¹, and B. F. Odenike², ¹Department of Animal Production Technology, Lagos State Polytechnic, Ikorodu, Nigeria, ²Lagos State Polytechnic, Ikorodu, Nigeria

P24  Effect of feeding low protein diets formulated with synthetic amino acids on the production performance and of laying hens.
J. L. MacIsaac¹, D. M. Anderson*², and B. M. Rathgeber², ¹Atlantic Poultry Research Institute, Truro, NS, Canada, ²Dalhousie University, Faculty of Agriculture, Truro, NS, Canada

P25  The effect of high mineral content in water on mineral balance and retention of laying hens.
D. S. Ariyamuni and D. M. Anderson*, Dalhousie University, Faculty of Agriculture, Truro, NS, Canada

P26  The Effect of Turmeric on Egg Yolk Pigmentation and Production Performance of Laying Hens.
H. DeGruchy and D. M. Anderson*, Dalhousie University, Faculty of Agriculture, Truro, NS, Canada
P27  The effect of Tasco® and enzyme supplementation on the growth performance of broiler chickens fed wheat-based diets.
R. Lowe¹, J. L. MacIsaac², and D. M. Anderson*¹,
¹Dalhousie University, Faculty of Agriculture, Truro, NS, Canada, ²Atlantic Poultry Research Institute, Truro, NS, Canada

P28  Effects of oil levels, heat and enzymes on the nutritive value of mechanically-pressed camelina (Camelina sativa) meal in 21 day old broiler chickens.
B. Y. Rajapakse and D. M. Anderson*, Dalhousie University, Faculty of Agriculture, Truro, NS, Canada

P29  The effect of essential oils and organic acids as alternatives to antibiotic growth promoters in broiler chickens housed under good and poor environmental conditions.
D. M. Anderson*¹, L. Cook¹, and J. L. MacIsaac²,
¹Dalhousie University, Faculty of Agriculture, Truro, NS, Canada, ²Atlantic Poultry Research Institute, Truro, NS, Canada

P30  Effect of age on apparent metabolizable energy (amen) of yellow and black full fat canola seeds grown in different locations in broilers.
D. M. Anderson*¹, B. Jayaraman², and J. L. MacIsaac³,
¹Dalhousie University, Faculty of Agriculture, Truro, NS, Canada, ²University of Manitoba, Winnipeg, MB, Canada, ³Atlantic Poultry Research Institute, Truro, NS, Canada

P31  Influence of calcium source and fat level, on broilers performance and nutrients utilization.
M. Michael*, Cairo University, Cairo, Egypt

PHYSIOLOGY AND ENDOCRINOLOGY

P32  Nychthermal rhythm of dromedary camel’s body temperature using two measurement techniques.
A. Al-Haidary*¹, K. Abdoun², A. Okab¹, and E. Samara²,
¹Departments of Animal Production, College of Food and Agriculture Sciences, King Saud University, Riyadh, Saudi Arabia, ²Department of Animal Production, College of Food and Agriculture Sciences, King Saud University, Al-Rayidh, Saudi Arabia
Blood cell parameters are associated with feed efficiency in replacement beef heifers.
E. M. Crane*, J. C. Munro¹, S. L. Bourgon¹,², K. C. Swanson³, A. H. Fredeen¹, and Y. R. Montanholi¹,⁴,
¹Department of Plant and Animal Sciences, Faculty of Agriculture, Dalhousie University, Truro, NS, Canada,
²Department of Plant and Animal Sciences, Dalhousie University, Truro, NS, Canada, ³North Dakota State University, Fargo, ND, ⁴Department of Animal and Poultry Science, University of Guelph, Guelph, ON, Canada

PRODUCTION, MANAGEMENT AND ENVIRONMENT

A typological characterization of Canadian beef cattle farms using multivariate analyses.
A. W. Alemu*, B. D. Amiro¹, S. Bittman², D. MacDonald³, and K. H. Ominski¹, ¹University of Manitoba, Winnipeg, MB, Canada, ²Agriculture and Agri-Food Canada, Agassiz, BC, Canada, ³Environment Canada, Gatineau, QC, Canada

RUMINANT NUTRITION AND MICROBIOLOGY

Effect of lactic acid bacteria and Bacillus subtilis on the fiber digestibility and ruminal fermentation of beef cattle finished in feedlot.
C. H. Silveira Rabelo*, A. L. D. S. Valente², R. P. Barbero¹, E. C. Lara¹, F. C. Basso¹, and R. A. Reis²,
¹Unesp, Jaboticabal, Brazil, ²UNESP, Jaboticabal, Brazil

Effect of Lactobacillus buchneri and different ruminal environment on the in vitro corn silage degradability and methane estimation.
C. H. Silveira Rabelo*, F. C. Basso¹, E. C. Lara¹, L. G. D. O. Jorge¹, C. J. Härter², and R. A. Reis³, ¹Unesp, Jaboticabal, Brazil, ²UNESP, Univ Estadual Paulista, Department of Animal Science, Jaboticabal, Brazil, ³UNESP, Jaboticabal, Brazil
P37 Viability of the direct-fed Saccharomyces cerevisiae boulardii in the digestive tract of calves.
J. Chiquette¹, L. Veilleux¹, J. Brochu¹, F. Beaudoin¹, B. Fomenky¹,², and M. Ibeagha-Awemu¹, ¹Agriculture and Agri-Food Canada, Dairy and Swine Research and Development Centre, Sherbrooke, QC, Canada, ²Department of Animal Science, Laval University, Québec, QC, Canada

P38-GS Effects of 3-nitrooxypropanol and monensin on methane production using a background diet in Rusitec fermenters.
A. Romero-Perez¹,², E. K. Okine², L. L. Guan², S. M. Duval³, M. Kindermann¹, and K. A. Beauchemin¹, ¹Agriculture and Agri-Food Canada, Lethbridge Research Centre, Lethbridge, AB, Canada, ²Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, AB, Canada, ³DSM Nutritional Products France, Research Centre for Animal Nutrition and Health, Saint Louis Cedex, France, ⁴DSM Nutritional Products, Basel, Switzerland

P39 Effect of supplementing Tasco® to dairy calves in milk and calf starter.
D. M. Anderson¹, J. L. MacIsaac², and B. Strehler¹, ¹Dalhousie University, Faculty of Agriculture, Truro, NS, Canada, ²Atlantic Poultry Research Institute, Truro, NS, Canada

P40-GS Effects of dietary supplementation with safflower oil on milk components and fatty acid composition of Canadian Holstein cows.
A. Ammah¹,², F. Beaudoin¹, L. Marier¹, C. Benchaar¹, N. Bissonnette¹, N. Gévry³, and E. M. Ibeagha-Awemu¹, ¹Agriculture and Agri-Food Canada, Dairy and Swine Research and Development Centre, Sherbrooke, QC, Canada, ²Department of Biology, University of Sherbrooke, Sherbrooke, QC, Canada, ³Department of biology, Université de Sherbrooke, Sherbrooke, QC, Canada

P41 Aluminium, iron and manganese contents of dairy cow feces in Manitoba.
J. C. Plaizier⁶, K. H. Ominski, and E. J. McGeough, University of Manitoba, Winnipeg, MB, Canada
## GRADUATE STUDENT ORAL COMPETITIONS

**Thursday, May 7, 2015**

**Chair:** Filippo Miglior, Centre for Genetic Improvement of Livestock, University of Guelph  
**Room:** Governor General III

### GRADUATE STUDENT ORAL COMPETITION SESSION II

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:15 AM</td>
<td>005-GS</td>
<td>The effect of lysozyme applied on hatching eggs to reduce eggshell microbial load without jeopardizing hatching performance.</td>
<td>X. Li*, D. M. Anderson, and B. M. Rathgeber, Dalhousie University, Faculty of Agriculture, Truro, NS, Canada</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>006-GS</td>
<td>Effects and mode of action of red seaweed (Palmaria palmata) supplemented diets fed to broiler chickens raised under normal or stressed conditions (environmental stress and dirty litter).</td>
<td>H. Karimi*, D. M. Anderson¹, B. M. Rathgeber¹, and F. D. Evans², ¹Dalhousie University, Faculty of Agriculture, Truro, NS, Canada, ²Acadian Seaplants Limited, Dartmouth, NS, Canada</td>
</tr>
<tr>
<td>9:45 AM</td>
<td>007-GS</td>
<td>Heart rate in response to an acute stressor and additional cardiovascular parameters as indicators of feed efficiency in beef cattle.</td>
<td>J. C. Munro³¹, P. W. Physick-Sheard³, A. P. Fontoura¹, S. L. Bourgon¹, F. S. Schenkel³, T. Tennessen¹, and Y. R. Montanhóli³,³¹, ¹Department of Plant and Animal Sciences, Faculty of Agriculture, Dalhousie University, Truro, NS, Canada, ²Ontario Veterinary College, University of Guelph, Guelph, ON, Canada, ³Centre for Genetic Improvement of Livestock, University of Guelph, Guelph, ON, Canada</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>008-GS</td>
<td>Use of mustard oil to inhibit the production of mycotoxins in corn contaminated with fungi.</td>
<td>B. Ludvig Tracz*, Giuseppe Meca, Jordi Mañes, Renata Ernlund Freitas de Macedo, Fernando Bittencourt Luciano, School of Agricultural Sciences and Veterinary Medicine, Pontificia Universidade Católica do Paraná, Sao Jose, Brazil</td>
</tr>
</tbody>
</table>
10:45 AM  009-GS  Continuous assessment of rumen pH and temperature in beef cattle with known feed efficiency.  
S. Lam*, S. P. Miller1,2, J. C. Munro3, T. R. Caldwell1, J. P. Cant1, M. A. Steele4, and Y. R. Montanholi1,3,  
1Department of Animal and Poultry Science, University of Guelph, Guelph, ON, Canada, 2Invermay Agriculture Centre, AgResearch, Mosgiel, New Zealand, 3Department of Plant and Animal Sciences, Faculty of Agriculture, Dalhousie University, Truro, NS, Canada, 4Department of Agricultural, Food, and Nutritional Science, University of Alberta, Edmonton, AB, Canada

11:00 AM  010-GS  Vitality and Morphology of Boer buck Spermatozoa stored fresh for 72 hours.  
O. A. Ajao*, University of Venda, Thohoyandou, South Africa

S. Palacio*, L. Peignier4, S. Adam2, R. Bergeron1, D. Pellerin3, A. M. De Passille4, J. Rushen5, D. B. Haley6, T. J. DeVries6, and E. Vasseur1, 1University of Guelph Alfred Campus, Alfred, ON, Canada, 2Valacta, Ste-Anne-de-Bellevue, QC, Canada, 3Université Laval, Québec, QC, Canada, 4UBC Dairy Education Research Centre, University of British Columbia, Agassiz, BC, Canada, 5Faculty of Land and Food Systems - University of British Columbia, Vancouver, BC, Canada, 6University of Guelph, Guelph, ON, Canada

11:30 AM  012-GS  Enteric methane (CH4) produced by beef cattle as affected by dietary crude protein of forage diets fed during extreme cold.  
K. Blair*, K. H. Ominski, M. Undi, and K. M. Wittenberg, University of Manitoba, Winnipeg, MB, Canada

11:45 AM  013-GS  Short-term effects of a nucleotide-rich yeast extract on growth performance, immunity, and colonic and cecal bacteria of weaner pigs raised under a sanitary challenge.  
S. M. Waititu*, M. Nyachoti1, F. Yin1, R. Patterson2, A. Yitbarek3, and J. C. Rodriguez-Lecompte4, 1University of Manitoba, Winnipeg, MB, Canada, 2Canadian Biosystems, Calgary, AB, Canada, 3University of Guelph, Guelph, ON, Canada, 4University of Prince Edward Island, Charlottetown, PE, Canada
Feces of feedlot cattle contain a diversity of bacteriophages that lyse non-O157 Shiga toxin-producing Escherichia coli.

J. Wang¹,², Y. D. Niu³*, J Chen¹, H. Anany⁴,⁵, H-W Ackermann⁶, R. P. Johnson⁷, C. N. Ateba⁸, K. Stanford², T. A. McAllister³.
¹ College of Veterinary Medicine, South China Agricultural University, Guangzhou, Guangdong, P.R. China; ² Alberta Agriculture and Rural Development, Lethbridge, AB, Canada T1J 4V6; ³ Agriculture and Agri-Food Canada, Lethbridge, AB; ⁴ Department of Food Science, Canadian Research Institute for Food Safety, Guelph, ON; ⁵ Department of Microbiology, Ain Shams University, Cairo, Egypt; ⁶ Département de microbiologie, Faculté de médecine, Université Laval, Québec, QC; ⁷ Laboratory for Foodborne Zoonoses, Public Health Agency of Canada, Guelph, ON; ⁸ Department of Biological Sciences, North West University-Mafikeng Campus, North West, Mmabatho, South Africa

ORAL PRESENTATIONS

Thursday, May 7, 2015

Chair: Tim Reuter, Alberta Agriculture and Rural Development Governor General III

ANIMAL HEALTH AND BEHAVIOR

Accuracy and inter-laboratory consistency of enzyme-linked immunosorbent assays for quantification of antibodies against the Aleutian mink disease virus.

A. H. Farid¹ and P. P. Rupasinghe², ¹Dalhousie University Faculty of Agriculture, Truro, NS, Canada, ²Department of Plant and Animal Sciences, Dalhousie University Faculty of Agriculture, Truro, NS, Canada
1:45 PM  016  Effect of long dry periods on calcium content on cattle without supplements in a semi-arid areas in the North West Province of South Africa.
B.G Mokolopi-Kgobe1* and D.E Beighle2, 1Department of Agriculture and Animal Health, College of Agriculture and Environmental Services, University of South Africa, Science Campus, 2Under appointment by the International Mission Board, S.B.C. on loan to Department of Animal Health, Faculty of Agriculture, Science and Technology, North West University, Mafikeng Campus, Private Bag X2046, Mmabatho, 2735 South Africa (until 2008) University of South Africa, Johannesburg, South Africa

2:00 PM  017  Welfare of horses transported to slaughter in Canada: Assessment of welfare and journey risk factors.
M. S. Cockram*, R. C. Roy, and I. R. Dohoo, University of Prince Edward Island, Charlottetown, PE, Canada

**BREEDING AND GENETICS**

2:15 PM  018  Heritability estimates and accuracy of predicting direct genomic breeding values for fatty acid composition in beef cattle.
C. Li1,2*, C. Ekine-Dzivenu3, L. Chen3, M. Vinsky4, J. A. Basarab5, J. L. Aalhus1, M. E. R. Dugan4, and C. Fitzsimmons3,4, 1Agriculture and Agri-Food Canada, Lacombe, AB, Canada, 2Department of Agriculture, Food and Nutritional Science, University of Alberta, Edmonton, AB, Canada, 3Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, AB, Canada, 4Agriculture and Agri-Food Canada, Lacombe Research Center, Lacombe, AB, Canada, 5Alberta Agriculture and Rural Development, Lacombe, AB, Canada
### NONRUMINANT NUTRITION

**2:30 PM  019**  
The effect of dietary lysozyme on growth performance and intestinal microbiota of broiler chickens in each period of the growth cycle.  
M. Gong¹, D. M. Anderson¹, B. M. Rathgeber¹, and J. L. MacIsaac². ¹Dalhousie University, Faculty of Agriculture, Truro, NS, Canada, ²Atlantic Poultry Research Institute, Truro, NS, Canada

**2:45 PM  020**  
Effects of moringa oleifera aqueous leaf extract on semen characteristics, fertility and haematological indices of dominant black breeder cocks.  
K. K. Agbalaya¹, O. A. Anjola*¹, S. A. Olurode², M. A. Onigemo³, L. A. Tijani¹, P. F. Agbaye¹, F. A. Fakunmoju¹, and O. E. Olaoluwa¹. ¹Department of Animal Production Technology, Lagos State Polytechnic, Ikorodu, Nigeria, ²Department of Veterinary Public Health and Reproduction, Federal University of Agriculture, Abeokuta, Nigeria

### PRODUCTION, MANAGEMENT AND ENVIRONMENT

**3:00 PM  021**  
Sustainable livestock production system in the Pantanal region - Mato Grosso do Sul, Brazil.  
J. C. De Souza*¹, R. M. Silva², R. Jardim³, and S. Markwith⁴. ¹UFMS - Federal University of Mato Grosso do Sul, Paranaíba, MS, Brazil, ²UFMS - Federal University of Mato Grosso do Sul, Campo Grande, MS, Brazil, ³Fazenda Bodoquena, Bodoquena, Brazil, ⁴Florida Atlantic University, Boca Raton, FL
Future Meeting

2016 Joint Annual Meeting
ASAS-ADSA-CSAS-WSASAS

July 19 - 23, 2016
Salt Palace Convention Center
Salt Lake City, Utah