Program of the 13th
ISAE North-American
Regional Meeting

May 12-13, 2017
Iowa State University
Ames, IA, USA

Organizing and scientific committee:

Suzanne T. MILLMAN, Anna K. JOHNSON,
Yolande M. SEDDON, Peter KRAWCZEL and Nicolas DEVILLERS
# Program Overview

## Friday, May 12 – Scheman Building, ISU Campus

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Registration opens &amp; Poster set-up</td>
</tr>
<tr>
<td>09:00</td>
<td>Meeting opening</td>
</tr>
<tr>
<td>09:15</td>
<td>Oral session: <strong>Social behavior of pigs</strong></td>
</tr>
<tr>
<td>10:30</td>
<td>Coffee break and <strong>1st Poster session</strong></td>
</tr>
<tr>
<td>11:00</td>
<td>Oral session: <strong>Housing &amp; Enrichment</strong></td>
</tr>
<tr>
<td>12:15</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30</td>
<td>Oral session: <strong>Welfare assessment</strong></td>
</tr>
<tr>
<td>15:15</td>
<td>Coffee break and <strong>2nd Poster session</strong></td>
</tr>
<tr>
<td>15:45</td>
<td>Keynote Lecture: <strong>Dr. Cheryl L. MORRIS</strong> (Omaha’s Henry Doorly Zoo and Aquarium) Advancements in Animal Care Through Training</td>
</tr>
<tr>
<td>18:30</td>
<td>Banquet at Reiman Gardens</td>
</tr>
</tbody>
</table>

## Saturday, May 13 – Scheman Building, ISU Campus

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Oral session: <strong>Health &amp; Pain relief</strong></td>
</tr>
<tr>
<td>10:00</td>
<td>Coffee break and <strong>3rd Poster session</strong></td>
</tr>
<tr>
<td>10:30</td>
<td>ISAE Business Meeting</td>
</tr>
<tr>
<td>11:05</td>
<td>2018 ISAE international congress</td>
</tr>
<tr>
<td>11:15</td>
<td>Oral session: <strong>Behavioral variability</strong></td>
</tr>
<tr>
<td>12:00</td>
<td>Awards, closing discussion and meeting adjournment</td>
</tr>
<tr>
<td>Afternoon</td>
<td>Excursions (optional)</td>
</tr>
</tbody>
</table>
Oral presentations

Friday AM 9:15-10:30   Social behavior of pigs

9:15  Social network analysis of group housed gestating sows
      Kristina M. Horback, Meghann K. Pierdon, Thomas D. Parsons

9:30  Agonistic interactions in swine housed in a retrofitted gestation group housing pen with a
gated electronic sow feeder
      Magnus R. Campler, Justin D. Kieffer, Monique D. Pairis-Garcia

9:45  Effects of social status on enrichment use in group housed gestating sows
      *G*  Victoria Kyeiwaa, Denise A. Beaulieu, Yolande M. Seddon, Laurie M. Connor, Jennifer A. Brown

10:00 Analysis of swine aggression when stable groups are moved to novel pens
      *UG*  Grace E. Flynn, Kaitlin E. Wurtz, Carly I. O’Malley, Juan P. Steibel, Ronald O. Bates, Catherine W.
      Ernst, Janice M. Siegfard

10:15  The relationship between social aggression and play behavior in finisher pigs: do pigs that play
      less fight more?
      *UG*  Hannah E. Pearsall, Alexis F. Hinson, Carly I. O’Malley, Kaitlin E. Wurtz, Juan P. Steibel, Ronald O.
      Bates, Catherine W. Ernst, Janice M. Siegfard

Friday AM 11:00-12:15   Housing & Enrichment

11:00 Dairy cows and heifers prefer to calve in a bedded pack barn or natural forage compared to
      open pasture
      *G*  Erika M. Edwards, Katy L. Proudfoot, Heather M. Dann, Peter D. Krawczel

11:15 The effects of access to pasture, winter exercise, and modified stalls on the welfare and
      behaviours of dairy cows kept in tie-stalls
      *G*  Santiago Palacio, Steve Adam, Renée Bergeron, Doris Pellerin, Anne Marie de Passillé, Jeff
      Rushen, Derek B. Haley, Trevor J. DeVries, Elsa Vasseur

11:30 Effects of nursery space allowance on the behavior and salivary cortisol levels of weaned pigs
      *G*  Ravneet Kaur, Yolande M. Seddon, Dan Bussieres, Sandra A. Edwards, Jennifer A. Brown

11:45 It’s no laughing matter: cage color and light intensity alter rat affect
      *G*  Megan R. LaFollette, Melissa P. Swan, Brianna N. Gaskill

12:00 Behavioral responses of Allegheny woodrats to fluctuating enrichment stimuli and their
      implications for reintroduction programs
      *G*  Lindsey A. Robbins, Olivia L. Vaught, Timothy J. Smyser, Robert K. Swihart, Brianna N. Gaskill

Presenting author underlined

*G*: Oral presentation entered in the Graduate Student Oral Competition

*UG*: Oral presentation entered in the Undergraduate Student Competition
Friday PM 13:30-15:15  Welfare assessment

13:30  Pekin duck welfare assessment: a comparison of methods  
       Essam M. Abdelfattah, Giuseppe Vezzoli, Maja. M. Makagon

13:45  Impacts experienced at the keel and development of keel bone damage in laying hens in enriched housing systems  
       G  Sydney L. Baker, Cara I. Robison, Darrin M. Karcher, Michael J. Toscano, Maja M. Makagon

14:00  Examining the efficacies of two non-penetrating captive bolt devices for the on-farm euthanasia of broiler breeders  
       G  Lilia Serpa, Tina M. Widowski, Penny Lawlis, Karen Schwean-Lardner, Patricia V. Turner, Stephanie Torrey

14:15  Do you see WAT I see? Developing and testing a welfare assessment tool for kenneled dogs  
       Amy E. Bauer, Mary Jordan, Monica Colon, Traci Shreyer, Candace C. Croney

14:30  Aversion to argon-induced hypoxia in pigs using approach-avoidance and conditioned place avoidance paradigms  
       G  Luna KC, Mhairi A. Sutherland, Anna K. Johnson, Timothy A. Shepherd, Hongwei Xin, Kenneth J. Stalder, Locke A. Karriker, Donald C. Lay, Jr, Suzanne T. Millman

14:45  Associations between tail lesions and other injurious behaviours and health deviations in pigs  
       G  Nienke van Staaveren, Alison Hanlon, Julia A. Calderón Díaz, Laura Boyle

15:00  The effect of 24 hour lying and sleep deprivation on energy balance, behavior, and milk yield  
       G  Jessie A. Kull, Gina M. Pighetti, Katy L. Proudfoot, Jeffrey M. Bewley, Bruce F. O’Hara, Kevin D. Donohue, Peter D. Krawczel

Saturday AM 9:00-10:00  Health & Pain relief

09:00  Relationship between the clinical and behavioral response to a mastitis challenge with Streptococcus uberis from Holstein dairy cows  
       G  Victoria L. Couture, Peter D. Krawczel, Raúl A. Almeida, Gina M. Pighetti, Stephen P. Oliver

09:15  Behavioral changes in group-housed dairy calves infected with Mannheimia haemolytica  
       G  Catherine L. Hixson, Peter D. Krawczel, J. Marc Caldwell, Emily K. Miller-Cushon

09:30  The pain responses of piglets after castration when using three different analgesics: Results from a behavioural test  
       G  Erin L. Davis, Yolande M. Seddon, Jennifer A. Brown

09:45  Clinical trial of local anesthetic protocols for acute pain associated with caustic paste disbudding in dairy calves  
       G  Charlotte B. Winder, Stephen J. LeBlanc, Derek B. Haley, Kerry D. Lissemore, M. Ann Godkin, Todd F. Duffield

Saturday AM 11:15-12:00  Behavioral variability

11:15  Genome wide association analyses of lesion scores in group-housed swine  
       G  Kaitlin E. Wurtz, Juan P. Steibel, Ronald O. Bates, Catherine W. Ernst, Nancy E. Raney, Janice M. Siegfried

11:30  Consistency over time of individual activity budgets by gestating sows housed in ESF pens  
       Kristina M. Horback, Ilana Yablonsovich, Thomas D. Parsons

11:45  Feedlot cattle are motivated to obtain roughage and show contrafreeloading  
       Jennifer M. C. Van Os, Erin M. Mintline, Trevor J. DeVries, Cassandra B. Tucker
Posters

Friday AM 10:30-11:00  First Poster Session

1  Characterizing standing behavior at social grouping in weaned dairy calves
   G  Kelsey C. Horvath and Emily K. Miller-Cushon

2  Evaluation of single vs. paired calf housing on behavior and immunity of Holstein calves: A proposal
   G  Clay B. Kesterson, Peter D. Krawczel, Gina M. Pighetti

3  Sows’ preferences for different fresh and dry mixed forages
   G  Lydiane Aubé, Frédéric Guay, Renée Bergeron, Gilles Bélanger, Gaëtan F. Tremblay, Nicolas Devillers

Friday PM 15:15-15:45  Second Poster Session

4  It’s getting hot in here: A preliminary study to evaluate the impact of in utero heat stress on piglet behavior after weaning and transport
   G  Christopher J. Byrd, Nichole M. Chapel, Drew W. Lugar, Matthew C. Lucy, Timothy J. Safranski, Jay S. Johnson

5  Effects of probiotics on anxiety-like behavior in weaned pigs
   G  Morgan B. Garvey, Elizabeth Petrosus, Jeremy N. Marchant-Forde, Susan D. Eicher

6  An aural-visual classification of the vocal repertoire of adult pigs (Sus scrofa domesticus)
   G  Kathryn Y. Henley, Je’Vana L. Pickens, Betty Pat, Virginia Aida, Candace L. Floyd

7  Do different behavior tests measure similar personality dimensions in domestic pigs?
   G  Carly I. O’Malley, Kaitlin E. Wurtz, Juan P. Steibel, Ronald O. Bates, Catherine W. Ernst, Janice M. Siegford

Saturday AM 10:00-10:30  Third Poster Session

8  Comparison of perching behavior and its effects on keel bone deviations of laying hens in two types of enriched colony cages
   UG  Ashley K. Birakos, Jordan M. Tonooka, Sydney L. Baker, Cara I. Robison, Nick Chargo, Darrin M. Karcher, Michael J. Toscano, Maja M. Makagon

9  Comparing measurements of different behavioral responses between a novel environment test and a novel object test in domestic swine
   UG  Briana C. Dewberry, Carly I. O’Malley, Kaitlin E. Wurtz, Juan P. Steibel, Ronald O. Bates, Catherine W. Ernst, Janice M. Siegford

10 Influence of genetic strain on resource use by four strains of laying hens in a non-cage aviary
    Ahmed B.A. Ali, Dana L.M. Campbell, Darrin M. Karcher, Janice M. Siegford

11 Frequency of culling by sow housing type as reported by North American pork producers
    Sarah H. Ison, Ronald O. Bates, Juan P. Steibel, Catherine W. Ernst, Janice M. Siegford

Presenting author underlined
G: Poster entered in the Graduate Student Poster Competition
UG: Poster entered in the Undergraduate Student Competition
Sponsorship for the conference has been generously provided by

[Logo of Purdue University Center for Animal Welfare Science]

[Logo of Iowa State University College of Veterinary Medicine]