Plan now to attend the AASV 48th Annual Meeting
February 25 - 28, 2017
Hyatt Regency Denver
DENVER, COLORADO

We extend our sincere appreciation to the following sponsors of AASV annual meeting activities:

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  AASV Student Seminar and Student Poster Session
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Standing on the Shoulders of Giants: Collaboration & Teamwork

47th AASV
Annual Meeting
February 27 - March 1, 2016
New Orleans

2018 San Diego March 3 - 6
2019 Orlando March 9-12
AASV’s 50th Anniversary!
Our meeting in The Big Easy is sure to provide some warm weather that will be a welcome break from Old Man Winter. New Orleans offers an exciting venue with its Cajun cuisine, New Orleans Jazz and lots of history. As we gather in New Orleans we will have a wonderful opportunity to renew relationships with friends and colleagues. Each year we are presented with opportunities to change the way that we think about serving our profession, industry and clients. More importantly, it is an opportunity to renew our commitment to advocate for and do what is right for the pigs that are under our care.

At last year’s annual meeting, a number of speakers including Drs. Stevenson, Daniels, Webb and Desrosiers discussed the importance of collaboration and teamwork in managing the issues that we collectively face. No one individual or even organization is capable of “moving the ball all the way down the field” on their own and these speakers charged our association to work collaboratively.

The 2016 conference theme reflects a continuation and expansion of that charge and draws on the famous quote of Sir Isaac Newton, who said “If I have seen further, it is by standing on the shoulders of giants.” Newton was paying homage to those who preceded him and enlightened his thinking. I would argue that a collaborative team process provides that same type of enlightenment in real time. The AASV Program Committee supported “Standing on the Shoulders of Giants: Collaboration and Teamwork” as the theme for this year’s annual meeting and I am sure that you will readily see this theme woven throughout the fabric of the meeting.

Dr. John Harding will present this year’s Howard Dunne Memorial Lecture entitled “Emergence of Brachyspira hampsonii in western Canada: A collaborative success.” Dr. Harding will provide a healthy measure of science of emerging diseases while discussing the value of a collaborative process in managing an emerging disease.
Dr. Peggy Anne Hawkins will follow with the Alex Hogg Memorial Lecture, “Whose shoulders are we standing on?” As we head towards AASV’s 50th Anniversary, Dr. Hawkins will visit with us about the changing demographics of our organization and how this might affect how we interact as a team.

Monday’s general session will also address neonatal immunology, on-farm welfare audits, and public perception. Porcine epidemic diarrhea will continue to receive a fair share of attention in a Monday afternoon concurrent session devoted to swine enteric coronaviruses. PRRS, Mycoplasma, and influenza will be addressed during another concurrent session. This year there will be an entire concurrent session devoted to antimicrobial resistance, antimicrobial use, and the increasing role of veterinary oversight.

This year also marks the beginning of a new adventure for AASV with the launch of the Swine Health Information Center. Time is of the essence in delivering results. The Tuesday general session is devoted to the management of emerging diseases. The lessons learned during recent encounters with porcine epidemic diarrhea, high-path avian influenza, and Senecavirus A will provide the backdrop for an examination and discussion of the critical issue of emerging disease response. We will be challenged to think globally and be prepared to act locally. You will not want to miss this session.

I appreciate having the opportunity to serve as this year’s program chair. Thank you so much to the AASV Program Committee and AASV staff for all of their hard work. A job well done. Your annual meeting is a great example of collaboration and teams at work. I look forward to seeing you in New Orleans.

Let the Good Times Roll!
George Charbonneau, DVM
Program Chairman
George Charbonneau, Chair

Glen Almond  Daniel Kovich
Matt Anderson  Chris Rademacher
Ron Brodersen  Alex Ramirez
C. Scanlon Daniels  Kent Schwartz
Mark Engle  Michelle Sprague
Jeff Harker  Mike Tokach
Samuel Holst  Blaine Tully
Megan Inskeep  Sherrie Webb
Jennifer Koeman

Information Technology

Mobile App
Keep track of when and where you need to be with the free AASV mobile conference app! It’s loaded with the most up-to-date schedule, speaker and exhibitor information, interactive maps of the conference rooms, and links to proceedings papers. Use it to create your personal schedule and “to do” list. The app will be available for download from the iOS and Android app stores using the redeem code emailed to conference registrants February 15. An HTML5 version will also be available for web-based devices.

Proceedings
All proceedings papers (including seminar papers) will be available for download from the AASV website prior to and during the meeting. There will be no printed proceedings.

For more information: www.aasv.org/annmtg
Registration & Fees

Registration

Registration desk located in
Celestin Foyer

Saturday, Feb 27  7:00 AM – 5:00 PM
Sunday, Feb 28     7:00 AM – 5:00 PM
Monday, Feb 29     7:00 AM – 5:00 PM
Tuesday, March 1   7:00 AM – 12:00 PM

Fees

Register online at www.aasv.org/annmtg

AASV member pre-registration  $345
AASV member registration after February 5  $445
Non-member veterinarian registration  $475
Add’l Tech Table representatives (limit 3)  $475

Meeting Hotel

Hyatt Regency New Orleans
601 Loyola Ave
New Orleans, Louisiana 70113
Tel: 504-561-1234

www.aasv.org/annmtg/2016/lodging.htm

Session Locations

Unless otherwise noted, the meeting rooms for conference sessions are located on level 3 of the Hyatt Regency New Orleans.

Continuing Education Credit

Up to twenty (20) credit hours of veterinary continuing education are available for attendance during the regular meeting sessions on Sunday 8:00 AM through Tuesday 12:00 PM. Four (4) credit hours are available for the PRRS Risk Assessment Training and each of the pre-conference seminars on Saturday.
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Student Delegate
Emily Mahan-Riggs
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Technical Tables

Location: Storyville
Monday: 9:00 AM – 5:00 PM
Tuesday: 8:00 AM – 12:00 PM

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Web-based PRRS Risk Assessment Training for the Breeding Herd

Date: Saturday, February 27  
Time: 7:30 AM – 12:30 PM  
Location: Strand 10A  
Fee: No charge  
Limit: 20 participants, AASV members only  
Coordinator: Derald Holtkamp

This training will guide you through the use of the web-based PRRS Risk Assessment known as the Production Animal Disease Risk Assessment Program (PADRAP). PADRAP allows you to view benchmarking reports immediately after submitting an assessment.

Three ways veterinarians have applied the PRRS Risk Assessment:

- Evaluate current biosecurity protocols and/or develop new biosecurity protocols to avoid risk
- Communicate risks and the importance of biosecurity procedures to clients or production personnel
- Aid in the decision to initiate a project to eliminate PRRSV from a breeding herd site and identify modifiable risk factors in an effort to increase the likelihood that an elimination project will be successful long-term.

This session is open to AASV member veterinarians who have not previously used the PRRS Risk Assessment, as well as those who have previously been trained on the spreadsheet version. Please bring a laptop capable of accessing the internet via wireless connection using one of the following web browsers: Mozilla Firefox, Google Chrome or Internet Explorer.
Risk Assessment Training

7:30  Welcome and introductions (note the early start time!)  
      Derald Holtkamp

7:45  Incorporating information already in PADRAP  
to expedite data collection for Seneca Valley Virus  
      outbreak investigations  
      Kim Gerardy

8:15  Overview of PRRS Risk Assessment  
      Dale Polson

8:45  “How to” tour of PADRAP Resetting/retrieving your  
      password, creating a new production system, setting  
      up a site and survey, navigating through a survey,  
      duplicating and taking multiple surveys  
      Chris Mowrer

9:45  BREAK

10:00 Hands-on use of the risk assessment;  
      User interview  
      Dale Polson

12:00 Demonstration of pareto chart and the database  
      and benchmarking tool for risk assessment data;  
      exporting raw data: Interpreting results  
      Derald Holtkamp

12:30 Training concludes
AASV’s Got Talent

**Date:** Saturday, February 27  
**Time:** 1:00 – 5:00 PM  
**Location:** Celestin D  
**Fee:** $80  
**Chair:** Jeff Harker

Prepare to learn all the latest at the AASV’s version of America’s Got Talent. These practitioners will be attempting to impress a panel of judges to be named “Tipster of the Year.” Presentations covering all topics should give every attendee something to take home and use. From technology to interpersonal topics to pigs, expect this to be a very dynamic and lively afternoon.

1:00  Innovative shoulder sore treatment  
      Lori Feldmann

1:15  Experiences with Seneca Valley virus  
      Dave Bomgaars

1:30  Swine DIY  
      Whitney Burton

1:45  Epidurals and C-sections  
      Daniel Hendrickson

2:00  Learning to use the SMEC video library  
      Paisley Canning

2:15  Solutions to stock solutions  
      Mike Strobel

2:30  Laryngeal swab tricks and tips  
      Shamus Brown

2:45  BREAK

3:15  Gender challenges at hog farms  
      Natalie Baker
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>3:30</td>
<td>Multigenerational teams that work</td>
<td>Bill Hollis</td>
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<tr>
<td>3:45</td>
<td>Digital photography tips</td>
<td>Locke Karriker</td>
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<td>4:00</td>
<td>Fresh out of vet school; tips from a newbie</td>
<td>Megan Schnur</td>
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<td>4:15</td>
<td>Social media; staying connected</td>
<td>Egan Brockhoff</td>
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<td>4:30</td>
<td>Working through the “generation gap”</td>
<td>Jason Hocker</td>
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<td>4:45</td>
<td>Life hacks: Things I’ve learned from 25 years of shower-in, shower-out</td>
<td>Lisa Tokach</td>
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<td>5:00</td>
<td>Session concludes</td>
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AASV STUDENT TRIVIA EVENT

Sponsored by: MERCK ANIMAL HEALTH
Saturday, February 27
7:00 PM
Rampart Room
(offsite, above Walk-On’s Bistreaux and Bar)
Antibiotics and other pharmaceutically based topics are among those with the most potential impact on the swine industry. While Guidance for Industry #213 and the VFD rule are at the forefront of these topics, those particular items will be discussed during a concurrent session on Monday afternoon. This seminar will deliver information and experiences regarding antibiotic use internationally and discuss the concept of antibiotic stewardship. An update from Washington DC on current and future legislation related to antibiotics will also be provided. Additionally, procedures and measures that distributors of veterinary pharmaceuticals should have in place in order to be on the right side of an FDA audit will be covered. Finally, the most up-to-date information regarding pain management will be addressed.

1:00  Update on current and upcoming antibiotic legislation (non-VFD related)
      Liz Wagstrom

1:30  The European antibiotic experience
      Peter Davies

2:00  The Australian antibiotic experience
      Chris Richards

2:30  Antibiotic stewardship
      Christine Hoang

3:00  BREAK

3:30  FDA audit preparation for distributors of veterinary pharmaceuticals
      Mike Apley

3:50  Measuring and assessing pain in animals
      Pat Turner
Seminar 2

4:10  Mitigating and managing pain in swine production
      Monique Pairis-Garcia

4:30  Roundtable Q&A
      All speakers

5:00  Seminar concludes
Seminar 3

Current Issues in Swine Reproduction

Date: Saturday, February 27
Time: 1:00 – 5:20 PM
Location: Celestin C
Fee: $95
Chair: Glen Almond

This seminar will provide up-to-date information and guidance on current issues in modern swine reproduction. Some of the topics will address new technologies, while others will report on production issues facing the industry. The presentations will be practical and applied. Veterinarians should be comfortable either adapting the new technologies or solving problems with their clients’ herds.

1:00 The advantages of post-cervical artificial insemination (PCAI) implementation in a sow farm
John Sonderman

1:40 Batch farrowing in commercial sow farms
James Kober

2:20 Current strategies in boar management
Billy Flowers

3:00 BREAK

3:20 Gilt management for improved performance
Jenny Patterson

4:00 Updates on sow longevity
Billy Flowers and Jenny Patterson

4:40 Uterine prolapses in sows: An emerging concern
Bob Thompson and Emily Mahan-Riggs

5:20 Seminar concludes
Swine Welfare

Date: Saturday, February 27  
Time: 1:00 – 5:30 PM  
Location: Celestin A  
Fee: $95  
Chair: Sherrie Webb  
Moderator: Jamee Amundson

From shoulders to tails and everything in between, this seminar will cover hot topics in the area of swine welfare and care. Speakers in this session will cover trends in gestation housing and different housing options being used in lactation. We’ll also explore potential pitfalls of managing heavier finishing pigs. Whether you work with sows or finishers or have interest in becoming a certified animal welfare expert, this seminar has something for you!

1:00 Sow shoulder sores  
Fiona Lang

1:30 Economics of implementing gestation housing options  
Kent Bang

2:00 Lactation housing options  
Tom Parsons

2:30 Tail docking and tail biting  
Yuzhi Li

3:00 BREAK

3:30 American College of Animal Welfare: Becoming an accredited expert  
Meghann Pierdon

4:00 Managing heavier finishing pigs  
Mike Brumm
Seminar 4

4:30  Keeping pigs on their feet  
      Paisley Canning

5:00  Penalty at the 10-yard line: Potential new handling rules at the packing plant  
      Dan Kovich

5:30  Seminar concludes
Seminar 5

Operation Main Street Training

**Date:** Saturday, February 27  
**Time:** 1:00 – 5:15 PM  
**Location:** Strand 11A & B (level 2)  
**Fee:** no charge  
**Limit:** 25 participants; US AASV member veterinarians only  
**Chair:** Al Eidson  
**Co-sponsored by AASV and the National Pork Board**

In 2011, AASV and the National Pork Board partnered to train veterinarians as Operation Main Street (OMS) speakers, with a goal to help focus pork industry outreach efforts to professional veterinary associations, schools of veterinary medicine, and veterinary technical colleges.

To date, the program has 90 OMS-trained veterinarians who have presented at 26 of 30 schools of veterinary medicine. Overall, more than 150 OMS speeches have been scheduled, with an audience reach of 9,900.

This training updates participants on what activists are saying about agriculture today, and will provide attendees with the needed tools and presentations to address those concerns in a science-based, proactive manner. The objective is to equip veterinarians to speak to veterinary students and professional groups including veterinary associations and dieticians. Unless otherwise indicated, presentations will be made by Al Eidson.

1:00  Welcome, overview, and introductions  
**Al Eidson**

1:15  Antibiotic update  
**Jennifer Koeman**

2:00  A presentation for schools of veterinary medicine  
**Rick Tubbs**

3:00  BREAK

3:45  Overview of the industry structure, trust model, and US Farmers and Ranchers Alliance (USFRA) messages

*Continued on next page*
Seminar 5

4:00  Issue updates and answering common questions
      4:00  Animal care and well-being  
      4:30  Environment

4:45  Events at schools of veterinary medicine; speaking to civic groups, dieticians, and county commissioners

5:15  Training evaluation; Seminar concludes
For many, Sunday is a day to gather with family and friends for spiritual nourishment and encouragement in faith. Bring your family and join your AASV friends for breakfast, music, and fellowship at the AASV Praise Breakfast!

Praise our Lord with the AASV praise team. Then receive a God-directed message provided by AASV member Dr. Greg Stevenson!

Your free-will offering, along with support from Stuart Products, will defray the cost of the breakfast. The program will conclude by 8:00 AM to allow you to attend the meeting sessions, but feel free to stay and visit.

All AASV meeting attendees and their family members are welcome!
We are not in Kansas anymore, Dorothy! African swine fever is on the move in the EU, and classical swine fever lurks as close as the Caribbean. There are more countries with foot and mouth disease than there are without, and the poultry industry has just experienced the biggest foreign animal disease (FAD) outbreak in US history. This tornado of disease activity combined with the ever-increasing global commerce of people, products, and inputs for production means one thing: we better have our house in order before the big one hits! So put on your ruby red slippers and follow the yellow brick road to this seminar to learn about cutting-edge FAD response strategies and the important role you play in early disease detection, rapid response, and managing production when faced with an FAD that shuts down trade and commerce.

8:00   Foreign animal disease overview
       Barbara Porter-Spalding

8:45   Federal planning: Managing disease control areas
       Barbara Porter-Spalding

9:30   BREAK

10:00  State perspective: Practical management for control areas
       Jimmy Tickel

10:45  Secure Food Supply Plans
       Jim Roth

11:30  Roundtable Q&A
       All speakers

12:00  Seminar concludes
Zoonoses, Workplace Safety, and Mental Health: The Confluence of Pigs and People

Date: Sunday, February 28
Time: 8:00 AM – 12:00 PM
Location: Celestin B
Fee: $95
Seminar chair: Jennifer Koeman

We’re all so focused on herd health that we sometimes take our own health and that of producers and farm workers for granted. This seminar is designed to help you recalibrate your thinking at the intersection of pigs and people. Come learn more about health and safety topics, including zoonoses, injuries and illness, workplace safety training, euthanasia and mental health.

8:00  Emerging bacterial zoonoses: How much should we be concerned? Peter Davies

8:30  Injuries and illness in swine workers and veterinarians  Bruce Alexander

9:00  Workplace safety: A training tool for the hog barn worker  Karen Hoare

9:30  Fun with PPE: Veterinary workplace health and safety training  Abbey Canon

10:00  BREAK

10:30  The current impact of influenza A virus on pigs, people, and birds  Andrew Bowman

11:00  Timely euthanasia and impacts of euthanasia on caretakers  Jan Shearer

11:30  Veterinarians and mental health  Stacy Holzbauer

12:00  Seminar concludes
Seminar 8

Diagnostics

Date: Sunday, February 28
Time: 8:00 AM – 12:00 PM
Location: Celestín D
Fee: $95
Chair: Kent Schwartz

The science and application of diagnostic testing and agent characterization in the first half of this seminar will highlight strengths and pitfalls to proper selection, interpretation, and application of molecular diagnostic tests. The second portion will feature a 2-hour interactive workshop with multiple group activities to build core competencies in applying diagnostics in evidence-based approaches to population medicine.

8:00 Molecular diagnostic and research tools: Application and limitations
Kyoung Jin Yoon

8:30 Influenza: Application of molecular tools for better decisions
Marie Culhane

8:55 Molecular characterization of bacteria: Interpretation and applications
Albert Rovira

9:20 Oral fluid update
Jeff Zimmerman

9:45 BREAK

10:00 Diagnosis: Dissecting diagnostic results to reveal population diagnoses
Eric Burrough

10:30 Neonatal diarrhea: The challenges of the “classical approach”
Clayton Johnson and Aaron Lower

10:45 Applying an evidence-based approach to defining the problem: Case definition, quizzical triangle, aggregating evidence group activity
Clayton Johnson, Jim Lowe, and Aaron Lower

11:30 Understanding the root cause of the clinical presentation: Applying fishbone diagram to a real case as a group activity
Clayton Johnson and Jim Lowe

12:00 Seminar concludes

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Attendees will leave with tools and knowledge to improve swine feed efficiency to lower feed cost for swine producers. Diet, health, stress, barn management, and other factors will be addressed. Field research results will share how factors such as DDGS source, particle size, pellet quality, marketing, and sow feeding impact pig growth and feed efficiency.

8:00 Feed and other factors that drive feed efficiency
John Patience
Like so many things in pork production, feed efficiency is a multi-factorial outcome. It is influenced by the pig’s diet and by barn management. Dietary factors and barn management factors will be discussed, all leading to a summary checklist on improving feed efficiency at a practical level.

8:45 Gut mechanics during stress: How feed efficiency and growth can be influenced
Adam Moeser
To optimize performance of pigs under health challenges, we need to understand how the stressors impact intestinal function. Who better to do that than Dr. Adam Moeser, the world-renowned expert on gut physiology and how it is impacted by stressful events?

9:30 BREAK

10:00 Latest field research on feed efficiency
Bob Goodband
Dr. Goodband will highlight numerous field projects with feeding DDGS of different oil levels, particle size, pellet quality, marketing, and sow feeding, and how growth and feed efficiency is impacted.
Seminar 9

10:45  Tools to help clients evaluate and improve feed efficiency

Mike Tokach

Tools will be shared and discussed that can be used to help calculate the value of several factors that influence feed efficiency including energy and amino acid levels, particle size, pelleting, pellet quality, feed additives, temperature, stocking density, topping market pigs, etc. We believe these simple tools provide an excellent opportunity to run “what if” scenarios for real-time questions. Tools include a feed efficiency calculator, space calculator, DDGS value calculator, and iodine value calculator.

11:30  Roundtable Q&A

All speakers

12:00  Seminar concludes
Swine Medicine for Students

Date: Sunday, February 28
Time: 8:00 AM – 12:00 PM
Location: Celestin GH
Fee: $95; No charge for veterinary students or 2014 or 2015 DVM graduates
Co-chairs: Angela Supple and Jeremy Pittman

The student pre-conference seminar is designed to provide swine-specific information that students may not receive in their veterinary curriculum. This year we will return to a consistently requested topic that many students feel deficient in upon graduating: medication. Specifically, the seminar will address the ever-changing regulations around use of medications in swine/food animals, and the options on how to calculate water medication for use in populations of pigs. In addition, the ever-popular interactive case(s) will return in this seminar, where small groups of students use the information they learn in the seminar to walk through specific “real-world” cases.

8:00 Introduction

8:05 The regulatory aspects of swine medicines
Locke Karriker

9:00 Life of an item: The North American Veterinary Licensing Examination (NAVLE®) demystified
Karen Lehe

9:30 BREAK

10:00 Calculations for water medication
Angela Supple and Jeremy Pittman

10:30 Interactive cases: Water-soluble medication
Angela Supple and Jeremy Pittman

12:00 Seminar concludes
Research Topics

Date: Sunday, February 28
Time: 8:00 AM – 12:00 PM
Location: Celestin F
Chair: Chris Rademacher

8:00  Comparative analysis of vaccine efficacy of live-attenuated virus, whole-virus inactivated and alphavirus vectored subunit vaccines against antigenically distinct swine influenza A viruses  
Eugenio Abente

8:15  Novel reassortant human-like H3N2 and H3N1 influenza A viruses detected in pigs are virulent and antigenically distinct from endemic viruses  
Daniela Rajao

8:30  Effect of sow vaccination and maternally derived antibodies on IAV infection  
Fabian Chamba Pardo

8:45  Airborne transmission of highly pathogenic avian influenza virus. Is the swine industry ready?  
Carmen Alonso

9:00  Particle size association with PRRS and PED viruses in aerosols from acutely infected pigs under field conditions  
Carmen Alonso

9:15  PCV as delivery virus vector to express PRRSV epitopes  
Pablo Pineyro

9:30  Developing sampling guidelines for oral fluid-based PRRSV surveillance  
Marisa Rotolo

9:45  BREAK
Research Topics

10:15  Evaluation of the pathogenesis differences of the US PEDV prototype and S-INDEL-variant strains and examination of the cross-protective immunity of two strains in weaned pigs  
Qi Chen

10:30  An evaluation of porcine epidemic diarrhea virus survival in individual feed ingredients in the presence or absence of a liquid antimicrobial  
Scott Dee

10:45  Effect of thermal mitigation of porcine epidemic diarrhea virus (PEDV) contaminated feed  
Roger Cochrane

11:00  PEDV antibody responses in fecal and oral fluid specimens  
Luis Gimenez-Lirola

11:15  Stochastic modeling to determine number of laryngeal swab sample pools and sample collections needed for low Mycoplasma hyopneumoniae group prevalences  
Cassandra Fitzgerald

11:30  Detection of Actinobacillus pleuropneumoniae ApxIV toxin antibody in serum and oral fluid specimens from pigs inoculated under experimental conditions  
Wendy Gonzalez

11:45  Discovery of a divergent lineage pestivirus in piglets with congenital tremors and reproduction of disease following experimental challenge  
Bailey Arruda

12:00  Session concludes
Sunday Session #1

Student Seminar

Date: Sunday, February 28
Time: 1:00 – 5:15 PM
Location: Celestin E
Session co-chairs: Alex Ramirez and Maria Pieters

Sponsored by ZOETIS

1:00 The effects of tulathromycin injectable solution on reducing the transmission of swine respiratory pathogens from sows to wean pigs
Timothy Pearson, University of Tennessee

1:15 Correlation between aggression and cognitive bias in gestating sows
Sindumani Manoharan, University of Pennsylvania

1:30 Evaluation of diagnostic sampling techniques used in the farrowing house to increase sensitivity of detection and sequencing of influenza A virus (IAV-S) in swine
Ryan Strobel, University of Minnesota

1:45 Assessing and ranking sow farm biosecurity within a production system
Brent Sexton, Iowa State University

2:00 Effect of administering tulathromycin to IAV-S positive weaned pigs to control swine respiratory disease
Kathleen Wood, North Carolina State University

2:15 Characterization of shedding and viremia in naive or vaccinated replacement gilts given 1-7-4 RFLP PRRS live virus inoculation
Taylor Engle, Virginia-Maryland Regional CVM

2:30 Evaluation of a second iron supplementation and the use of zinc oxide in the prevention of iron-deficient anemia in young pigs
Eric Perrin, University of Guelph

2:45 BREAK
Sponsored by: HARRISVACCINES
3:15  Viral ecology determined by metagenomic sequencing within multisourced swine markets located in the SE United States  
Olivia Myers, North Carolina State University

3:30  Effect of herd closure on the pattern of *Mycoplasma hyosynoviae* and *Mycoplasma hyorhinis* infection  
Alyssa Anderson, University of Minnesota

3:45  Vesicles, hoof lesions, and severe lameness in commercial finishing pigs in the United States  
Scott Radke, Iowa State University

4:00  Evaluation of *Salmonella* Typhimurium fecal shedding in pigs vaccinated with *Salmonella* Choleraesuis-Typhimurium vaccine via drinking water and challenged four weeks later  
Quynn Steichen, Kansas State University

4:15  Evaluation of the effect of shipping and handling of oral fluid samples on detection of influenza A virus in swine by PCR  
Victoria Foerster, Iowa State University

4:30  Use of topical spray containing lidocaine to mitigate pain in pigs undergoing castration  
Sara Davenport, University of Pennsylvania

4:45  Residue depletion profile of ampicillin trihydrate in cull sows  
Christine Mainquist-Whigham, Iowa State University

5:00  Characterization of genomic and pathogenic changes of porcine epidemic diarrhea virus after serial passages in cell culture  
Holly Salzbrenner, Iowa State University

5:15  Session concludes

**STUDENT RECEPTION**

Sponsored by: **MERCK ANIMAL HEALTH**

Sunday, February 28  
8:30 – 11:00 PM  
Celestín FGH
Sunday Session #2

Industrial Partners

Date: Sunday, February 28
Time: 1:00 – 4:45 PM
Location: Celestin FGH
Session chair: Daniel Kovich

1:00  Comparison of the detection of PRRSV antibodies from oral fluids using a commercial PRRS oral fluids assay and the modified PRRS X3 overnight protocol
Christa Goodell
IDEXX

1:15  Descriptive study of swine enteric coronavirus disease (SECD) elimination and prevention in a genetic multiplication system in North America
Jean Paul Cano
PIC

1:30  Ambitine™: A late finishing intervention
Dan McManus
PURINA ANIMAL NUTRITION

1:45  Biometrics - Intelligent sensors for swine production
Guido Klement
FANCOM

2:00  Xylanase reduces wean to finish mortality; potential mechanisms of action
David Nolan
HUVEPHARMA

2:15  A novel PCV2 qPCR and PCV2 ELISA. Powerful tools to monitor PCVAD
Alex Eggen
BIOCHEK

2:30  Advances in PRRS vaccination strategy: Vaccination schedules alternating MLVs and KVs increase efficiency
Francois Joisel
MERIAL

2:45  BREAK
Sponsored by: HARRISVACCINES
Sunday Session #2

3:15  Improved swine influenza virus A (SIV-A) strain selection method affords cross-protection against heterologous challenge in the face of maternal antibodies  
Paulraj Lawrence  
NEWPORT LABORATORIES

3:30  An effective vaccination program. Utilizing a killed PRRSV and *Mycoplasma hyopneumoniae* vaccine  
Justin Kuecker  
NEWPORT LABORATORIES

3:45  The future of swine for research and xenotransplantation is here  
Rexanne Struve  
STRUVE LABS INTERNATIONAL

4:00  The use of the Zephyr EXL for the humane euthanasia of neonate swine  
Andrew Grist  
BOCK INDUSTRIES

4:15  Safety and efficacy of a porcine circovirus type 2 (PCV2, killed) and *Mycoplasma hyopnuemoniae* (M hyo, bacterin) vaccine  
Wei Lu  
CEVA

4:30  Utilization of commercial female data in maternal genetic improvement programs  
Douglas Newcom  
PURETEK GENETICS

4:45  Session concludes
## Sunday Session #3

### Industrial Partners

**Date:** Sunday, February 28  
**Time:** 1:00 – 4:45 PM  
**Location:** Celestin D  
**Session chair:** Megan Inskeep

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00</td>
<td>Porcilis® Ileitis: 20-week duration of immunity against <em>Lawsonia intracellularis</em> challenge</td>
<td>Erin Strait</td>
<td>MERCK ANIMAL HEALTH</td>
</tr>
<tr>
<td>1:15</td>
<td>Estimation of the economic value of the productivity differences following a change in porcine circovirus type 2 and <em>Mycoplasma hyopneumoniae</em> vaccines in growing pigs using historical production data</td>
<td>Derald Holtkamp</td>
<td>MERCK ANIMAL HEALTH</td>
</tr>
<tr>
<td>1:30</td>
<td>Circumvent® PCV M G2: PCV2d challenge study and field production data update</td>
<td>Brad Thacker</td>
<td>MERCK ANIMAL HEALTH</td>
</tr>
<tr>
<td>1:45</td>
<td>Effectiveness of avilamycin (Kavault™) for reducing the incidence and severity of colibacillosis in post-weaned pigs</td>
<td>Tom Marsteller</td>
<td>ELANCO ANIMAL HEALTH</td>
</tr>
<tr>
<td>2:00</td>
<td>Effectiveness of tilmicosin phosphate (Pulmotil® AC) for controlling respiratory disease associated with <em>Mycoplasma hyopneumoniae</em> in swine in the presence of porcine reproductive and respiratory syndrome virus (PRRSV)</td>
<td>Chris Puls</td>
<td>ELANCO ANIMAL HEALTH</td>
</tr>
<tr>
<td>2:15</td>
<td>Genetic strategies to improve piglet quality</td>
<td>Caitlyn Abell</td>
<td>DNA GENETICS</td>
</tr>
</tbody>
</table>
2:30 Evaluation of efficacy, safety and stability of a novel adjuvant system in conventional and advanced vaccine platform technologies for use with various antigens in swine vaccines
   Timothy Miller
   BENCHMARK BIOLABS

2:45 BREAK
   Sponsored by: HARRISVACCINES

3:15 Establishing *Mycoplasma hyopneumoniae* herd status criteria for breeding herds
   Lucina Galina
   ZOETIS

3:30 Evaluation of Fostera® PRRS cross-protection against a contemporary Linage 1 (RFLP 1-7-4) PRRS virus
   Jose Angulo
   ZOETIS

3:45 Comparison of immunologic response, shedding profiles, and production performance between Fostera® PRRS and Ingelvac PRRS®MLV in the face of a heterologous PRRSV challenge
   Scott Dee
   ZOETIS

4:00 Field evaluation of the intranasal route as an alternative for administering *Streptococcus suis* and *Haemophilus parasuis* bacterins
   Randy Jones
   MVP LABORATORIES

4:15 Quantitative assessment of prevalence and severity to understand impact of Lactobacillus acidophilus fermentation product (SynGenX®) in a herd with endemic K88 and *Salmonella* post-wean
   Sarah Probst Miller
   DIAMOND V

4:30 New discoveries for injectable fat-soluble vitamins for sows and piglets
   Rob Stuart
   STUART PRODUCTS

4:45 Session concludes
Sunday Session #4

Industrial Partners

Date: Sunday, February 28  
Time: 1:00 – 4:30 PM  
Location: Celestin ABC  
Session chair: Dwain Guggenbiller

1:00  Comparative efficacy evaluation of two modified-live PRRS vaccines  
      Reid Philips  
      BOEHRINGER INGELHEIM VETMEDICA

1:15  Evaluation of PRRSV infectious dose in vaccinated pigs  
      Reid Philips  
      BOEHRINGER INGELHEIM VETMEDICA

1:30  PCV2 vaccine cross-protection: Identification of isolates in successfully vaccinated field cases  
      Brian Payne  
      BOEHRINGER INGELHEIM VETMEDICA

1:45  Innovative polymeric adjuvant for PCV2 vaccination  
      Sophia Bingling Xu  
      SEPPIC

2:00  Herd health management solutions - the future is now!  
      J. Tyler Holck  
      GLOBALVETLINK

2:15  Evaluation of an RNA particle vaccine against porcine epidemic diarrhea in both naïve sows and previously exposed gilts  
      Kimberly Crawford  
      HARRISVACCINES

2:30  RNA particle vaccines: Bringing solutions to emerging and rapidly mutating pathogens  
      Channing Sebo  
      HARRISVACCINES

2:45  BREAK  
      Sponsored by: HARRISVACCINES
3:15 Spermatotoxic potential of insemination lubricant
Chris Kuster
AURORA PHARMACEUTICAL

3:30 Effect of induction of farrowing following OvuGel® and SFTAI on farrowing performance, timing of parturition and piglet survivability
Paul Yeske
JBS UNITED ANIMAL HEALTH

3:45 New generation live intranasal PRRSV vaccine
Federico Zuckermann
APT IMMUNE BIOLOGICS

4:00 A novel approach to classifying porcine reproductive and respiratory syndrome virus - MJ PRRS® Grouping Technology
Keith Kinsley
PHIBRO ANIMAL HEALTH CORPORATION

4:15 Experimental infection of US swine with China origin PRV (HeN1 variant)
Sabrina Swenson
NATIONAL VETERINARY SERVICES LABORATORY

4:30 Session concludes

WELCOME RECEPTION
Sponsored by: ZOETIS
Sunday, February 28
6:30 – 8:30 PM
Empire A (level 2)
Veterinary Student Posters (#1 – #39)

Location: Storyville

Sunday, February 28
12:00 – 5:00 PM
Authors present from 12:00 – 1:00 PM

Monday, February 29
9:00 AM – 5:00 PM

Sponsored by ZOETIS

Posters #1-15 have been selected for judging in the Student Poster Competition, with scholarship awards sponsored by NEWPORT LABORATORIES

1. Identification of *Mycoplasma hyopneumoniae* shedding gilts in the field
   Chris Deegan, University of Minnesota

2. Risk assessment for the introduction of African swine fever virus (ASFV) into the United States
   Jessica Rotschafer, University of Minnesota

3. Comparing biopsy instruments and techniques for antemortem joint tissue collection
   Emily Mahan-Riggs, North Carolina State University

4. Serum inoculation of a finishing swine operation to aid the elimination of porcine reproductive and respiratory syndrome: A case study
   Ryan Tenbergen, University of Guelph

5. Differentiation of *Pasteurella multocida* field strains isolated from growing-finishing pigs that died of bronchopneumonia using PCR-RFLP analysis of the *omph* gene
   Kara Telfer, Iowa State University

6. Cognitive bias testing of commercial and heritage-breed gilts
   Jessica Piergiovanni, University of Pennsylvania

7. Determining the effects of pooling placenta umbilical cord serum (PUCS) on polymerase chain reaction (PCR) sensitivity
   Donna Drebes, University of Minnesota
8. Evaluating the use of the EnviroBootie™ to detect *Salmonella* at five breed-to-wean sites
   Kayla Blake, Auburn University

9. Case study: Investigation of porcine reproductive and respiratory syndrome positive PCR results from a gilt development unit with a negative status
   Nicole Thomas, University of Illinois

10. Effect of antimicrobial administration on the microbiome of the pig
    Katharine Kancer, University of Illinois

11. Effect of pre-farrow ceftiofur sodium administration on *Streptococcus suis* colonization of peri-parturient females and their litters
    Daniel Gascho, Purdue University

12. Determining the prevalence of *Mycoplasma hyopneumoniae* colonization of weaned piglets from gilt litters
    Thomas Wurtz, Washington State University

13. Evaluation of diagnostic tests for Circumvent PCVM G2 compliance monitoring
    T’Lee Girard, Iowa State University

14. Management practices implemented following an outbreak of porcine reproductive and respiratory syndrome in commercial swine breeding herds in North America
    Kathryn Duda, University of Illinois

15. Determining effects of transport factors on transport loss in a commercial production system
    Megan Pieters, Iowa State University

16. Use of oral fluids and fecal samples in sow herds for detection of *Erysipelothrix rhusiopathiae* by polymerase chain reaction (PCR)
    Claire Behnke, University of Illinois

17. Effect of injectable fat-soluble vitamins pre-farrow on piglet number born alive
    Daniel Carreño, North Carolina State University

*Continued on next page*
Veterinary Student Posters

18. The effect of sampling strategy on porcine epidemic diarrhea virus (PEDV) associated gut morphology and immunohistochemistry scores
   Jessica Davenport, University of Georgia

19. The effect of multi-dose iron dextran and vitamin E administration on hemoglobin concentration and weight gain in neonatal pigs
   Scott Foster, University of Georgia

20. Impact of grain particle size reduction technologies on pig performance and economics
   Jordan Gebhardt, Kansas State University

21. Salmonella enterica: A case study of enterocolitis in Oklahoma and Iowa swineherds
   Kylie Glisson, North Carolina State University

22. Evaluation of iron injection protocols in piglets and their effect on wean weights and hemoglobin levels
   Tiffany Haegele, North Carolina State University

23. Improved influenza A virus isolation using non-woven fabric for nasal wipe collection
   Christie Hammons, The Ohio State University

24. Determination of a maternal antibody decay curve for influenza A virus in swine
   Henry Johnson, University of Illinois

25. Sow lameness scoring: Reliability and correlations with other indicators of lameness
   Jane Karpowicz, University of Pennsylvania

26. Porcine epidemic diarrhea: The value of repeat testing
   Kaushalya (Kash) Kuruppu, University of Guelph

27. See one, do one, teach one: Increasing swine disease response and diagnostic capacity by using a pyramid-based training technique to get boots on the ground
   Nicholas Lauterbach, Iowa State University

28. The effects of different vaccination dosing and timing protocols on porcine circovirus type 2 viremia and post vaccination serologic responses
   Claire LeFevre, University of Wisconsin
Veterinary Student Posters

29. *Salmonella* shedding in nursery pigs fed with a high or low complexity diet
   Jane Newman, University of Guelph

30. A comparison of NP ELISA and HI tests identifying influenza A virus maternal antibody levels in processing-aged piglets
   Mary O’Loughlin, Iowa State University

31. Comparison of macro-gut health parameters in PEDV positive and negative pigs
   Chelsea Ruston, Iowa State University

32. Incidence of porcine coronavirus and porcine rotavirus in an Indiana swine operation following clinical onset of acute diarrhea
   Cody Schnur, Purdue University

33. Do sows and gilts previously infected with PEDV respond to PEDV vaccination?
    Blake Setness, Iowa State University

34. Development of a snatch-farrowed, colostrum-deprived piglet challenge model for porcine rotavirus C
    Brooke Smith (Murphy), University of Illinois

35. Disease surveillance in an all natural system
    Chelsea Stewart, Iowa State University

36. Comparison of sample types for assessing porcine circovirus type 2 status of sow herds
    Corrine Stoffel, University of Illinois

37. The interaction between swine heath and low crude protein, amino acid supplemented diets
    Caitlin Vonderohe, Purdue University

38. Patterns of resting position in group-housed, gestating sows
    Hanum Wensil-Strow, University of Pennsylvania

39. Conditions for development of cross-neutralizing antibodies to porcine reproductive and respiratory syndrome virus
    Jordan Young, University of Minnesota
Research Topics Posters (#40 - #64)

**Location:** Storyville

**Sunday, February 28**
12:00 – 5:00 PM
Authors present from 12:00 to 1:00 PM

**Monday, February 29**
9:00 AM – 5:00 PM

40. Financial impact of endemic and epidemic pathogens in growing pigs
   **Julio Alvarez Sanchez**

41. Description and use of network data to inform disease control and prevention strategies
   **Andréia Arruda**

42. Biotherapeutics as alternatives to antibiotics: Effects of adenoviral delivered IFN-α and G-CSF on innate and adaptive immunity in swine
   **Susan Brockmeier**

43. An emerging H1N2 sub-cluster within the alpha H1 cluster of influenza A viruses of swine
   **Susan Detmer**

44. The effect of agitation and dose position during storage on semen quality
   **Hanneke Feitsma**

45. Dynamics of influenza virus transmission in a swine herd and analysis of risk factors for recurrent infections
   **Juliana Bonin Ferreira**

46. Evaluation of the risk of a feed mill being contaminated with PEDV or PDCoV
   **Laura Greiner**

47. Assessment of the immunocrit ratio assay for evaluation of colostrum quality in sows induced to farrow and inseminated using single-dose fixed time insemination
   **Andrea Hanson**
Poster Session

Research Topics Posters

48. Absence of human innate immune evasion complex in LA-MRSA ST5 strains isolated from pigs, swine facilities, and humans with swine contact
   Samantha Hau

49. PEDV shedding patterns and antibody kinetics in commercial growing pigs
   Jordan Kraft

50. Dietary iron concentration affects intestinal permeability and inflammation in pigs
   Yihang Li

51. Routine manure removal from swine operations: A potential mechanism for pathogen dispersion
   Melissa Millerick-May

52. Association of growth performance with clinical signs following co-infection with porcine reproductive and respiratory syndrome virus (PRRSV) and porcine circovirus type 2 (PCV2) in nursery pigs
   Megan Niederwerder

53. Early weaning induces long-lasting effects on gastrointestinal health and susceptibility to subsequent stressors in grower and finisher pigs
   Calvin Pohl

54. Does circulating antibody affect the course of PEDV infection in neonatal piglets?
   Korakrit Poonsuk

55. Investigating the seeder-to-naïve ratio for successful exposure of gilts to Mycoplasma hyopneumoniae
   Luiza Roos

56. Lactogenic protection against porcine epidemic diarrhea virus in piglets following homologous challenge
   Adam Schelkopf

Continued on next page
Poster Session

Research Topics Posters

57. A stochastic, mathematical model of influenza A virus within swine breeding herds: Implications of possible management interventions

Montserrat Torremorell

58. PRRS aerobiology: Experimental evidence and 10 years of field experiences with 119 filtered breeding farms in the United States

Steven Tousignant

59. Porcine reproductive and respiratory syndrome virus and porcine epidemic diarrhea virus infection patterns and risk factors in sow farms in the United States

Steven Tousignant

60. Measuring progress on the control of porcine reproductive and respiratory syndrome (PRRS) at a regional level: The Minnesota N212 regional control project (RCP) as a working example

Pablo Valdes-Donoso

61. Reduction of antibiotic use to treat post-weaning diarrhea following oral vaccination with Escherichia coli F4: Case report

Frederic Vangroenweghe

62. Effect of azaperone administration after farrowing on maternally derived immunoglobulin level in suckling piglets using the Immunocrit® method

Frederic Vangroenweghe

63. Detection of classical swine fever virus (CSFV) using serum-based assays

Jeff Zimmerman

64. Detection of classical swine fever virus (CSFV) in oral fluid samples by RT-PCR

Jeff Zimmerman
Industrial Partners Posters (#63 - #72)

Location: Storyville

Sunday, February 28
12:00 – 5:00 PM
Authors present from 12:00 to 1:00 PM

Monday, February 29
9:00 AM – 5:00 PM

65. BioChek software, a novel link between sample submission and laboratory results with 24/7 access
Alex Eggen
BIOCHEK

66. Multiplex testing for PRRSV, SIV, PCV2, and APP antibodies using multiplexing fluorometric immuno assays (MFIA)
Andres Broes
BIOVET

67. Observations of a commercially licensed trivalent PRDC vaccine for PCV2, M hyo, and PRRS
Brian Payne
BOEHRINGER INGELHEIM VETMEDICA

68. Birth weight impact on survivability and days to market
Jan Jourquin
ELANCO ANIMAL HEALTH

69. The use of antibody monitoring for endemic diseases in two commercial sow farm on-site GDUs and a barn of high-health commercial pigs: Field study
Christa Goodell
IDEXX

70. Improving sow farm profitability by reducing unnecessary culling and non-productive days and improving reproductive management using advanced technologies
Christine Pelland
MERCK ANIMAL HEALTH

Continued on next page
71. Determining viability of porcine mycoplasmal pure cultures using a redox indicator
Boh Chang Lin
MVP LABORATORIES

72. A combination vaccine strategy. Improving ADG from weaning to finish
Paul Lawrence
NEWPORT LABORATORIES

73. Flexible adjuvants for combined live Aujesky’s disease and inactivated swine influenza vaccines
Sophia Bingling Xu
SEPPIC

74. The prospects of selection for social genetic effects to improve welfare and productivity in pigs
John Eggert
TOPIGS NORSVIN INTERNATIONAL

75. Nutritional requirements of immunologically castrated (IC) barrows
Daniel Nelson
ZOETIS
With more than 80 companies and organizations participating (see page 8), the Technical Tables Exhibit offers the perfect opportunity to learn about the products and services available to you and your clients.

EXHIBITS OPEN
Monday, February 29
9:00 AM – 5:00 PM

Tuesday, March 1
8:00 AM – 12:00 PM

LOCATION
Storyville

All refreshment breaks on Monday and Tuesday will take place in Storyville. Take some time to visit with our exhibitors and thank them for supporting the AASV Annual Meeting!
The AASV is pleased to host the spouse hospitality suite at the Hyatt Regency New Orleans. Spouses of meeting attendees are invited to enjoy complimentary pastries, juice, and coffee. Make new acquaintances, visit with old friends, and plan the rest of your day with other AASV spouses and family members.

**AASV Foundation RAFFLE**

WOW! This year, MVP Laboratories is once again donating the raffle grand prize, valued at $25,000. What is it? Take a look at [http://ecom.aasv.org/raffle](http://ecom.aasv.org/raffle) and see for yourself! While you’re there, scroll down the page and purchase your chance to win this incredible prize!

Tickets are $100 each, and can also be purchased from one of the Auction Committee members, or at the AASV registration desk.

The winning raffle ticket will be drawn and announced during the Foundation Auction on Monday night, February 29. The winner does not need to be present to win – so ALL AASV members can participate, knowing they have a chance to win and support the AASV Foundation at the same time.

Thanks to MVP Laboratories, the AASV Foundation is a winner with every ticket purchased!
What better place than New Orleans to support the AASV Foundation?

The “Big Easy” maintains the image of relaxation and slow, easy-going ways to unwind and live on the fun side of life. Likewise, the AASV Foundation Auction Committee invites you to relax, enjoy some jazz, and be generous while you invest in the future of the swine veterinary profession. Our success depends on you!

Look over the auction catalog or go to aasv.org/foundation to see the items up for bid. Since everything’s been donated, the full amount of your bid will support AASV Foundation programs, including swine research, scholarships, swine externship grants, annual meeting travel stipends for students, heritage videos, and more!

**Silent Auction**

Bid on the silent auction items on Monday, February 29. The bidding will close Monday evening, and we’ll announce the names of the winning bidders at the AASV Awards Reception.

**Live Auction**

The Live Auction will be held at the conclusion of the AASV Awards Reception Monday evening.

aasv.org/foundation
Standing on the Shoulders of Giants: Collaboration and Teamwork

Date: Monday, February 29
Time: 8:00 AM – 12:30 PM
Location: Celestin ABCD
Program chair: George Charbonneau

8:00 Howard Dunne Memorial Lecture
Emergence of *Brachyspira hampsonii* in western Canada: A collaborative success
John Harding

9:00 Alex Hogg Memorial Lecture
Whose shoulders are we standing on?
Peggy Anne Hawkins

10:00 BREAK
Co-sponsored by: HOG SLAT

10:30 Neonatal immunology and vaccinology:
Timing is everything
Dick Hesse

11:00 Fair Oaks Pig Adventure: Public perception of what we do
Megan Inskeep

11:30 On-farm welfare audits: Preparing your clients
Chris Rademacher

12:00 It’s about us, not me! Communication, cooperation, coordination and collaboration
Dale Polson

12:30 LUNCHEON

**AASV LUNCHEON**
Sponsored by:
**BOEHRINGER INGELHEIM VETMEDICA, INC**
Monday, February 29
12:30 – 2:00 PM
Celestin EFGH
Monday Session #1

Swine Enteric Coronaviruses

Date: Monday, February 29
Time: 2:00 – 5:30 PM
Location: Celestin ABC
Session chair: Chris Rademacher

2:00  Review of PEDV disinfectant research
      Derald Holtkamp

2:25  PEDV in feed
      Steve Dritz

2:50  PEDV prevalence
      Bob Morrison

3:15  BREAK
      Sponsored by: CEVA ANIMAL HEALTH

3:45  PEDV outbreak management
      Sara Hough

4:10  PEDV gilt acclimatization
      Pete Thomas

4:35  PEDV vaccination
      Trevor Schwartz

5:00  Panel discussion
      Paul Yeske, Pete Thomas, Sara Hough
           and Joe Connor

5:30  Session concludes

AASV AWARDS RECEPTION

Sponsored by:
ELANCO ANIMAL HEALTH
Monday, February 29
6:30 – 8:30 PM
Celestin EFGH
Monday Session #2

PRRS, Mycoplasma, and Influenza

Date: Monday, February 29
Time: 2:00 – 5:30 PM
Location: Celestin D
Session chair: Mark Engle

2:00  PRRS epidemiology: Data from the Swine Health Monitoring Project
      Bob Morrison

2:25  PRRSV: emerging isolates
      Chad Smith

2:50  Mycoplasma hyopneumoniae elimination
      Paul Yeske

3:15  Gilt acclimation options for Mycoplasma hyopneumoniae infected breeding herds
      Matthew Turner

3:40  BREAK
      Sponsored by: CEVA ANIMAL HEALTH

4:10  Mycoplasma hyosynoviae: Sample collection and findings from diagnostic case review
      Paisley Canning

4:35  Interspecies movement of influenza A viruses
      Marie Culhane

5:00  Considerations for vaccines against influenza A virus
      Amy Vincent

5:30  Session concludes
Monday Session #3

Antibiotic Use: 2017 and Beyond

Date: Monday, February 29
Time: 2:00 – 5:30 PM
Location: Imperial 5 (level 4)
Session chair: Sam Holst

2:00  Current status of GFI 213 and VFD rule
      Jennifer Koeman

2:20  Implementing the VFD rule: Feed company perspective
      Ronny Moser

2:40  Implementing the VFD rule: Practitioner perspective
      Paul Ruen

3:00  Pork production without antibiotics
      Jessica Risser

3:20  BREAK
      Sponsored by: CEVA ANIMAL HEALTH

3:50  Antibiotic use in practice
      Laura Bruner

4:10  Treatment decision trees
      Locke Karriker

4:30  Considerations for preserving antibiotic use
      Mike Apley

4:50  Roundtable Q&A
      All speakers

5:30  Session concludes

AASV FOUNDATION AUCTION

Monday, February 29
Celestin

Silent Auction: Bidding starts at noon
Live Auction: Immediately following the AASV Awards Reception
**Emerging Disease Response**

**Date:** Tuesday, March 1  
**Time:** 8:00 AM – 12:00 PM  
**Location:** Celestin ABCD  
**Session chair:** George Charbonneau  

<table>
<thead>
<tr>
<th>Time</th>
<th>Session title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>8:00</td>
<td>Emerging disease response: Global roadmap but local drivers</td>
<td>Corrie Brown</td>
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<tr>
<td>8:30</td>
<td>Modeling the transboundary risk of PEDV: Introduction of the virus to the US from China via contaminated feed ingredients in the presence or absence of treatment</td>
<td>Scott Dee</td>
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<tr>
<td>9:00</td>
<td>The next one! A Canadian vision for emerging disease preparedness</td>
<td>Doug MacDougald</td>
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<tr>
<td>9:30</td>
<td>Swine Health Information Center (SHIC): Enhancing our preparedness</td>
<td>Paul Sundberg</td>
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<tr>
<td>10:00</td>
<td>BREAK</td>
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<tr>
<td>10:30</td>
<td>Lessons learned from highly pathogenic avian influenza (HPAI)</td>
<td>Craig Rowles</td>
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<tr>
<td>11:00</td>
<td>Keep your feet on the ground but stick your head in the “cloud”</td>
<td>Rodger Main</td>
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<tr>
<td>11:30</td>
<td>Roundtable Q&amp;A</td>
<td>All speakers</td>
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<tr>
<td>12:00</td>
<td>Session concludes</td>
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**AASV BUSINESS BREAKFAST**

**Tuesday, March 1**  
7:00 – 8:00 AM  
Celestin FGH
Speakers

Caitlyn Abell Columbus, NE
Eugenio Abente Ames, IA
Bruce Alexander Minneapolis, MN
Carmen Alonso St Paul, MN
Julio Alvarez Sanchez St Paul, MN
Alyssa Anderson St Paul, MN
Jose Angulo St Joseph, MO
Mike Apley Manhattan, KS
Andréia Arruda Guelph, ON
Bailey Arruda Ames, IA
Natalie Baker Boonville, IN
Kent Bang Omaha, NE
Claire Behnke Urbana, IL
Kayla Blake Auburn, AL
Dave Bomgaars Orange City, IA
Andrew Bowman Columbus, OH
Egan Brockhoff Red Deer, AB
Susan Brockmeier Ames, IA
Andres Broes Saint-Hyacinthe, QC
Corrie Brown Athens, GA
Shamus Brown Indianola, IA
Mike Brumm North Mankato, MN
Laura Bruner Belle Plaine, MN
Eric Burrough Ames, IA
Whitney Burton Tarboro, NC
Paisley Canning Ames, IA
Jean Paul Cano Hendersonville, TN
Abbey Canon Ames, IA
Daniel Carreño Raleigh, NC
Fabian Chamba Pardo St Paul, MN
Qi Chen Ames, IA
Roger Cochrane Manhattan, KS
Joe Connor Carthage, IL
Kimberly Crawford Ames, IA
Marie Culhane St Paul, MN
Jessica Davenport Athens, GA
Sara Davenport Philadelphia, PA
Peter Davies St Paul, MN
Scott Dee Pipestone, MN
Chris Deegan St Paul, MN
Susan Detmer Saskatoon, SK
Donna Drebes St Paul, MN
Steve Dritz Manhattan, KS
Kathryn Duda Urbana, IL
Speakers

Alex Eggen
John Eggert
Al Eidson
Taylor Engle
Hanneke Feitsma
Lori Feldmann
Juliana Bonin Ferreira
Cassandra Fitzgerald
Billy Flowers
Victoria Foerster
Scott Foster
Lucina Galina
Daniel Gascho
Jordan Gebhardt
Kim Gerardy
Luis Gimenez-Lirola
T'Lee Girard
Kylie Glisson
Wendy Gonzalez
Bob Goodband
Christa Goodell
Laura Greiner
Andrew Grist
Tiffany Haegele
Christie Hammons
Andrea Hanson
John Harding
Samantha Hau
Peggy Anne Hawkins
Daniel Hendrickson
Dick Hesse
Christine Hoang
Karen Hoare
Jason Hocker
J. Tyler Holck
Bill Hollis
Derald Holtkamp
Stacy Holzbauer
Sara Hough
Megan Inskeep
Clayton Johnson
Henry Johnson
Francois Joisel
Randy Jones

Scarborough, ME
Burnsville, MN
Leawood, KS
Blacksburg, VA
Northfield, MN
Mapleton, MN
Guelph, ON
Ames, IA
Ruthven, NC
Athens, GA
Florham Park, NJ
West Lafayette, IN
Manhattan, KS
Ames, IA
Ames, IA
Ames, IA
Raleigh, NC
Ames, IA
Manhattan, KS
Westbrook, ME
Carthage, IL
Philipsburg, PA
Raleigh, NC
Columbus, OH
St Peter, MN
Saskatoon, SK
Ames, IA
Northfield, MN
Farmland, IN
Manhattan, KS
Schaumburg, IL
Clive, IA
Audubon, IA
Gilbert, IA
Carthage, IL
Ames, IA
St Paul, MN
Clinton, NC
Rensselaer, IN
Carlyle, IL
Urbana, IL
FRANCE
Kinston, NC
Speakers

Jan Jourquin  BELGIUM
Katharine Kancer  Urbana, IL
Jane Karpowicz  Philadelphia, PA
Locke Karriker  Ames, IA
Keith Kinsley  Sioux Falls, SD
Guido Klement  GERMANY
James Kober  Holland, MI
Jennifer Koeman  Blaine, WA
Dan Kovich  Washington, DC
Jordan Kraft  Ames, IA
Justin Kuecker  Algona, IA
Kaushalya Kuruppu  Scarborough, ON
Chris Kuster  Geneseo, IL
Fiona Lang  MEXICO
Nicholas Lauterbach  Ames, IA
Paulraj Lawrence  Worthington, MN
Claire LeFevre  Luxemburg, WI
Karen Lehe  Brookston, IN
Yihang Li  East Lansing, MI
Yuzhi Li  Morris, MN
Boh Chang Lin  Omaha, NE
Jim Lowe  Albers, IL
Aaron Lower  White Heath, IL
Wei Lu  Overland Park, KS
Doug MacDougald  Stratford, ON
Emily Mahan-Riggs  Angier, NC
Rodger Main  Ames, IA
Christine Mainquist-Whigham  Ames, IA
Sindumani Manoharan  Bensalem, PA
Tom Marsteller  Carmel, IN
Dan McManus  Dakota Dunes, SD
Timothy Miller  Lincoln, NE
Melissa Millerick-May  East Lansing, MI
Adam Moeser  East Lansing, MI
Bob Morrison  St Paul, MN
Ronny Moser  Sheridan, IN
Chris Mowrer  Ames, IA
Olivia Myers  Raleigh, NC
Daniel Nelson  Howard Lake, MN
Douglas Newcom  West Lafayette, IN
Jane Newman  London, ON
Megan Niederwerder  Manhattan, KS
David Nolan  Sedgwick, KS
Mary O’Loughlin  Ames, IA
Speakers

Monique Pairis-Garcia
Tom Parsons
John Patience
Jennifer Patterson
Brian Payne
Timothy Pearson
Eric Perrin
Christine Pelland
Reid Philips
Meghann Pierdon
Jessica Piergiovanni
Megan Pieters
Pablo Pineyro
Jeremy Pittman
Calvin Pohl
Dale Polson
Korakrit Poonsuk
Barbara Porter-Spalding
Sarah Probst Miller
Chris Puls
Chris Rademacher
Scott Radke
Daniela Rajao
Chris Richards
Jessica Risser
Luisa Roos
Jim Roth
Marisa Rotolo
Jessica Rotschafer
Albert Rovira
Craig Rowles
Paul Ruen
Chelsea Ruston
Holly Salzbrenner
Adam Schelkopf
Cody Schnur
Megan Schnur
Trevor Schwartz
Channing Sebo
Blake Setness
Brent Sexton
Jan Shearer
Brooke Smith
Chad Smith

Columbus, OH
Kennett Square, PA
Ames, IA
Edmonton, AB
St Joseph, MO
Murfreesboro, TN
Guelph, ON
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Raleigh, NC
Monticello, IL
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Ames, IA
Ames, IA
Ames, IA
AUSTRALIA
Middletown, PA
St Paul, MN
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Ames, IA
White Bear Lake, MN
St Paul, MN
Johnston, IA
Fairmont, MN
Ames, IA
Ames, IA
Pipestone, MN
West Lafayette, IN
Carthage, IL
Rockwell City, IA
Ames, IA
Ames, IA
Ames, IA
Ames, IA
Champaign, IL
Goldsboro, NC
Speakers

John Sonderman
Quynn Steichen
Chelsea Stewart
Corrine Stoffel
Erin Strait
Mike Strobel
Ryan Strobel
Rexanne Struve
Rob Stuart
Paul Sundberg
Angela Supple
Sabrina Swenson
Kara Telfer
Ryan Tenbergen
Brad Thacker
Nicole Thomas
Peter Thomas
Bob Thompson
Jimmy Tickel
Lisa Tokah
Mike Tokach
Montserrat Torremorell
Steven Tousignant
Rick Tubbs
Matthew Turner
Pat Turner
Pablo Valdes-Donoso
Frederic Vangroenweghe
Amy Vincent
Caitlin Vonderohde
Liz Wagstrom
Hanum Wensil-Strow
Kathleen Wood
Thomas Wurtz
Sophia Bingling Xu
Paul Yeske
Kyoung Jin Yoon
Jordan Young
Jeff Zimmerman
Federico Zuckermann

Columbus, NE
Manhattan, KS
Ames, IA
Champaign, IL
De Soto, KS
Northfield, MN
St Paul, MN
Manning, IA
Bedford, TX
Ames, IA
Hopkinton, IA
Ames, IA
Kelley, IA
Guelph, ON
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Urbana, IL
Boone, IA
Franklin, KY
Halifax, NC
Abilene, KS
Manhattan, KS
St Paul, MN
St Paul, MN
Jasper, AL
Clinton, NC
Guelph, ON
St Paul, MN
BELGIUM
Nevada, IA
Lafayette, IN
Washington, DC
Philadelphia, PA
Raleigh, NC
Pullman, WA
Fairfield, NJ
St Peter, MN
Ames, IA
Ames, IA
Champaign, IL
Saturday, February 27

7:00 AM
Registration Desk open
Location: Celestin Foyer

Committee Meetings
Location: Strand (level 2)

7:30 AM
PRRS Risk Assessment Training (page 10)
Location: Strand 10A (level 2)

8:00 AM
ABVP Entrance Examination
Location: Reliance 2 (level 4)

ABVP Oral Examination
Location: Reliance 3 (level 4)

1:00 PM
SEMINARS

#1 AASV’s Got Talent (page 12)
Location: Celestin D

#2 Pharmaceutical Hot Topics (page 14)
Location: Celestin B

#3 Current Issues in Swine Reproduction (page 16)
Location: Celestin C

#4 Swine Welfare (page 17)
Location: Celestin A

#5 Operation Main Street Training (page 19)
Location: Strand 11A & B (level 2)

5:30 PM
OPEN EVENING
There is no reception scheduled for Saturday evening.
Enjoy New Orleans!

7:00 PM
STUDENT TRIVIA EVENT
Sponsored by: MERCK ANIMAL HEALTH
Location: The Rampart Room, located above Walk On’s Bistreaux and Bar (off-site)
6:30 AM
AASV Student Breakfast
Location: Strand 13 A & B (level 2)

7:00 AM
PRAISE BREAKFAST (page 21)
Sponsored by: STUART PRODUCTS
Location: Imperial 5 (level 4)

Registration Desk open
Location: Celestin Foyer

8:00 AM
Canadian Swine Veterinarians
Location: Strand 10 A (level 2)

SEMINARS

#6 Blisters and Quarantines, No Exports – Oh, My!
(page 22)
Location: Celestin A

#7 Zoonoses, Workplace Safety, and Mental Health: The Confluence of Pigs and People (page 23)
Location: Celestin B

#8 Diagnostics (page 24)
Location: Celestin D

#9 Tools to Improve Feed Efficiency and Reduce Feed Cost (page 25)
Location: Celestin C

#10 Swine Medicine for Students (page 27)
Location: Celestin GH

RESEARCH TOPICS (page 28)
Location: Celestin F
Sunday, February 28

12:00 PM

POSTER SESSION OPEN
Authors in attendance: 12:00 – 1:00 PM
Location: Storyville

Veterinary Student Posters (page 38)
Sponsored by ZOETIS

Research Topics Posters (page 42)

Industrial Partners Posters (page 45)

AASV FOUNDATION LUNCHEON
(Advance registration required)
Location: Strand 11A & B (level 2)

1:00 PM

CONCURRENT SESSIONS

#1 Student Seminar (page 30)
Sponsored by ZOETIS
Location: Celestin E

#2 Industrial Partners (page 32)
Location: Celestin FGH

#3 Industrial Partners (page 34)
Location: Celestin D

#4 Industrial Partners (page 36)
Location: Celestin ABC

6:30 PM – 8:30 PM

WELCOME RECEPTION
Sponsored by ZOETIS
Location: Empire A (level 2)

8:30 PM – 11:00 PM

STUDENT RECEPTION
Sponsored by MERCK ANIMAL HEALTH
Location: Celestin FGH
Monday, February 29

7:00 AM
Registration Desk open
Location: Celestin Foyer
Spouse Hospitality Suite open (page 48)
Location: Strand 8 (level 2)

8:00 AM – 12:30 PM
GENERAL SESSION: Standing on the Shoulders of Giants: Collaboration and Teamwork (page 50)
Location: Celestin ABCD

Howard Dunne Memorial Lecture: Dr. John Harding
“Emergence of Brachyspira hampsonii in western Canada: A collaborative success”

Alex Hogg Memorial Lecture: Dr. Peggy Anne Hawkins
“Whose shoulders are we standing on?”

9:00 AM – 5:00 PM
COMMERCIAL TECHNICAL TABLES (page 8)
Location: Storyville

12:30 PM
LUNCHEON
Sponsored by BOEHRINGER INGELHEIM VETMEDICA INC.
Location: Celestin EFGH

2:00 – 5:30 PM
CONCURRENT SESSIONS
#1 Swine Enteric Coronaviruses (page 51)
Location: Celestin ABC

#2 PRRS, Mycoplasma, and Influenza (page 52)
Location: Celestin D

#3 Antibiotic Use: 2017 and Beyond (page 53)
Location: Imperial 5 (level 4)

6:30 PM – 8:30 PM
AASV AWARDS RECEPTION
Sponsored by ELANCO ANIMAL HEALTH
Location: Celestin EFGH

AASV FOUNDATION AUCTION (page 49)
Celestin EFGH
Tuesday, March 1

7:00 AM
Registration Desk open
Location: Celestin Foyer

BREAKFAST and AASV ANNUAL BUSINESS MEETING
Location: Celestin FGH

8:00 AM – 12:00 PM
GENERAL SESSION: Emerging Disease Response
(page 54)
Location: Celestin ABCD

8:00 AM – 12:00 PM
COMMERCIAL TECHNICAL TABLES (page 8)
Location: Storyville

12:00 PM
MEETING CONCLUDES

Thank you to ALL of the companies, organizations, and members who support the AASV in so many ways throughout the year!

The contributions of time, money, and resources are vital to the AASV’s efforts to provide high quality educational programming at a reasonable cost to AASV members.
Plan now to attend the
AASV 48TH Annual Meeting
February 25 - 28, 2017
Hyatt Regency Denver
DENVER, COLORADO

We extend our sincere appreciation to the following sponsors of AASV annual meeting activities:

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AASV Awards Reception
AASV Foundation Veterinary Student Scholarships

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Student Reception
Student Trivia Event

NEWPORT LABORATORIES
Veterinary Student Travel Stipends
Veterinary Student Poster Awards

STUART PRODUCTS
Praise Breakfast

ZOETIS
Welcome Reception
AASV Student Seminar and Student Poster Session
AASV Foundation Veterinary Student Scholarship

Thank you!

Standing on the Shoulders of Giants:
Collaboration & Teamwork

February 27 - March 1, 2016
New Orleans

2018 San Diego March 3 - 6
2019 Orlando March 9-12
AASV’s 50th Anniversary!
Plan now to attend the AASV 48TH Annual Meeting
February 25 - 28, 2017
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DENVER, COLORADO

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STUART PRODUCTS  
Praise Breakfast

ZOETIS  
Welcome Reception  
AASV Student Seminar and Student Poster Session  
AASV Foundation Veterinary Student Scholarship