Beyond Our Oath: Integrity, Intensity,

Professionalism

46th AASV Annual Meeting

February 28 - March 3, 2015 Orlando, Florida

Message from the Program Chair, Dr Ron Brodersen



Welcome colleagues, we return again to the city of Orlando, for the 46th AASV Annual Meeting. This year is a good year to have our annual meeting in a warm climate. But if you think about it, every year is a good year to have our meeting is a warm climate! This is our third conference in the "Sunshine State" and

I hope you have time to enjoy the warmth and take a wild ride on Space Mountain or other local attractions with family or friends before you head back recharged and refreshed for the challenges ahead.

"I challenge our association to improve our image as respected professionals on the health and welfare of the pig" In the media and society at large, there are groups that are confronting the role of the veterinarian as an authority on animal well being. They question our relevance! To respond, I challenge our association to improve our image as respected professionals on the health and

welfare of the pig. It's important that we become visible as THE LEADING source of scientific knowledge, sound economics and proven animal husbandry regarding the rearing and care of pigs. To this end we have chosen to build on last year's theme and "go beyond our oath" to practice what we preach! We want to instill in each of us the drive to "raise the bar" on what we do every day.

I asked Dr. Greg Stevenson, a long-time friend and esteemed diagnostician, to deliver the Howard Dunne Memorial Lecture. I have great respect for his insight of the privileged position that veterinarians hold in society. He will be sharing his wisdom and experience with respect to ethics and character. We follow with the Alex Hogg Memorial Lecture, where Dr. Scanlon Daniels, a respected practitioner, will discuss the future role of veterinarians in leadership positions and how they can become agents of influence. Please check out our preconference seminars. We have chosen some really good topics. PED is still the hottest issue and now, almost two years since it was introduced into North America, we are still in

"We want to instill in each of us the drive to "raise the bar" on what we do every day."

the steep part of the learning curve. PED topics thread themselves through the pre-conference sessions and continue Monday morning and into the afternoon breakout sessions. Tuesday morning we focus on what might be done by our profession to prevent or control the "next" foreign animal disease.

I want to thank the program committee for putting together a top notch educational program. I know the presenters donated countless hours to our association sharing their knowledge, and I thank them for their generosity. The AASV staff is outstanding in their expertise and support. Thanks to all involved in the effort; it has been a privilege and honor to work with you.

We have just witnessed a couple of incredible years in the swine industry. A period that will be referenced for years to come—volatility in commodity prices and production output, wild swings in swine profitability, and the emergence of an unknown, highly contagious foreign disease. It's a profession not for the faint of heart! Talk about a roller coaster ride – who needs Space Mountain?!

Ron Brodersen Program Chairman



Program Committee

Ron Brodersen, Chair

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New This Year...

Mobile App

Keep track of when and where you need to be with the new, free mobile app! It's loaded with the most up-todate schedule, speaker and exhibitor information, maps

of the conference rooms, links to proceedings papers, and more! It will be available in February in iOS, Android, and HTML5 format for your phone, tablet, or laptop.

Proceedings

There will be NO printed proceedings, but ALL of the proceedings papers (including seminar papers) will be available for members to download in a variety of formats prior to and during the conference.



For more information on these new features, see **www.aasv.org/annmtg.**

Registration & Fees

Registration

Registration desk located in Great Hall (Convention Level)

Saturday, Feb 28	7:00 am – 5:00 pm
Sunday, March 1	7:00 am – 5:00 pm
Monday, March 2	7:00 am – 5:00 pm
Tuesday, March 3	7:00 AM - 12:00 PM

Fees

Register online at www.aasv.org/annmtg

AASV member pre-registration	\$345
AASV member registration after February 6	\$380
Non-member veterinarian registration	\$475
Add'l Tech Table representatives (limit 3)	\$475

Meeting Hotel

Buena Vista Palace Hotel & Spa 1900 E Buena Vista Drive Lake Buena Vista (Orlando), Florida 32830 Reservations: 866-397-6516

www.aasv.org/annmtg/2015/lodging.htm

Session Locations

Unless otherwise noted, all conference sessions will be held on the Convention Level of the Buena Vista Palace Hotel & Spa. The Convention Level is accessible only from the outdoors and the Lobby Level. From your guest room, take the elevators to Level 3, then go down the escalator to the Convention Center.

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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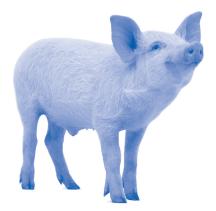
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Technical Tables

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

Academy of Rural Veterinarians AgCreate Solutions Agrivolt AgroSoft Allflex USA/Destron Fearing Alltech Animal Health International APC **ARKO** Laboratories Automated Production Systems **Bayer HealthCare Beller Biosecurity Strategies BioChek Biomin USA Boehringer Ingelheim Choice Genetics USA** Chr. Hansen **Christian Veterinary Mission CLARCOR Air Filtration Products** Diamond V **DNA Genetics Double L Group DSM Nutritional Products** Elanco Animal Health **FPI Air Fast Genetics** Feedstuffs & National Hog Farmer Genesus GlobalVetLINK Grazix Animal Health Harrisvaccines Hermitage NGT Hog Slat Huvepharma Hydro Systems Company Hypor USA

Technical Tables

IDEXX **IMV** Technologies USA **Insight Wealth Group IVESCO. A Division of MWI** JBS United Animal Health **King Techina** Merck Animal Health Merial **MJ Biologics** Mofa Global **MVP** Laboratories National Pork Board National Pork Producers Council Nedap Livestock Management **Neogen Corporation Newport Laboratories** Norbrook Novartis Animal Health Nutriquest Pharmacosmos **Pharmgate Animal Health** Phibro Animal Health Corp PIC **PigCHAMP PigKnows** PigTek Preserve International PureTek Genetics **RTI** – Research Technology Innovation Struve Labs International Stuart Products Swine Medicine Education Center (SMEC) **TechMix** Tetracore Thermo Fisher Scientific **Topigs Norsvin USA USDA APHIS Veterinary Services** Value-Added Science & Technologies **Zinpro Corporation** Zoetis

Risk Assessment Training

Web-based PRRS Risk Assessment Training for the Breeding Herd

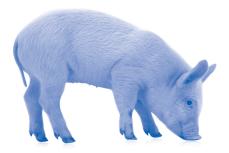
Date: Saturday, February 28 Time: 7:30 AM – 12:30 PM Location: Captain (Lobby Level) Fee: No charge Limit: 20 participants, AASV members only Coordinator: Derald Holtkamp

This training will guide you through the use of the webbased 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	Application of PRRS Risk Assessment Egan Brockhoff
8:00	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



Beyond Our Oath: *Primum non nocere* and other excellent tips, tricks and shortcuts

Date: Saturday, February 28 Time: 1:00 – 5:00 PM Location: Ireland B Fee: \$80 Seminar chair: John Waddell

Back by popular demand, the practice tips pre-conference seminar will again provide even more great "tips, tricks and shortcuts" to take home and utilize immediately in your practice and business. This year will feature tips from veteran practitioners and "young guns" alike for a great mix of experience and unbridled enthusiasm. As in years past, no proceedings will accompany these tips so you have to be "in the seats" to get the latest as these stalwarts of our profession compete to be the "top tipster" for cash and prizes. This session promises to truly go "Beyond our Oath: Integrity, Intensity, Professionalism!"

1:00	What am I worth? Negotiating contracts as a new grad Abbey Harding
1:15	The rubber band: The most versatile tool in practice? Dale Hendrickson
1:30	Your most under-appreciated and under-utilized asset Shamus Brown
1:45	Thinking "outside the crate": Cleaning up PED in a 10,000-head, pen-gestation sow unit Micah Jansen
2:00	Sh*t I have done that you shouldn't: The "un-practice" tip Larry Rueff
2:15	Experiences with electronic sow feeding and large pen sow housing Pete Schneider

2:30	Engaging and motivating employees: Make it their idea! Bryan Myers
2:45	BREAK
3:15	Pooling without the pain: Factors that influence pooling results Brent Pepin
3:30	Turn up biosecurity against PEDV with UV Andrea Pitkin
3:45	Accept reality as it is, not as it used to be or as you wish it were Paul DuBois
4:00	Setting up a mobile office Mike Eisenmenger
4:15	Fantasy pig production: Draft day and free agents Mike Lemmon
4:30	CSF? ASF? Nope, just PCV-APES (TYL!): Scary similarities between FADs and domestic "zebras" Emily Byers
4:45	A man with a pickup plan Monte Fuhrman

5:00 Seminar concludes



Coronavirus Diagnostics and Surveillance

Date: Saturday, February 28 Time: 1:00 – 5:00 PM Location: Scotland B Fee: \$95 Seminar chair: Alex Ramirez

Since the introduction of PED in the US in 2013, porcine coronaviruses have become a clinical and diagnostic reality. The swine industry and profession have had a lot to learn and accomplish in just a few months. With so many unknowns and the development of many diagnostic tools, swine veterinarians are cautiously learning how to better use and interpret these tools to make the right decisions which will impact the health and well-being of millions of pigs. This pre-conference seminar will spotlight porcine epidemic diarrhea (PED), while referencing porcine delta coronavirus where applicable. The ultimate goal of this seminar is to enhance our current understanding of applicability and interpretation of diagnostic assays.

1:00	Transmission: What do we know so far? Montse Torremorell
1:30	Serology: Overview of PED antibody response Luis Gimenez-Lirola
2:00	The use of diagnostic tools for porcine epidemic diarrhea virus and swine deltacoronavirus control Travis Clement and Jane Christopher-Hennings
2:30	Surveillance: The value of oral fluids in PED surveillance Marisa Rotolo
3:00	BREAK
3:30	Feed diagnostics: What does it really mean – or does it even matter? Steve Dritz and Loni Schumacher
4:00	Sequencing: does it really matter? Jianqiang Zhang
4:30	Field application: Results from longitudinal field studies Albert Rovira
5:00 14	Seminar concludes

Sow Reproduction: Achieving and maintaining the high-producing sow herd

Date: Saturday, February 28 Time: 1:00 – 5:30 PM Location: Ireland A Fee: \$95 Seminar chair: Nathan Winkelman

Benchmarking record systems show us that the top 10th percentile of US swine farms are at 29 pigs weaned per sow per year, and the very best are at 34 pw/s/yr!

The objective of this session is for our panel of experts to evaluate the genetic, management, and nutrition technologies needed to achieve this level of production, and try to understand why more herds aren't reaching their potential. The last two speakers will examine the reproduction and financial records, employee philosophy, and details for success of one of the best sow farms in existence today.

1:00	Swine genetics: Current and future potential Matt Culbertson
1:40	Gilt and sow management: Why do most systems fail to reach their potential? Gustavo Pizarro
2:20	Recent breakthrough findings in essential fatty acid nutrition and seasonal infertility R. Dean Boyd
3:00	BREAK
3:30	Day one critical care management: Critical tasks to maximize full value pigs Sarah Probst Miller
4:10	Records: Evaluating the production and financial performance of high-producing sow farms Tom Stein
4:50	People: What it takes to produce 34 pigs weaned/sow/year Larry Coleman
5:30	Seminar concludes

Practical Interventions that Impact Swine Housing

Date: Saturday, February 28 Time: 1:00 – 5:00 PM Location: Scotland A Fee: \$95 Seminar chair: Michelle Michalak

All pig housing is not alike, but there are many common factors. The housing environment affects the pigs' health and productivity. This workshop is filled with information that can be used on your next farm visit or team meeting. Presentations are by experts that specialize in swine production, including agricultural engineers, a livestock entomologist, a pest control expert, and a veterinarian. They will enlighten you with ideas and methods to improve the pigs' environment. Case studies will illustrate the swine practitioner's role in evaluating swine housing concerns. This workshop is practical and filled with tips and action steps.

1:00	Things to know about environmental sustainability: Keeping energy bills tamed Mike Brumm
1:45	Repair or replace? When is old too old? Scott Unke
2:30	Ventilation tweaks and upgrades to help the pig WIN! Jeff Kurt
3:00	BREAK
3:15	Bugs that bug you: Flies, biting insects, and meal moths Mike Catangui
4:00	Uninvited guests: Rodent control in production facilities John Beller
4:45	Roundtable Q & A All presenters
5:00	Seminar concludes
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Growing Pig Lameness: An emerging syndrome

Date: Saturday, February 28 Time: 1:00 – 5:00 PM Location: Scotland C Fee: \$95 Seminar chair: Matthew Turner

"Hey, Doc – pigs look great, but they can't walk. What can you give me to get them on the truck?" With margins reaching record highs, the cost of late finishing losses has never been more significant. Why do we lose so many pigs to lameness? This session will focus on diagnosis, prevention, and treatment of growing pig lameness. Attendees will pick up the most current tools and techniques to diagnose complex lameness issues, enabling their customers to improve their bottom line.

1:00	Growing pig lameness: A costly emerging issue Jess Waddell
1:30	Infectious causes of lameness: Diagnostic tools and approach Kent Schwartz
2:00	Using prevalence and severity alongside diagnostics to monitor lameness treatment plans over time Sarah Probst Miller
2:30	The pharmacology of lameness treatment Locke Karriker
2:45	BREAK
3:15	Emerging insights into classical cases of nutritionally induced lameness in pigs Laura Amundson (Rortvedt)
4:00	Diagnostic evaluation of metabolic lameness: New tools and techniques Kent Schwartz
4:30	A case of non-infectious lameness Pete Lasley
5:00	Seminar concludes

Public Policy, Pigs, and FDA: Why you should care

Date: Saturday, February 28 Time: 1:00 – 5:00 PM Location: Ireland C Fee: \$95 Seminar chair: Jennifer Stevens

Public policy and regulators at the US Food and Drug Administration (FDA) are playing a bigger role in how swine veterinarians work with clients and patients. This seminar will provide an update on FDA's Guidance for the Industry #213, while adding in the perspective on implementation from a state veterinarian. It will provide information and experiences about FDA inspections and prescription management that can be taken home and implemented in the practice and on the farm. AMDUCA and compounding will also be addressed. Finally, this seminar will provide an update from Washington, DC on policy that directly impacts swine veterinarians.

1:00	What's happening in Washington, DC that can impact what happens on the farm Liz Wagstrom
1:30	FDA CVM update on implementing Guidance 213 and updating the VFD rule Neal Bataller
1:50	A State Veterinarian's perspective on Guidance 213 Bret Marsh
2:15	Prescription management in our practices Todd Williams
2:35	FDA inspections of clinics and farms: How do we prepare and what do we do? Brad Leuwerke
2:55	BREAK
3:25	AMDUCA: What pain management options are available to swine veterinarians? Neal Bataller

- 3:45 AMDUCA and compounding in the real world: How do our practices conform? Mike Apley
 4:05 The Food Safety Modernization Act and what it means to you Leah Wilkinson
 4:35 Roundtable Q & A All presenters
- 5:00 Seminar concludes





Sunday, March 1 7:00 – 8:00 AM Great Hall Center

Coordinators: Monte Fuhrman, Tom Wetzell, and Mark Brinkman

Sponsored by Stuart Products

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. David Baum!

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!

Piglet Diarrhea

Date: Sunday, March 1 Time: 8:00 AM – 12:00 PM Location: Ireland B Fee: \$95 Seminar chair: Andrew Bents

- 8:00 Pathophysiology of piglet diarrhea during and after a PED infection Kurt Rossow
- 8:35 Porcine deltacoronavirus: What we know so far Kelly Lager
- 9:10 Clostridium perfringens and difficile: Proper diagnosis, prevention, and control Paulo Arruda
- 9:45 BREAK Sponsored by: MERIAL and NEWPORT LABORATORIES
- 10:15 Alternative scour prevention and control: On-farm experience Deb Murray
- 10:50 Alternative scour prevention and control: History and science of options Randy Simonson
- 11:25 E. coli control and prevention strategies Hans Koehnk
- 12:00 Seminar concludes



Biosecurity: Bridging the gap between science and compliance

Date: Sunday, March 1 Time: 8:00 AM – 12:00 PM Location: Scotland B Fee: \$95 Seminar chair: Adam Schelkopf

This seminar will provide a review of infectious disease transmission and biosecurity with respect to PRRS and PEDV, followed by a look into managing biosecurity within an integrated system. We will take a look at the next levels of biosecurity, as well as understanding the risks to our country's borders. Finally, there will be a look into biosecurity within the poultry industry and human behavior. A roundtable discussion will conclude the seminar.

8:00	Biosecurity: PRRS, PEDV, and a history of progress Scott Dee
8:45	Managing biosecurity in an integrated system Deborah Murray
9:30	BREAK Sponsored by: MERIAL and NEWPORT LABORATORIES
10:00	Biosecurity to the extremes and protecting our borders Dick Hesse
10:45	Biosecurity: Driving execution Jean-Pierre Vaillancourt
11:30	Biosecurity roundtable Q&A All speakers
12:00	Seminar concludes

Nutrition and Feeding in the Era of PED Virus

Date: Sunday, March 1 Time: 8:00 AM – 12:00 PM Location: Scotland A Fee: \$95 Seminar chair: Joel Spencer

The introduction of PED virus into North America has intensified the focus on feeding health-challenged pigs and early-weaned pigs. This session delves into the latest science and on-farm practices for feeding pigs that are challenged by health status or young age. The session will also provide the latest knowledge of the relationships between PEDV/PDCoV transmission and feed.

8:00	Neonatal nutritional concepts learned by using piglets as models for preterm human nutrition Randy Buddington
8:45	Nutrition concepts for early-weaned PEDV pigs and nutrition-related welfare concerns Laura Greiner
9:30	BREAK Sponsored by: MERIAL and NEWPORT LABORATORIES
9:50	Research update on nutrition and metabolism needs for health-challenged pigs Nick Gabler
10:40	State of the knowledge: The relationships between PEDV/PDCoV transmission and feed Russ Nugent
11:40	Q & A Roundtable All speakers
12:00	Seminar concludes

Swine Medicine for Students

Date: Sunday, March 1 Time: 8:00 AM – 12:00 PM Location: Ireland A Fee: \$95; No charge for veterinary students or 2013 or 2014 DVM graduates Seminar co-chairs: Angela Supple and Jeremy Pittman

The student pre-conference seminar has been set up to provide supplementary and useful information that students may not receive in their veterinary curriculum. The goal is to provide this information through the experience of recent graduates who remember what it was like to be a student. This year, we will return to a topic that is consistently requested and in which many students feel deficient upon graduating: medication. In addition, the ever-popular interactive case will return in this session. To close the session, we will have a question-and-answer panel of recent graduates (within 1 year) from a variety of practice types.

8:00	Introduction
8:05	Essentials of farm pharm Jeremy Pittman
9:00	Practical farm pharm Amber Stricker
9:50	BREAK Sponsored by: MERIAL and NEWPORT LABORATORIES
10:00	Multi-sourced commingling event and interactive case Angela Supple and Jeremy Pittman
11:30	Q & A: What to expect the first year out? Recent Graduate Panel
12:00	Seminar concludes

Boar Stud Health, Biosecurity, and Technology

Date: Sunday, March 1 Time: 8:00 AM – 12:00 PM Location: Scotland C Fee: \$95 Chair: Joe Fent

Our focus is two-fold: first, to address the challenge of PEDV specific to boars, and second, to examine the ways boar studs influence reproductive performance. Whether you are responsible for the health of a boar stud, need to know more about the judicious use of CASA systems to better apply motility, morphology, and morphometry parameters at the production level, have an interest in reference lab flow cytometry analysis, or work primarily with sow farms and want to hear a western European perspective on what boar studs can and should be doing to protect and enhance your client's performance, this is the session for you. Swine practitioners and consultants will leave this seminar with practical information they can apply immediately, and will gain confidence in becoming familiar with topics they are likely to encounter in the near future.

8:00	PEDV and boars: Case studies from practitioner experience Marlena McCarty and Bob Thompson
8:45	PEDV and boars: Research update Darwin Reicks
9:15	Internal quality control performed at boar studs: The importance to the breeding herd veterinarian Hanneke Feitsma
9:45	BREAK Sponsored by: MERIAL and NEWPORT LABORATORIES
10:00	Currently available technologies to refine semen analysis, processing decisions, and boar usage Claus Hansen
11:00	Chromosomal causes of impaired reproductive performance in swine Alain Pinton
12:00	Seminar concludes 25

Research Topics

Research Topics

Date: Sunday, March 1 Time: 8:00 AM – 12:00 PM Location: England Session chair: Chris Rademacher

- 8:00 Viremia and tissue distribution of porcine epidemic diarrhea virus in weaned pigs after experimental infection Mahesh Bhandari
- 8:15 Evaluation of porcine epidemic diarrhea virus transmission and the immune response in growing pigs Kimberly Crawford
- 8:30 Defining PEDV maternal immunity and correlates of neonatal protection Korakrit Poonsuk
- 8:45 Comparison of the pathogenesis differences of the US PEDV prototype and variant strains in neonatal piglets Jiangiang Zhang
- 9:00 In vitro evaluation of serological cross-reactivity and cross-neutralization between the US PEDV prototype and variant strains Qi Chen
- 9:15 Does previous infection of sows with a "mild" (variant) strain of PED virus confer significant protection against infection with a "severe" (prototype) strain? Dane Goede
- 9:30 Airborne transmission of PED virus and effect of the electrostatic particle ionization technology on decreasing airborne swine viruses Carmen Alonso
- 9:45 BREAK Sponsored by: MERIAL and NEWPORT LABORATORIES

Research Topics

- 10:15 Risk assessment of feed ingredients of porcine origin as vehicles for transmission of porcine epidemic diarrhea virus (PEDV)
 Fernando Sampedro
- 10:30 A porcine deltacoronavirus serological survey using an indirect PDCoV anti-IgG ELISA confirms that PDCoV infection in US pigs is low and has been present since 2010 Tanja Opriessnig
- 10:45 Histopathological and immunohistochemical characterization of pigs experimentally infected with porcine deltacoronavirus Sarah Vitosh-Sillman
- 11:00 Effects of porcine reproductive and respiratory syndrome (PRRS) modified live virus vaccine on the host response of nursery pigs to co-infection with PRRS virus and porcine circovirus type 2b Megan Niederwerder
- 11:15 Dynamics of co-circulating H1N1 and H3N2 influenza A viruses in a cohort of pigs after weaning Andres Diaz
- Effect of timing of gilt relocation from group pens to individual stalls on measures of fertility and well-being
 Laura Greiner
- 11:45 The timing of estrus and ovulation in gilts synchronized using Matrix and the effects of synchronizing ovulation using OvuGel[®] on fertility Rob Knox
- 12:00 Session concludes

Student Seminar

Date: Sunday, March 1 Time: 1:00 – 5:15 PM Location: Great Hall North Session co-chairs: Alex Ramirez and Peter Davies

Sponsored by ZOETIS

1:00	Impact of piglet weight and weaning age on influenza A virus infection and nucleoprotein antibody levels at weaning Hunter Baldry, University of Minnesota
1:15	An investigation of PRRSV-positive PCR findings in weanling pigs using a novel sampling method Brigitte Mason, University of Illinois
1:30	The effects of vaccination timing on porcine circovirus type 2 viremia Colleen Crozier, North Carolina State University
1:45	Comparison of sow decubital shoulder ulcer treatments Emily Renner, University of Minnesota
2:00	Effect of porcine epidemic diarrhea virus infectious doses on outcome of infection in naïve neonatal piglets and weaned pigs Joseph Thomas, Iowa State University
2:15	Persistence of clinical signs associated with a porcine epidemic diarrhea virus outbreak on a farrow-to-grow swine operation in southwestern Ontario: A case study Ryan Tenbergen, University of Guelph
2:30	Correlation of semi-quantitative reverse transcription polymerase chain reaction results for porcine epidemic diarrhea virus and the presence of positive immunohistochemistry Alyssa Taplett, Iowa State University
2:45	BREAK Sponsored by: HARRISVACCINES

3:15	Evaluation of an accelerated hydrogen peroxide disinfectant to inactivate PEDV in swine feces on metal surfaces found in livestock trailers Jacqueline Myers, Iowa State University
3:30	Comparison of ante-mortem sampling procedures to post-mortem bronchial swabs for detection of <i>Mycoplasma hyopneumoniae</i> by PCR Christopher Sievers, Iowa State University
3:45	Evaluation of disinfectants to neutralize porcine epidemic diarrhea virus Scott Radke, Iowa State University
4:00	Use of environmental sampling and bioassay as supportive diagnostics in eliminating porcine epidemic diarrhea virus from sow farms Kathleen Wood, North Carolina State University
4:15	A solution to controlled exposure of feedback material in group-housed gestating sows Alexandra John, University of Pennsylvania
4:30	Evaluation of a porcine epidemic diarrhea vaccine to reduce preweaning mortality Amanda Harris, Iowa State University
4:45	Evaluating the use of Swiffer [®] pads to detect porcine epidemic diarrhea virus in the farrowing environment Quinn Robinson, Iowa State University
5:00	Pharmacokinetics of translactational delivery of the analgesic meloxicam Brianna Peters, University of Tennessee
5.15	Session concludes

STUDENT RECEPTION

Sponsored by: MERCK ANIMAL HEALTH

> Sunday, March 1 8:30 – 11:00 PM Great Hall North

Industrial Partners

Date: Sunday, March 1 Time: 1:00 – 4:30 PM Location: Great Hall Center Session chair: Dwain Guggenbiller

- 1:00 Impact of Neo-Terramycin[®], Mecadox[®], Denagard[®] plus CTC and Denagard[®] feeding programs on nursery pigs with PEDV, Salmonella serovars, and E coli
 Dwain Guggenbiller
 PHIBRO ANIMAL HEALTH
- 1:15 Novel tool for on-farm quantification of prevalence and severity of sow claw lesions and lameness Jerry Torrison ZINPRO CORPORATION
- 1:30 How post-cervical artificial insemination (PCAI) impacts the sow farm and reduces genetic lag John Sonderman DNA GENETICS
- 1:45 Practicalities of batch farrowing implementation Juan Carlos Pinilla PIC NORTH AMERICA
- 2:00 New developments in dietary acidifier usage for swine Joseph Soto BIOMIN USA
- 2:15 Map-based comparative genomic analysis of a virulent *Streptococcus suis* serotype 2 strain against recent field isolates Paulraj Lawrence NEWPORT LABORATORIES
- 2:30 Virulence-associated multi-locus genetic typing of Streptococcus suis Srivishnupriya Anbalagan NEWPORT LABORATORIES

2:45	BREAK Sponsored by: HARRISVACCINES
3:15	Development of real-time PCR reagents for the detection of porcine epidemic diarrhea virus and porcine deltacoronavirus Michael Angelichio IDEXX
3:30	System-based PRRS control: A summary of 4 large system PRRS control projects John Kolb BOEHRINGER INGELHEIM VETMEDICA
3:45	Evaluation of the Enterisol [®] Salmonella T/C vaccine strains against challenge with a virulent <i>S</i> Typhimurium isolate Axel Neubauer BOEHRINGER INGELHEIM VETMEDICA
4:00	<i>Mycoplasma hyopneumoniae</i> gilt acclimation and sow herd stability: Essentials to the systematic control approach Eduardo Fano BOEHRINGER INGELHEIM VETMEDICA
4:15	Efficacy of an innovative food to reduce neonatal losses in piglets and increase pre-weaning growth Hervé Gabillet EARLYPIG

4:30 Session concludes



Industrial Partners

Date: Sunday, March 1 Time: 1:00 – 4:15 PM Location: Great Hall East/West Session chair: Adam Moeser

- 1:00 Detection of tylvalosin (Aivlosin[®]) in synovial fluid from nursery pigs Paisley Canning PHARMGATE ANIMAL HEALTH
- 1:15 Enterotoxigenic *E. coli* pathophysiology and new insights on the impact of gut function and health Adam Moeser ELANCO ANIMAL HEALTH
- 1:30 Evaluation of the effects of narasin on the growth performance and viral shedding of nursery pigs infected with porcine epidemic diarrhea virus Chris Puls ELANCO ANIMAL HEALTH
- 1:45 A health information management system to analyze diagnostic data for rapid, precise decision-making Joseph Connor GLOBALVETLINK
- 2:00 Nursery, finishing and wean-to-finish cost-ofproduction data benchmarking Tom Stein METAFARMS
- 2:15 Post-PEDV sow reproductive performance following an epidemic James Lehman MERCK ANIMAL HEALTH
- 2:30 Circumvent[®] PCV M G2: Impact of vaccination timing and interval on PCV2 efficacy and serological responses Brad Thacker MERCK ANIMAL HEALTH

2:45	BREAK Sponsored by: HARRISVACCINES
3:15	PCV2 vaccination update: Field experiences and serological test comparisons Brad Thacker MERCK ANIMAL HEALTH
3:30	Vaccination of sows with CIRCOVAC [®] and piglet PCV2 vaccination gives better chances to control PCV2 circulation in the pig flow Francois Joisel MERIAL
3:45	The impact of supportive care on Challenged Pig recovery Dan McManus PURINA ANIMAL NUTRITION
4.00	A new PRRSV FLISA highly correlated with IPMA

- 4:00 A new PRRSV ELISA, highly correlated with IPMA Eric van Esch BIOCHEK
- 4:15 Session concludes



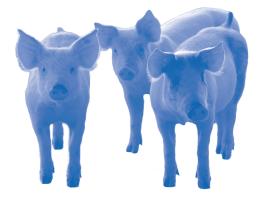
Industrial Partners

Date: Sunday, March 1 Time: 1:00 – 4:15 PM Location: England Session chair: Gene Nemechek

- 1:00 New findings for injectable and oral fat-soluble vitamins Robert Stuart STUART PRODUCTS
- EUTHANEX[®] AgPro[™] humane euthanasia with CO2: How it meets AVMA *Guidelines for the Euthanasia of Animals*: 2013 Edition Corky Feuerbach VALUE-ADDED SCIENCE & TECHNOLOGIES
- 1:30 Comparison of culture and PCR from oral fluids for the detection of *Brachyspira hyodysenteriae* Perle Boyer NOVARTIS ANIMAL HEALTH US
- 1:45 Solubility of Florvio[®] under various water quality conditions in the laboratory Keith Erlandson NOVARTIS ANIMAL HEALTH US
- Evaluation of reproductive performance using OvuGel[®] with a single fixed-time artificial insemination protocol in six commercial swine farms
 Charles Francisco
 JBS UNITED ANIMAL HEALTH
- 2:15 Fostera PRRS keeps pigs growing in the face of heterologous challenge Brett O'Brien ZOETIS
- 2:30 Field efficacy of an experimental porcine epidemic diarrhea vaccine, killed virus, administered to pregnant sows
 Ashley DeDecker
 ZOETIS

2:45	BREAK Sponsored by: HARRISVACCINES
3:15	Anti-inflammatory properties of Draxxin [®] (tulathromycin) Doug King ZOETIS
3:30	ESF implementation options: Finding the right solution to meet your clients' needs Jeff Schoening AUTOMATED PRODUCTION SYSTEMS
3:45	Feeding a proprietary animal protein mitigates PRRSV-induced effects in mature gilts Ran Song NUTRIQUEST
4:00	Evaluation of PED RNA vaccine efficacy in a dam vaccination, suckling pig challenge model Mark Mogler HARRISVACCINES

4:15 Session concludes



Veterinary Student Posters (#1 – #46)

Location: Events Center Sunday, March 1 12:00 – 5:00 PM Authors present from 12:00 – 1:00 PM Monday, March 2 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**

- A porcine reproductive and respiratory syndrome virus vaccine based on the synthetic attenuated virus engineering (SAVE) approach is attentuated and effective in protecting against macroscopic lung lesions associated with homologous virus challenge
 Danielle Evenson, Iowa State University
- A retrospective study of *Brachyspira hampsonii* in western Canadian swine using paraffin-embedded colon tissue from diagnostic cases
 Stephanie Derbawka, University of Saskatchewan
- Effect of reconstitution of an influenza A swine vaccine with another vaccine on the serological response
 Daniel Gascho, Purdue University
- Evaluation of deworming protocols in breeding herds using a survey and fecal examination
 Cassy Griebel, University of Minnesota
- Individual Pig Care: Determing the best management practice for the B-pig
 Chelsea Onken, Iowa State University
- Investigation of neutralizing antibodies to determine lactogenic immunity levels following exposure to porcine epidemic diarrhea virus
 Erin Jobman, Kansas State University

- Alternative methods of measuring swine body temperature
 Amanda Jara, University of Georgia
- Serology comparison of pigs vaccinated with Ingelvac[®] PRRS MLV at different ages, from a PRRSV positive stable source
 Tyler Te Grotenhuis, Iowa State University
- Vaccination mitigates the negative impact PRRSV infection has on the pharmacokinetics of ceftiofur crystalline free acid in pigs Joel Sparks, Iowa State University
- 10. Comparison of 4 euthanasia methods in weaning age pigletsDan Breuer, Iowa State University
- 11. Elucidating positive states of sow welfare Bernadetta Bernatowicz, University of Pennsylvania
- Comparison of sampling methods for detection of influenza A virus
 Kayla Ohrt, Iowa State University
- The effect of translactational antibodies on preweaning mortality in a porcine epidemic diarrhea virus exposed herd
 Donna Drebes, University of Minnesota
- Differences in host genetics influence PCVAD susceptibility based on experimental challenges with porcine circovirus 2b
 Taylor Engle, Virginia-Maryland Regional College of Veterinary Medicine
- Evaluation of Flu DETECT antigen test kit using three different sampling methods during natural infections of influenza A virus in swine Joseph Yaros, Cornell University
- Determing Mycoplasma hyopneumoniae viability through the use of ethidium monoazide Alyssa Anderson, University of Minnesota

Continued on next page

- Swine handling facilities at small regional pork processors
 Kayla Blake, Auburn University
- Characterization of lesions of pigs rejected at finisher placement
 Daniel Boykin, North Carolina State University
- Prophylactic antibiotic and navel care used for the prevention of umbilical hernias in swine
 Daniel Carreño, North Carolina State University
- 20. Comparison of performance in pigs administered Fostera PRRS at processing or weaning with subsequent PRRSV challenge in nursery Laura Carroll, North Carolina State University
- 21. Feral swine and brucellosis in the United States Adam Copeland, Texas A&M University
- Influence of caretaker preferences and implementation of protocols on the use of carbon dioxide gas for piglet euthanasia
 Lindsay Daly, Cornell University
- Characterization and management of *Mycoplasma hyopneumoniae* status in a newly established genetic multiplication herd
 Natalie Didier, University of Illinois
- 24. The effects of hemoglobin levels on growth rates in pigs Sarah Dunnigan, North Carolina State University
- Examining spatial dynamics of influenza A virus in swine at agricultural fairs
 Alexa Edmunson, The Ohio State University
- 26. Comparison of tracheobronchial mucus collection and RT-PCR with seroconversion for assessment of herd prevalence
 Brittany Farron, University of Illinois
- 27. Influence of the neonatal piglet microbiota on survivability and wean weight
 Marissa Garry, University of Minnesota

- 28. Effects of third generation cephalosporin administration at piglet processing on mortality, morbidity, average daily gain, and castration wound-healing
 Kristen Hayman, Iowa State University
- 29. Biosecurity audits of grow-finish sites Jessica Johnson, University of Minnesota
- Evaluation of diagnostic sampling types to evaluate porcine epidemic diarrhea virus shedding status after known exposure to replacement gilts
 Henry Johnson, University of Illinois
- 31. An evaluation of 4 different mobile phone applications for on-farm data collection Mackenzie Kelling, University of Illinois
- The association between environmental conditions and diseases in nursery pigs
 Kaushalya Kuruppu, University of Guelph
- Monitoring of porcine reproductive and respiratory syndrome virus in Ontario swine herds and assessing its impact on morbidity and mortality
 Roxana Lelewski, University of Guelph
- 34. Seasonal infertility: A clinical case analysis Emily Mahan-Riggs, North Carolina State University
- Investigation into increased rectal, uterine, and vaginal prolapses in commercial sow herds
 Brittney McLamb, North Carolina State University
- **36.** Environmental enrichment for growing swine Heather Neureuther, University of Guelph
- Comparison of Florvio[®] and amoxicillin impacts on clinical diarrhea and average daily gain
 Mara Nix, University of Illinois

- A pilot study evaluating maternal antibody interference with Ingelvac PRRS MLV and Fostera PRRS vaccines Mary O'Loughlin, Iowa State University
- 39. The challenge of type 1 PRRSV isolation and propagation: A reviewChris Olsen, Iowa State University
- 40. Behavioral preference for different enrichment types in a commercial sow herdLynn Pavlovic, University of Pennsylvania
- Determining if oral fluids can detect Lawsonia intracellularis in a commercial pen environment Megan Pieters, Iowa State University
- 42. Systematic investigation of elevated piglet mortality in a high health swine herdAmy Sneed, University of Illinois
- 43. Visual evaluation of sleep behavior in crated gestating sows
 John Sopronyi, University of Pennsylvania
- **44.** A retrospective study on the distribution of MLST types ST1, ST25, and ST28 of *Streptococcus suis* serotypes 1/2 and 2 clinical strains isolated in the US and evaluation of immunogenicity of each MLST in mice by vaccination **Molly Stafne, Iowa State University**
- 45. Influenza A virus testing: Which sample material should you use?Christine Szablewski, The Ohio State University
- 46. Prevalence of coccidiosis in nursing piglets Emily Zakrajsek, University of Guelph

Research Topics Posters (#47 - #62)

Location: Events Center Sunday, March 1 12:00 – 5:00 PM Authors present from 12:00 to 1:00 PM Monday, March 2 9:00 AM – 5:00 PM

- Particle size characterization of influenza A, PRRS, and PED viruses in aerosols from acutely infected pigs Carmen Alonso
- Exploring the uses of a PRRS area regional control and elimination database for disease investigation Andreia Arruda
- 49. Determining the frequency and associated risk factors of type A influenza virus infections in swine upon arrival at agriculture exhibitions Nola Bliss
- 50. Novel molecular epidemiology tools to assess the relation among porcine reproductive and respiratory syndrome viruses causing outbreaks in sow farms Andres Perez
- Effects of gilt body weight on litter characteristics under commercial conditions Marcio Goncalves
- 52. Evaluation of a PED vaccine on piglet mortality and sow immunityLaura Greiner
- 53. Cross-protection after challenge with a contemporary, heterologous PRRS virus in pigs vaccinated with Fostera PRRS[™]
 Drew Magstadt
- 54. 26-week duration of respiratory immunity for Fostera PRRS[™] vaccine in day-old pigletsBrett O'Brien

Research Topics Posters

- 55. Experimental PRRS vaccine for prevention of reproductive disease in gestating giltsBrett O'Brien
- 56. Evidence from bioassays that commercial spray drying processes are effective at inactivating PEDV
 Tanja Opriessnig
- Impact of mixing strategies on animal-based measures of welfare in sows fed via electronic sow feeder Meghann Pierdon
- 58. Safety and immunogenicity of an experimental porcine epidemic diarrhea vaccine, killed virus
 Vicki Rapp-Gabrielson
- Biological hazard analysis and biosecurity assessments for feed manufacturing and distribution in the swine feed supply chain
 Tim Snider
- Quantitative evaluation of nasal carriage of Staphyloccus aureus in swine veterinarians Jisun Sun
- Seasonal variation in prevalence of different respiratory pathogens during post-weaning and fattening period in Belgian and Dutch pig herds using a tracheobronchial swab technique
 Frederic Vangroenweghe
- 62. Survey on pig farmers' current knowledge on important aspects of Good Vaccination Practices under field conditions in the Netherlands
 Frederic Vangroenweghe

Industrial Partners Posters (#63 - #72)			
Location: Grand Hall (conf center, 1 st floor)			
Sunday, March 1			
12:00 – 5:00 pm			
Authors present from 12:00 to 1:00 PM			
Monday, March 2			
9:00 am – 5:00 pm			

- 63. Effect of piglet birth weight on performance and profitability
 Darwin Kohler
 BABCOCK GENETICS
- 64. In vitro activity of 12 antimicrobials against an oral attenuated live *Lawsonia intracellularis* vaccine isolate Bernd Grosse Liesner
 BOEHRINGER INGELHEIM VETMEDICA
- 65. Comparative performance of Hyogen[®] and three commercial Mhyo vaccines: Slaughterhouse evaluation William M.T. Costa
 CEVA ANIMAL HEALTH BRAZIL
- 66. The use of antemortem tracheobronchial mucus collection technique for *Mycoplasma hyopneumoniae* diagnostics
 Jessica Bates
 ELANCO ANIMAL HEALTH
- 67. Evaluation of gilt reproductive performance using OvuGel[®] with a single fixed-time artificial insemination protocol
 Michael Johnston
 JBS UNITED ANIMAL HEALTH
- 68. Diagnostic and control strategies for managing PCV2 in the breeding herd
 Keith Aljets
 MERCK ANIMAL HEALTH
- 69. Market hog sales data benchmarkingTom SteinMETAFARMS

Industrial Partners Posters

 70. A case report on discrepant serologic results obtained from ELISA and Western blot immunoassay for young pigs that received two vaccinations with *Mycoplasma hyopneumoniae* vaccine
 Boh Chang Lin MVP LABORATORIES

- 71. Lawsonia shedding in grow-finish pigs given a partial dose of Lawsonia vaccine. A case study
 Bob Evelsizer
 NOVARTIS ANIMAL HEALTH US
- 72. Comparative evaluation of two-dose PCV/M hyopneumoniae vaccination protocols in swine challenged with PCV and M hyopneumoniae Bobby Cowles ZOETIS



Located in Hampton Court Booth

Technical Tables

The marketplace devoted to the needs of the swine veterinarian.



Visit the Technical Tables Exhibit!

With more than 75 companies and organizations participating (see page 8), the Technical Tables offer the perfect opportunity to learn about the latest products and services available to you and your clients.

EXHIBITS OPEN

Monday, March 2 9:00 AM – 5:00 PM

Tuesday, March 3 8:00 AM – 12:00 PM

> LOCATION Events Center

All refreshment breaks on Monday and Tuesday will take place in the Events Center. Take some time to visit with our exhibitors and thank them for their support of the AASV Annual Meeting!



Monday, March 2 7:00 – 9:00 AM Veranda (Lobby Level)

The AASV is pleased to host the Spouse Hospitality Suite at the Buena Vista Palace. Visit with old friends and make new acquaintances as you enjoy pastries, juice, and coffee. This is a great place to plan the rest of your day with fellow AASV spouses and families.

AASV Foundation Big, Hairy, Audacious Raffle

Here's a fabulous opportunity for ALL AASV members to support the Foundation and have a ______chance to win – drum roll, please –

A BRAND NEW

That's right - **MVP LABORATORIES** has demonstrated their passionate support of the AASV Foundation by donating a **car valued at \$25,000** to raffle in Orlando, with all proceeds benefiting the foundation.

> The raffle drawing will be held during the Live Auction on **Monday, March 2**. It is not necessary to be present for the drawing in order to win.

For \$100 per raffle ticket, you can support the foundation AND have a chance to win a brand new vehicle valued at \$25,000. Contact the AASV office or one of the Auction Committee members to purchase your ticket(s) and show your support for the AASV Foundation!

AASV Foundation Auction



Monday, March 2 Empire Ballroom

Follow Your Passion!

It's only fitting that this year's AASVF Auction Committee has dedicated the 2015 fundraiser in honor of two of the foundation's most passionate supporters, the late Dr Rod Johnson and his wife, Jean. Rod and Jean donated items for the annual Foundation Auctions as generously and enthusiastically as they requested donations from others, and then followed up with their active participation in the bidding. The example set by Rod and Jean reminds us all of the greatness that can be achieved when we put the words "Follow your passion" into action.

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, March 2. 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

Monday General Session

Beyond Our Oath: Integrity, Intensity, Professionalism Date: Monday, March 2 Time: 8:00 AM – 12:30 PM Location: Great Hall East/West Program chair: Ron Brodersen				
9:00	Alex Hogg Memorial Lecture Influence and advocacy: Opportunities for swine veterinarians C. Scanlon Daniels			
10:00	BREAK Co-sponsored by HOG SLAT			
PED, T	GE, and Enteric Immunology:			
10:30	Coronavirus overview and maternal vaccines to induce lactogenic immunity to PEDV in swine Linda Saif			
11:10	Gut immunity – What are the keys to protection? Chris Chase			
11:50	Coronavirus clinical presentation Dick Hesse			
12:30	LUNCHEON			

AASV LUNCHEON

Sponsored by: BOEHRINGER INGELHEIM VETMEDICA, INC

> Monday, March 2 12:30 – 2:00 PM

Empire Ballroom

Monday Session #1

Managing Enteric Coronaviruses at the Farm Level

Date: Monday, March 2 Time: 2:00 – 5:30 PM Location: Great Hall North Session chair: Jeff Harker

2:00 Managing the initial break Elissa Schlueter

- 2:25 Intentional exposure techniques Matthew Turner
- 2:50 PED rebreaks Matt Ackerman

3:15 BREAK Sponsored by CEVA ANIMAL HEALTH

- 3:45 Managing chronic farms Luc Dufresne
- 4:10 Risk factors for chronic farms Jeremy Pittman
- 4:35 Time to stability/negative Dane Goede
- 5:00 Roundtable discussion All speakers
- 5:30 Session concludes

AASV AWARDS RECEPTION



Monday, March 2 6:30 – 8:30 PM

Empire Ballroom

Monday Session #2

Animal Welfare

Date: Monday, March 2 Time: 2:00 – 5:30 PM Location: Great Hall Center Session chair: George Charbonneau

2:00	What's coming down the pipe? Donald Lay
2:30	Canada's new pig code Blaine Tully
2:45	AMDUCA and pain mitigation; What tools are available to veterinarians? Mike Apley
3:15	Meloxicam use in pain management Locke Karriker
3:30	BREAK Sponsored by CEVA ANIMAL HEALTH
4:00	Feeding sows in pens: Keeping it simple Chad Smith
4:15	Advantages and challenges of implementing electronic sow feeding (ESF) Thomas Parsons
4:30	Beta-agonists and animal welfare Jeremy Marchant-Forde
4:45	Feeding/nutrition interactions affecting aggression Jeremy Marchant-Forde
5:00	B.E.S.T.: Identifying the sick or compromised pig Madonna Benjamin
5:15	Caring for pigs in hospital pens Suzanne Millman

5:30

Session concludes

Monday Session #3

Significant Swine Disease Topics

Date: Monday, March 2 Time: 2:00 – 5:30 PM Location: Great Hall East/West Session chair: Mitch Christensen

2:00	PCV2: Tools for assessing the subclinical impact
	Kent Schwartz

- 2:30 Influenza A viruses in swine: Diversity, diagnostics and interpretation Phil Gauger
- 3:00 Parainfluenza: Influenza-like syndromes Kyoung-Jin Yoon
- 3:30 BREAK Sponsored by CEVA ANIMAL HEALTH
- 4:00 *Mycoplasma hyopneumoniae* elimination: Swine Vet Center experience Paul Yeske
- 4:30 PRRS diagnostic trends: What changed with PRRS behavior? Albert Rovira
- 5:00 PRRS update from North Carolina: Regional spread of 1-7-4 virus Ashley Johnson

5:30 Session concludes



AASV FOUNDATION AUCTION

Monday, March 2 Empire Ballroom

Silent Auction: Bidding starts at noon Live Auction: Immediately following the AASV Awards Reception

Tuesday General Session

Transboundary or FAD: What difference does it make?

Date: Tuesday, March 3 Time: 8:00 AM – 12:00 PM Location: Great Hall North/Center Session chair: Ron Brodersen

- 8:00 Global effects of disease on world pork production Patrick Webb
- 9:00 Emerging diseases: The past and the future Robert Desrosiers
- 10:00 BREAK
- **10:30** Building on the Swine Futures Project: Detecting and responding to an emerging animal disease **Beth Lautner**
- 11:00 Protecting ourselves: The Feed Safety Modernization Act Henry Turlington
- 11:30 What veterinarians will do differently in the future Max Rodibaugh
- 12:00 Session concludes



AASV BUSINESS BREAKFAST

Tuesday, March 3 7:00 – 8:00 AM

Scotland

Matt Ackerman **Keith Aljets Carmen Alonso** Laura Amundson (Rortvedt) Srivishnupriya Anbalagan Alyssa Anderson **Michael Angelichio** Mike Apley Andreia Arruda Paulo Arruda Hunter Baldry Neal Bataller Jessica Bates John Beller Madonna Benjamin Bernadetta Bernatowicz Mahesh Bhandari Kayla Blake Nola Bliss R. Dean Boyd Perle Bover **Daniel Boykin Daniel Breuer** Egan Brockhoff Shamus Brown Mike Brumm **Randy Buddington Emily Byers Paisley Canning Daniel Carreño** Laura Carroll Mike Catangui **Chris Chase** Qi Chen Jane Christopher-Hennings **Travis Clement** Larry Coleman Joseph Connor Adam Copeland William M.T. Costa **Bobby Cowles Kimberly Crawford Colleen Crozier** Matt Culbertson

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Lindsay Daly C. Scanlon Daniels Ashley DeDecker Scott Dee Stephanie Derbawka **Robert Desrosiers** Andres Diaz Natalie Didier Donna Drebes Steve Dritz Paul DuBois Luc Dufresne Sarah Dunnigan Alexa Edmunson **Mike Eisenmenger Taylor Engle Keith Erlandson Bob Evelsizer Danielle Evenson** Eduardo Fano **Brittany Farron** Hanneke Feitsma **Corky Feuerbach** Charles Francisco Monte Fuhrman Hervé Gabillet Nicholas Gabler Marissa Garry **Daniel Gascho Phil Gauger** Luis Gimenez-Lirola Dane Goede Marcio Goncalves Laura Greiner **Cassy Griebel** Bernd Grosse Liesner Dwaine Guggenbiller **Claus Hansen** Abbey Harding Amanda Harris **Kristen Hayman** Dale Hendrickson **Dick Hesse Derald Holtkamp**

Ithaca, NY Dalhart, TX Rose Hill, NC Pipestone, MN Saskatoon, SK St-Hyacinthe, QC St Paul, MN DeLand, IL St Paul, MN Manhattan, KS Cameron, OK Shawnee Mission, KS Raleigh, NC Columbus, OH Windom, MN Blacksburg, VA Greensboro, NC Fairmont, MN Ames, IA St Joseph, MO Champaign, IL Northfield, MN Mason City, IA Sheridan, IN Canistota. SD FRANCE Ames, IA St Paul, MN West Lafayette, IN Ames, IA Ames, IA St Paul, MN Manhattan, KS Carthage, IL Falcon Heights, MN St Joseph, MO Columbus, OH DENMARK Collinsville, IL Jewell, IA Ames, IA Farmland, IN Manhattan, KS Ames, IA

Micah Jansen Amanda Jara Erin Jobman Alexandra John Ashley Johnson Henry Johnson Jessica Johnson Michael Johnston Francois Joisel Locke Karriker Mackenzie Kelling Doug King **Rob Knox** Hans Koehnk **Darwin Kohler** John Kolb Jeff Kurt Kaushalya Kuruppu **Kelly Lager** Pete Lasley **Beth Lautner** Paulraj Lawrence **Donald Lay** Jamie Lehman Roxana Lelewski Mike Lemmon Brad Leuwerke **Boh Chang Lin Drew Magstadt Emily Mahan-Riggs** Jeremy Marchant-Forde Bret Marsh **Brigitte Mason** Marlena McCarty **Brittney McLamb** Dan McManus Suzanne Millman Adam Moeser Mark Mogler Chris Mowrer **Deborah Murray** Bryan Myers Jacqueline Myers Axel Neubauer

Wheeler, IL Athens, GA Manhattan, KS Philadelphia, PA Raleigh, NC Champaign, IL Roseville, MN Sheridan, IN FRANCE Ames, IA Savoy, IL Florham Park, NJ Urbana, IL Jewell, IA Rochester, MN Ames, IA Fairmont, MN Scarborough, ON Colo, IA Trenton, MO Johnston, IA Worthington, MN West Lafavette, IN Sullivan, IL Guelph, ON Albion, IN Janesville, MN Omaha, NE Ames, IA Angier, NC West Lafayette, IN Indianapolis, IN Savoy, IL Hadar. NE Raleigh, NC Dakota Dunes, SD Ames, IA Raleigh, NC Ames, IA Ames, IA Jackson, MN Farley, IA Ames, IA St Joseph, MO

Heather Neureuther Megan Niederwerder Mara Nix **Russ Nugent** Brett O'Brien Kayla Ohrt Mary O'Loughlin Chris Olsen Chelsea Onken Tanja Opriessnig Tom Parsons Lynn Pavlovic **Brent Pepin** Andres Perez **Brianna Peters Meghann Pierdon Megan Pieters** Juan Carlos Pinilla Alain Pinton Andrea Pitkin Jeremy Pittman Gustavo Pizarro Dale Polson Korakrit Poonsuk Sarah Probst Miller Chris Puls Scott Radke Vicki Rapp-Gabrielson **Darwin Reicks Emily Renner Quinn Robinson** Max Rodibaugh **Kurt Rossow** Marissa Rotolo Albert Rovira Larry Rueff Linda Saif Fernando Sampedro **Elissa Schlueter** Pete Schneider Jeff Schoening Loni Schumacher Kent Schwartz **Christopher Sievers**

Guelph, ON Manhattan, KS Urbana, IL Springdale, AR Mankato, MN Ames, IA Ames, IA Johnston, IA Ames, IA Ames, IA Kennett Square, PA Harrisburg, PA Postville, IA St Paul, MN Knoxville, TN Bainbridge, PA Ames, IA Hendersonville, TN FRANCE Fairmont, MN Wakefield, VA Pipestone, MN Ankeny, IA Ames, IA Monticello, IL Greenfield, IN Ames, IA Kalamazoo, MI St Peter, MN Lauderdale, MN Ames, IA Frankfort, IN St Paul, MN Ames, IA St Paul, MN Greensburg, IN Wooster, OH St Paul, MN Carlyle, IL Waterloo, IA Pocahontas, IA Manhattan, KS Ames, IA Ames, IA

Randy Simonson Chad Smith Amy Sneed Tim Snider John Sonderman Ran Song John Sopronyi Joseph Soto Joel Sparks **Molly Stafne** Tom Stein **Greg Stevenson** Amber Stricker **Rob Stuart** Jisun Sun Angela Supple **Christine Szablewski** Alyssa Taplett Tyler Te Grotenhuis **Rvan Tenbergen Brad Thacker** Joseph Thomas **Bob Thompson Montse Torremorell** Jerry Torrison **Blaine Tully Henry Turlington** Matthew Turner Scott Unke Jean-Pierre Vaillancourt Eric van Esch Frederic Vangroenweghe Sarah Vitosh-Sillman Jess Waddell Liz Wagstrom Patrick Webb Leah Wilkinson Todd Williams Kathleen Wood Joseph Yaros Paul Yeske **Kyoung-Jin Yoon Emily Zakrajsek Jiangiang Zhang**

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Saturday, February 28

7:00 AM

Registration Desk open Location: Great Hall

Committee Meetings Location: Events Center

7:30 AM

PRRS Risk Assessment Training (page 10) Location: Captain (Lobby Level)

8:00 AM

ABVP Entrance Examination Location: Emerald

ABVP Oral Examination Location: Diamond

1:00 PM

SEMINARS

#1 Beyond Our Oath: *Primum non nocere* and other excellent tips, tricks and shortcuts (page 12) Location: Ireland B

#2 Coronavirus Diagnostics and Surveillance (page 14) Location: Scotland B

#3 Sow Reproduction: Achieving and expanding the high-producing heat (page 15) Location: Ireland A

#4 Practical Interventions that Impact Swine Housing (page 16) Location: Scotland A

#5 Growing Pig Lameness: An emerging syndrome (page 17) Location: Scotland C

#6 Public Policy, Pigs, and FDA: Why you should care (page 18) Location: Ireland C

5:00 PM

OPEN EVENING There is no reception scheduled for Saturday evening. Enjoy Orlando!

Sunday, March 1

6:30 АМ

AASV Student Breakfast Location: Great Hall East

7:00 AM

Praise Breakfast (page 20) Sponsored by: STUART PRODUCTS Location: Great Hall Center

Registration Desk open Location: Great Hall

8:00 AM

Canadian Swine Veterinarians Location: Cambridge (Lobby Level)

SEMINARS

#7 Piglet Diarrhea (page 21) Location: Ireland B

#8 Biosecurity: Bridging the gap between science and compliance (page 22) Location: Scotland B

#9 Nutrition and Feeding in the Era of PED Virus (page 23) Location: Scotland A

#10 Swine Medicine for Students (page 24) Location: Ireland A

#11 Boar Stud Health, Biosecurity, and Technology (page 25) Location: Scotland C

RESEARCH TOPICS (page 26) Location: England



Sunday, March 1

12:00 рм

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

Veterinary Student Posters (page 36) Sponsored by ZOETIS

Research Topics Posters (page 41)

Industrial Partners Posters (page 43)

AASV FOUNDATION LUNCHEON (Advance registration required) Location: Ireland C

1:00 PM

CONCURRENT SESSIONS

#1 Student Seminar (page 28) Sponsored by **ZOETIS** Location: Great Hall North

#2 Industrial Partners (page 30) Location: Great Hall Center

#3 Industrial Partners (page 32) Location: Great Hall East/West

#4 Industrial Partners (page 34) Location: England

6:30 рм – 8:30 рм

WELCOME RECEPTION Sponsored by ZOETIS Location: Scotland/England

8:30 рм – 11:00 рм

STUDENT RECEPTION Sponsored by MERCK ANIMAL HEALTH Location: Great Hall North

Monday, March 2

7:00 AM

Registration Desk open Location: Great Hall

Spouse Hospitality Suite open (page 46) Location: Veranda (Lobby Level)

8:00 AM - 12:30 PM

GENERAL SESSION: Beyond Our Oath: Integrity, Intensity, Professionalism (page 48) Location: Great Hall East/West

Howard Dunne Memorial Lecture: Dr. Greg Stevenson "Because it's the right thing to do"

Alex Hogg Memorial Lecture: Dr. C. Scanlon Daniels "Influence and advocacy: Opportunities for swine veterinarians"

9:00 AM - 5:00 PM

COMMERCIAL TECHNICAL TABLES (page 8) Location: Events Center

12:30 PM

LUNCHEON

Sponsored by **BOEHRINGER INGELHEIM VETMEDICA INC.** Location: Empire Ballroom

2:00 – 5:30 РМ

CONCURRENT SESSIONS

#1 Managing Enteric Coronaviruses at the Farm Level (page 49) Location: Great Hall North

#2 Animal Welfare (page 50) Location: Great Hall Center

#3 Significant Swine Disease Topics (page 51) Location: Great Hall East/West

6:30 PM – 8:30 PM

AASV AWARDS RECEPTION Sponsored by ELANCO ANIMAL HEALTH Location: Empire Ballroom

AASV FOUNDATION AUCTION (page 47) Empire Ballroom

Tuesday, March 3

7:00 AM

Registration Desk open Location: Great Hall

BREAKFAST and AASV ANNUAL BUSINESS MEETING Location: Scotland

8:00 AM – 12:00 PM GENERAL SESSION Transboundary or FAD: What difference does it make? (page 52) Location: Great Hall North/Center

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

12:00 PM MEETING CONCLUDES

Thank you!

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

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February 27 - March 1, 2016

Hyatt Regency New Orleans NEW ORLEANS, LOUISIANA



2017	Denver	Feb 25 - 28	
2018	San Diego	Mar 3 - 6	
2019	AASV's 50th Anniversary!		
	Location to be announced		

thank you

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Welcome Reception

AASV Student Seminar and Student Poster Session AASV Foundation Veterinary Student Scholarships