

PURPOSE-INSPIRED
PRACTICE

AASV

44TH ANNUAL MEETING



MARCH 2-5, 2013
SAN DIEGO, CALIFORNIA

Message from the Program Chair, Dr Matt Anderson



Welcome back to beautiful San Diego. And welcome home.

I have never been to one of our annual meetings when it didn't feel like coming back home after an extended absence. I believe that speaks to the very nature of our organization and its members – Friendship, Fellowship, Mentorship. What a wonderful group to be part of.

Every year I leave our conference inspired by our members and re-grounded in my professional purpose. Feeling like I should be doing a little more for our clients and my profession. That experience has given rise to this year's

"Over the course of veterinary history our professional purpose has changed many times."

conference title, "Purpose Inspired Practice." It is my hope that you will find something at this year's conference that will inspire you in your practice life.

Over the course of veterinary history our professional purpose has changed many times. Is it doing so now? It is my hope that you find something at this year's meeting that inspires you to think about that a little. What is the veterinarian's role? How do we best serve our clients? How do we best serve the public interest? After all, we have taken an oath to do so.

In this year's program we have a great combination of AASV experience and outside input. Dr Craig Rowles will deliver the Howard Dunne lecture. Dr Rowles has played a number of roles in his veterinary career—from mixed animal practitioner to production management. Throughout his practice life he has always served our organization quietly and effectively. Dr Rowles will bring a wealth of experience and insight to the Dunne lecture. Don't miss it.

Dr John Waddell is this year's Alex Hogg lecturer. Dr Waddell has served our organization in a leadership role and on countless committees. I don't know anyone who has had a greater influence on our organization through the mentorship of future veterinarians.

Every once in a while something comes out of left field and has a profound effect on an industry. Think Pink Slime. Think gestation stalls. Black swans? Maybe. Dr Guy Loneragan will talk to us on Tuesday morning about his insight on such events. Don't miss it – this will definitely be worth staying for.

"Every once in a while something comes out of left field and has a profound effect on an industry."

These great speakers, across a plethora of sessions and preconference seminars, will be complemented by talks on disease, diagnostics, business management, animal welfare, practice tips, antibiotic resistance, public health, business continuity in the face of an industry-changing event, and a host of other topics. There is something for everyone and I think you'll find something at this conference of value to you in your practice.

I would like to thank the program committee for working so diligently to put this conference together for you. They have been a great group of folks to work with and they have been personal friends and mentors of mine over the years. Be sure to thank them for their hard work.

Again, welcome. Enjoy the conference.
~ Matt Anderson, DVM



Program Committee

Matt Anderson, Chair

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Scott Dee

Tara Donovan

Doug Groth

Jeff Harker

Thayer Hoover

Clayton Johnson

Randy Jones

Jason Kelly

Jay Miller

Chris Rademacher

Paul Ruen

Kent Schwartz

Michelle Sprague

Montserrat Torremorell

Jess Waddell

John Waddell

Paul Yeske

Jeff Zimmerman



Registration & Fees

Registration

**Registration desk located in the
Litrenta Foyer (2nd level)**

Saturday, March 2	7:00 AM – 5:00 PM
Sunday, March 3	7:00 AM – 5:00 PM
Monday, March 4	7:00 AM – 5:00 PM
Tuesday, March 5	7:00 AM – 12:00 PM

Fees

Register online at www.aasv.org/annmtg

AASV member pre-registration	\$335
AASV member registration after Feb. 8	\$370
Non-member veterinarian registration	\$455
Add'l Tech Table representatives (limit 3)	\$455

Meeting Hotel

Manchester Grand Hyatt San Diego
One Market Place
San Diego, CA 92101
Reservations: 888-421-1442
Tel: 619-232-1234

Continuing Education Credit

Up to twenty (20) credit hours of veterinary continuing education are available for attendance during the regular meeting sessions Sunday 8:00 AM through Tuesday 12:00 PM. Four additional (4) credit hours are available for the PRRS Risk Assessment Training and each pre-conference seminar attended.

**Please turn off your cell phone or switch
to silent mode during scientific sessions.**

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Technical Tables

Location: Manchester GHI (2nd level)

Monday 9:00 AM – 5:00 PM

Tuesday 8:00 AM – 12:00 PM

Academy of Rural Veterinarians

ADM Specialty Ingredients

AgCreate Solutions

Allflex USA/Deatron Fearing

Alltech

Animal Health International

APC

ARKO Laboratories

Aurora Pharmaceutical

Automated Production Systems

AVMA PLIT

Baumgartner Environics, Inc (BEI)

Bayer Animal Health

Best Veterinary Solutions

BioChek

Biomim USA

Boehringer Ingelheim

CHR Hansen

Christian Veterinary Mission

CLARCOR Air Filtration Products

Continental Plastic Corp

Danbred North America

Elanco

Feedstuffs

Genesis Instruments

Genesis

Genetiporc USA

GlobalVetLINK

Harrisvaccines

Hermitage NGT

Hog Slat

Huvepharma

IDEXX

IMV Technologies

Insight Wealth Group

Technical Tables

IVESCO
JBS United Animal Health
Life Technologies Animal Health
Merck Animal Health
Merial
Minitube of America
Motomco
MVP Laboratories
MWI Veterinary Supply
National Hog Farmer
National Pork Board
National Pork Producers Council
Nedap Agri North America
Neogen
NewField Technologies
Newport Laboratories
Newsham Choice Genetics
Norbrook
Norsvin USA
Novartis Animal Health US
Pfizer Animal Health
Pharmacosmos
Pharmgate Animal Health
Phibro Animal Health
PIC
PigCHAMP
Preserve International
Prima Tech USA
PureTek Genetics
Ralco Animal Health
ReproQuest
Stuart Products
Struve Labs International
TechMix
Tetracore
TOPIGS USA
Tri-M AI
USDA APHIS Veterinary Services
Zinpro Performance Minerals

Risk Assessment Training

Web-based PRRS Risk Assessment Training for the Breeding Herd

Date: Saturday, March 2

Time: 7:30 AM – 12:30 PM

Location: Windsor BC (3rd level)

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. The website underwent a “facelift” in May 2011 and gained a few new useful features.

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 with MS Windows 2000, XP, Vista, or Windows 7 capable of accessing the internet via wireless connection.

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

Seminar 1

Purpose-Inspired Practice Tips

Date: Saturday, March 2

Time: 1:00 – 5:00 PM

Location: Manchester A (2nd level)

Fee: \$80

Seminar chair: Jay Miller

Purpose-Inspired Practice Tips will once again be an exciting, interactive, ideas-sharing session. There will be ten veterinarians competing for the big dollars for the practice tip with the “most impact” to our industry. The expert judges will be given the task to pick the practice tip with the most benefit to the practitioner and/or the producer. The session is sure to be loaded with everyday useful information to benefit the “boots-in-the-barn” veterinarian. Please come join our session as there will NOT be proceedings for all of the wonderful information presented.

- 1:00** Collecting diagnostics on the fly
Kelly Greiner

- 1:20** Dissecting lameness
Jason Verbeck

- 1:40** Finding a needle in a hog stack
Lori Feldmann

- 2:00** Put the cart before the pig
Melissa Farber Billing

- 2:20** Periorbital blood draw from pre-wean pigs
Monte W. Fuhrman

- 2:40** The first year practice lesson
Adam Schelkopf

- 3:00** BREAK

- 3:30** Potpourri of practical ideas for pig vets
Jeff Harker

- 3:50** 7 traits of a highly successful swine vet
Scott Stehlik

Seminar 1

- 4:10** Chasing lame finishing pigs
Jerry Torrison
- 4:30** Unexpected results – unexpected reason
Bill DuBois
- 5:00** Seminar concludes



Seminar 2

It's Not All Bugs and Drugs

Date: Saturday, March 2

Time: 1:00 – 5:00 PM

Location: Manchester B (2nd level)

Fee: \$95

Seminar co-chairs: Randy Jones and Rodger Main

Not all clinical disease that practitioners encounter on a daily basis is due to infectious agents. Numerous production inputs, stressors, and toxins can cause “disease.” Determining an accurate diagnosis on these, often multifaceted, cases can be challenging and require the use of diagnostic tools and methodologies that go beyond the traditional “test and report.” This seminar is designed to give practitioners the tools and knowledge needed to work up these atypical cases, and to present and discuss some recent cases as examples.

- 1:00** On-farm troubleshooting of non-infectious causes of “disease”
Scanlon Daniels
- 1:30** Diarrhea got you on the run?
Marlin Hoogland
- 2:00** Weather’s influence on grain quality; what does it mean to the pig?
Steve Ensley
- 2:30** Top 5 case-based examples of intoxications and deficiencies seen at the VDL
Steve Ensley
- 3:00** BREAK
- 3:30** Tools, methods, and samples needed for “complete” diagnostic workup
Darin Madson
- 4:00** “You make the call” rapid-fire case-based review
Phil Gauger and Eric Burrough
- 5:00** Seminar concludes

Seminar 3

Boar Stud Technology and Lameness Challenges in the Sow Herd

Date: Saturday, March 2

Time: 1:00 – 5:00 PM

Location: Manchester C (2nd level)

Fee: \$95

Seminar chair: Doug Groth

As we have seen this past year, boar studs have a large impact on the industry. This seminar will cover updates on testing procedures and new technologies affecting the stud. Speakers will also cover bacterial contamination in semen and PCAI impact at the stud and in the sow herd. The last section will cover lameness in group and individual housing, and mineral source effect on sow lameness.

- 1:00** Testing procedures in the stud
Darwin Reicks
- 1:30** Bugs in semen; what are the options?
Gary Althouse
- 2:15** Emerging sow reproductive technologies
Chris Kuster
- 2:45** BREAK
- 3:00** Sexed semen technology update
Duane L. Garner
- 3:45** PCAI impact at the stud and training in the sow herd
Tom Petznick
- 4:25** Sow lameness comparison in group and individual housing and mineral source effect on sow lameness
Laura Greiner
- 4:55** Seminar summary
- 5:00** Seminar concludes

Seminar 4

Turning Data into Knowledge

Date: Saturday, March 2

Time: 1:00 – 5:00 PM

Location: America's Cup AB (4th level)

Fee: \$95

Seminar chair: Thayer Hoover

The objective of this seminar is to provide practical information allowing for critical appraisal and validity of data presented from field and institutional studies to determine if the conclusions drawn from those data are supported by a valid study design. The seminar will provide practical, "real world" examples of data interpretation that can be used to make decisions supporting an intervention strategy.

- 1:00** Welcome and introduction
Thayer Hoover
- 1:05** Quantifying factors associated with disease
Randall Singer
- 2:00** Getting the correct data takes planning
Mike Brumm
- 2:45** BREAK
- 3:00** Background for case studies, odds ratios, NNT and other parameters, and their application for improving evidence-based decisions
Alex Ramirez
- 3:40** Useful spreadsheet design incorporating data collected from field studies
Matt Ackerman
- 4:20** Am I really getting what the trial results got? Detecting ongoing operational impact after the trial is done and the change has been implemented
Dale Polson
- 5:00** Wrap up: One key take-home from each presentation
Thayer Hoover
- 5:05** Seminar concludes

Seminar 5

Full Circle Sequencing: 360 degrees from sample to sequence to “so what?”

Date: Saturday, March 2

Time: 1:00 – 5:00 PM

Location: America’s Cup CD (4th level)

Fee: \$95

Seminar chair: Amber Stricker

The objectives of this seminar are 1) to educate and inform swine veterinarians on the process and mechanics of generating a PRRSv ORF5 sequence, and what they and the diagnostic laboratories do/can do to maximize sequence success rate, accuracy and the leverage of sequence information to support more effective and more “real-time” decision-making for their clients and communication/coordination in the PRRS area-regional control projects that they participate in, and 2) to educate and inform swine veterinarians on some relatively new and currently less familiar sequence analytic tools they can utilize with their clients, practices, and within/among area-regional control and elimination projects.

- 1:00** Introduction
Amber Stricker
- 1:10** What would a sustainable sampling plan for sequencing look like?
Derald Holtkamp and **Dale Polson**
- 2:00** What can a practitioner do to improve PRRSV ORF-5 sequencing success rates?
Rodger Main and **Jeff Zimmerman**
- 2:25** What does the diagnostic laboratory do to maximize sequencing success rates?
Travis Clement and **Jane Christopher-Hennings**
- 2:50** BREAK
- 3:10** Variation in PRRS ORF5 sequencing within and among state diagnostic laboratories
Amber Stricker

Seminar 5

- 3:35** The mechanics and process of sequencing from sample to data to dendrogram: What's inside the "black box"?
Michael Murtaugh
- 4:00** Sequence analytics: Getting more from sequence information than just a dendrogram and homology table
Barbara Brito and Jean Paul Cano
- 4:50** Summary
Amber Stricker
- 5:00** Seminar concludes





5K BY THE BAY!

Sunday, March 3
Check-in at 6:30 AM
Race begins 7:00 AM

AASV Fun Run/Walk

Fee: \$30 per entrant
Proceeds benefit the AASV Foundation

Step outside the hotel and stretch your legs on this fun 5K run/walk arranged especially for AASV! Participants check in at 6:30 AM on the boardwalk behind the Grand Hyatt. The race starts at 7:00 AM (sharp) and loops around on the sidewalks through South Embarcadero Park.

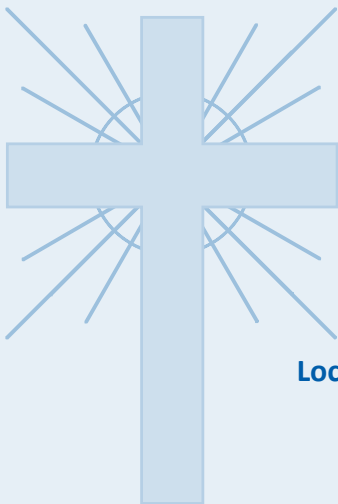
Pick your own speed and distance. Once around the course is 2.5K; twice around is 5K. No matter how fast or how far, you'll enjoy the exercise in the fresh seaside air and the competition and company of fellow meeting attendees.

All AASV meeting attendees and their families are welcome to participate. Registration includes your race bib, course map, and insurance, in addition to professional oversight of the race. All proceeds benefit the AASV Foundation.

Sorry, no race-day entries.

**Please register when you submit
your meeting registration!**

PRAISE BREAKFAST



Sunday, March 3
7:00 – 8:00 AM

Location: Manchester E

Coordinators:
Dave Smidt and
Monte Fuhrman

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 worship and fellowship at the AASV Praise Breakfast!

Join in musical worship led by members of the AASV praise band: Drs Jane Christopher-Hennings, Monte Fuhrman, Harold Tilstra, Keith Wilson and Tom Wetzell. This year we will enjoy hearing a meditation from one of our own, Dr Jane Christopher-Hennings.

Your free-will offering will defray the cost of the breakfast. The devotion will conclude by 8:00 AM to allow you to attend the meeting sessions, but feel free to stay and visit if you wish.

All AASV meeting attendees and their family members are welcome!

Seminar 6

Feeding Group-Housed Sows and the Growing Herd Efficiently

Date: Sunday, March 3

Time: 8:00 AM – 12:00 PM

Location: Manchester AB (2nd level)

Fee: \$95

Seminar chair: Bill Starke

Are you providing your clients or employer with the most current nutrition and feeding management recommendations? The speakers in this seminar will share their first-hand experiences along with practical and implementable information.

The seminar will delve into viable options for feeding and managing sows in group housing, including past experiences and future opportunities for improving sow welfare and performance. The seminar will also provide strategies for managing nutrition of the growing herd in this era of record high feed costs. Speakers will focus on efficiently managing the interactions of feeding non-traditional ingredients and non-traditional rations on grow/finish productivity.

- 8:00** Alternatives for feeding sows in group housing
Tom Parsons
- 8:50** Real-world experiences feeding sows in retrofitted gestation barns
Donald Davidson
- 9:30** BREAK
Sponsored by HARRISVACCINES
- 9:50** Formulating diets for sows in group housing: What should be considered?
Betsy Newton
- 10:15** Impacts of nontraditional ingredients and diets on pig health and performance
Ruurd T. Zijlstra
- 11:05** Review of everyday nutrition decisions and interventions affecting feed conversion, feed costs, and pig performance
Joel DeRouchey
- 12:00** Seminar concludes

Seminar 7

Business Management

Date: Sunday, March 3

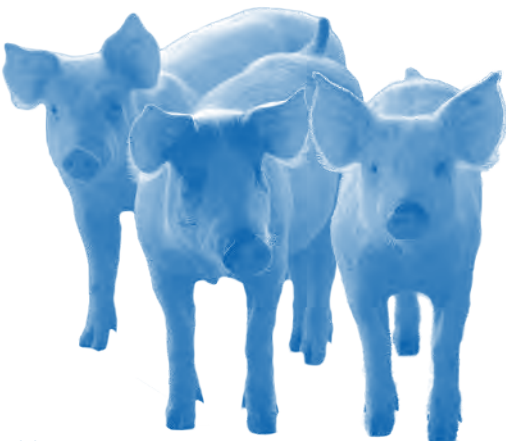
Time: 8:00 AM – 12:00 PM

Location: Elizabeth H (2nd level)

Fee: \$95

Seminar chair: Scanlon Daniels

- 8:00** Managing generational expectations
Larry Firkins
- 8:30** Effective hiring practices
Eric Spell
- 9:10** Structuring compensation
Rod Johnson
- 9:45** BREAK
Sponsored by HARRISVACCINES
- 10:00** Applying metrics to food animal practice
Randy Bush
- 10:40** Developing profit centers within a practice
Tim Loula
- 11:20** Succession planning
Wayne Freese
- 12:00** Seminar concludes



Seminar 8

How to Use Diagnostic Information in the Field

Date: Sunday, March 3

Time: 8:00 AM – 12:00 PM

Location: Manchester C (2nd level)

Fee: \$95

Seminar chair: Paul Yeske

This seminar will review diagnostic procedures and detail how the information can be used at the farm and system level. It will outline some of the latest procedures available along with their limitations, and identify some new methods for collecting and using diagnostic information.

- 8:00** So I got a positive on a PCR test - the relevance of PCR and sequencing results
Kurt Rossow
- 9:00** Improving sequencing virus isolation from oral fluids for PRRS and SIV
Christa Goodell and Jeff Zimmerman
- 9:30** Classification of CNS and locomotive problems
Kent Schwartz
- 10:00** BREAK
Sponsored by HARRISVACCINES
- 10:30** Using new technology for diagnostics (pictures, video, text)
Darin Madson
- 11:00** So I have the lab results; now what do I do with them? Organizing information and applying it back to the field
Clayton Johnson and Pete Thomas
- 12:00** Seminar concludes

Seminar 9

Swine Med for Students

Date: Sunday, March 3

Time: 8:00 AM – 12:00 PM

Location: Elizabeth F (2nd level)

Fee: \$95; **No charge** for veterinary students or
2011 or 2012 DVM graduates

Seminar co-chairs: Angie Supple and Jeremy Pittman

This year's student pre-conference seminar is a continuation of last year's session, which focused on differentials and diagnostics. Now that you know what "bugs" are there, we will explore the "drugs" that can be used to treat and prevent them. Areas we feel are opportunities for veterinary students and recent graduates include getting familiar with what products are available, how to select and develop antibiotic and vaccine protocols, and common "field" mistakes and tricks encountered. The first half of the session will be focused on these aspects, while the second half of the session will be a set of interactive case studies where groups of students will develop treatment or vaccine protocols based on a provided case example, using the knowledge gained in the first half.

- 8:00** Introduction
Angie Supple and **Jeremy Pittman**
- 8:05** Antibiotics
Jana Grauerholz-Morgan
- 9:00** Vaccines and programs
Deb Murray
- 10:00** BREAK
Sponsored by HARRISVACCINES
- 10:30** Interactive case studies
Angie Supple and **Jeremy Pittman**
- 12:00** Seminar concludes

Research Topics

Research Topics

Date: Sunday, March 3

Time: 8:00 AM – 12:00 PM

Location: Elizabeth G (2nd level)

Session chair: Chris Rademacher

- 8:00** Influenza A virus detection from oral fluid and nasal swabs of IAV-inoculated pigs
Christa Goodell
- 8:15** Indirect transmission of influenza A virus in two different biosecurity settings
Matt Allerson
- 8:30** Field investigations of perceived PCV2 vaccine failures and experimental challenge trials to support transitioning to a PCV2b based vaccine
Tanja Opriessnig
- 8:45** The influence of fetal PCV2 infection on lifetime performance and vaccine efficacy
Jim Lowe
- 9:00** Association of gilt vulval score with follicle development and expression of estrus
Robert Knox
- 9:15** Timed insemination following intravaginal OvuGel™ treatment in postpartum sows
Paul Yeske
- 9:30** Time to loss of consciousness using CO₂ or 70% N₂/30% CO₂ for pig euthanasia
Robert Meyer
- 9:45** BREAK
Sponsored by HARRISVACCINES
- 10:15** Evaluation of the impact of birth litter size on birth weight and subsequent birth-to-market performance
Derald Holtkamp

Continued on next page

Research Topics

- 10:30** Experimental reproduction of brachyspiral colitis in pigs infected with *Brachyspira hamptonii*
Fabio Vannucci
- 10:45** Quantifying the production impact in farms going through load-close-homogenize programs for PRRS virus
Daniel Linhares
- 11:00** Time to produce PRRSv-negative pigs from infected breeding sites
Daniel Linhares
- 11:15** Ring test evaluation for the detection of PRRSV antibody in oral fluid specimens using a commercial PRRSV serum antibody ELISA
Apisit Kittawornrat
- 11:30** Effect of sample collection material on the detection of PRRSV in oral fluid
Chris Olsen
- 11:45** Economic review of air filtration system performance in North American sow herds
Carmen Alonso
- 12:00** Session concludes

Welcome Reception



Sponsored by:
PFIZER ANIMAL HEALTH

Sunday, March 3
6:30 – 8:30 PM

Elizabeth DE (2nd level)

Sunday Session #1

Student Seminar

Date: Sunday, March 3

Time: 1:00 – 5:15 PM

Location: Manchester AB (2nd level)

Session co-chairs: Alex Ramirez and Peter Davies

Sponsored by PFIZER ANIMAL HEALTH

- 1:00** Utilizing snout wipes for PCR detection and virus isolation of SIV in nursery pigs
Kevin Dobesh, Iowa State University
- 1:15** Comparison of sampling methods for *Lawsonia intracellularis* testing using qPCR
Kelsey LaVigne, North Carolina State University
- 1:30** Evaluation of biosecurity measures and management variables as risk factors for infection of growing pigs that are negative at placement with porcine reproductive and respiratory syndrome virus
Caleb Robb, Iowa State University
- 1:45** Evaluation of Flu Detect antigen test kit for the detection of laboratory isolates and experimentally infected swine with influenza A virus
Anne Duquette, University of Minnesota
- 2:00** Pilot study to assess the effectiveness of thermo-assisted drying and decontamination in reducing PRRSV in the presence of organic matter in livestock transport vehicles
Jacob Schwartz, University of Minnesota
- 2:15** Use of oral fluid sampling in suckling pigs for PRRSV monitoring
Jordan Graham, Iowa State University
- 2:30** Post-weaning sudden death in nursery pigs; a case study
Paisley Canning, University of Guelph
- 2:45** BREAK

Continued on next page

Sunday Session #1

- 3:15** Effect of pre-farrow administration of tulathromycin injectable solution on *Mycoplasma hyopneumoniae* prevalence in suckling pigs at birth and weaning
Sam Holst, University of Minnesota
- 3:30** Comparison of the isolation of *Brachyspira hyodysenteriae* from various transport and selective media
Brian Bishop, Iowa State University
- 3:45** Correlation of individual behavioral responses to different environmental stressors by group housed sows
Alyssa Blaustein, University of Pennsylvania
- 4:00** Comparison of specimens for monitoring PRRSV in boar studs: What works best?
Brent Pepin, Iowa State University
- 4:15** Use of daily feeding order at an electronic sow feeder (ESF) to improve the individual animal care of group housed sows
Joseph Katz, University of Pennsylvania
- 4:30** An investigation of nodular ulcerative skin lesions in growing pigs
Katherine Wedel, University of Minnesota
- 4:45** Safety of modified live PRRSV 19S1.21 vaccine in late gestation adult breeding swine
Michael Berkland, Iowa State University
- 5:00** Probability of detecting PRRSV infection using pen-based swine oral fluid specimens as a function of within-pen prevalence
Chris Olsen, Iowa State University

Student Reception



Sponsored by:
MERCK ANIMAL HEALTH

Sunday, March 3
8:30 – 11:00 PM

Manchester DEF (2nd level)

Sunday Session #2

Industrial Partners

Date: Sunday, March 3

Time: 1:00 – 5:00 PM

Location: Elizabeth F (2nd level)

Session chair: Jeff Harker

- 1:00** NewField Technologies, LLC, offers S₂, a novel approach to piglet euthanasia
Jennifer Stevens
NEWFIELD TECHNOLOGIES
- 1:15** Porcine embryo vitrification and non-surgical embryo transfer (nsET)
John Verstegen III
MINITUBE OF AMERICA
- 1:30** Effectiveness of OvuGel® in commercial swine herds in the United States
Stephen Webel
JBS UNITED ANIMAL HEALTH
- 1:45** An experimental model to evaluate the effect of antibiotics on HPS colonization and immunity
Nubia Macedo
BAYER ANIMAL HEALTH
- 2:00** Studies to evaluate the effects of enrofloxacin on *Mycoplasma hyopneumoniae* and *Bordetella bronchiseptica* infections in swine
Daniel Keil
BAYER ANIMAL HEALTH
- 2:15** Productivity of pen gestation compared to stall gestation housing
Jeff Schoening
AUTOMATED PRODUCTION SYSTEMS
- 2:30** The economic value of feed efficiency and correct body condition in a sow herd
John Sonderman
DANBRED NORTH AMERICA
- 2:45** BREAK

Continued on next page

Sunday Session #2

- 3:15** Gilt management 2.0
Juan Carlos Pinilla
PIC
- 3:30** Association of lameness in late finishing with premarket mortality
Gene Shepherd
PIC
- 3:45** Development of an alphavirus RNA particle-based vaccine against classical swine fever virus
Kurt Kamrud
HARRISVACCINES
- 4:00** Development of an alphavirus RNA particle-based vaccine against *Clostridium difficile*
Mark Mogler
HARRISVACCINES
- 4:15** Struve Labs' CDCD pigs: Traditional and emerging swine applications
Rexanne Struve
STRUVE LABS INTERNATIONAL
- 4:30** Use of CIRCOVAC® to reduce PCV2 impact in pig herds
Keith Wilson
NEWPORT LABORATORIES and MERIAL
- 4:45** Water quality and its effect on production
Steve Stone
PRESERVE INTERNATIONAL and IVESCO
- 5:00** Session concludes

Sunday Session #3

Industrial Partners

Date: Sunday, March 3

Time: 1:00 – 4:45 PM

Location: Elizabeth G (2nd level)

Session chair: Clayton Johnson

- 1:00** Antimicrobial resistance patterns in *Streptococcus suis* and strategies for prudent drug use
Claude Thibault
VETOQUINOL
- 1:15** Effects of a supplemental zinc amino acid complex on intestinal integrity in acutely heat-stressed pigs
Lance Baumgard
ZINPRO CORPORATION
- 1:30** Oral and injectable fat-soluble vitamin programs for sows, newborn and weaned pigs
Robert Stuart
STUART PRODUCTS
- 1:45** *Serratia marcescens*, an emerging pathogen involved in semen contamination issues
Isaac Huerta
MAGAPOR, SL
- 2:00** Controlled challenge study to measure interference of Virginiamycin (Stafac®) when fed at 10 grams per ton with vaccination of an attenuated live oral *Lawsonia intracellularis* vaccine
Douglas Weiss
PHIBRO ANIMAL HEALTH
- 2:15** Effects of a commercial feed additive on the immune components of sow's colostrum and milk
Dan McManus
PURINA ANIMAL NUTRITION
- 2:30** Finishing and wean-to-finish group performance benchmarking by week-on-feed
Thomas Stein
METAFARMS

Continued on next page

Sunday Session #3

- 2:45** BREAK
- 3:15** Whole breeding herd double vaccination with FluSure XP® to reduce shedding of influenza A virus H1N2
Michael Kuhn
PFIZER ANIMAL HEALTH
- 3:30** A comprehensive, full chain and US meat sector economic analysis of the adoption of Improvest® by the US pork industry
Dennis DiPietre
PFIZER ANIMAL HEALTH
- 3:45** Ionization's documented impacts on microorganisms
John Baumgartner
BAUMGARTNER ENVIRONICS
- 4:00** The effect of deviations from predicted lactation feed intake on reproductive performance
Chad Yoder
PURETEK GENETICS
- 4:15** Oral Pro: Vitamin D3 and E; optimal dosing in piglets and nursery pigs
Mike Strobel
AURORA PHARMACEUTICAL, LLC
- 4:30** Phytobiologics: Novel natural compounds for improving enteric health in nursing swine
Ching Ching Wu
LIVELEAF BIOSCIENCE
- 4:45** Session concludes



Sunday Session #4

Industrial Partners

Date: Sunday, March 3

Time: 1:00 – 4:45 PM

Location: Elizabeth H (2nd level)

Session chair: John Waddell

- 1:00** In vitro susceptibility of Japanese, European and North American recent and historical isolates of *Mycoplasma* spp from swine to tylvalosin (Aivlosin®)
Dan Rosener
PHARMGATE ANIMAL HEALTH
- 1:15** Porcine circovirus type 2 diagnostic laboratory trends: Relationship between year and production phase
Brad Thacker
MERCK ANIMAL HEALTH
- 1:30** Virological and production evaluation of Circumvent® PCV M administered during an early field infection
Brad Thacker
MERCK ANIMAL HEALTH
- 1:45** Optimizing PG 600® and Matrix™ usage with progesterone testing and real-time ultrasound evaluation
Jamie Lehman
MERCK ANIMAL HEALTH
- 2:00** Activate organic acid blend improves performance in sows and pigs
Karen Lehe
NOVUS INTERNATIONAL
- 2:15** Sorting out the pathogens in brachyspiral colitis
Mark Hammer
NOVARTIS ANIMAL HEALTH US
- 2:30** Managing *Lawsonia* and *Brachyspira* using pharmacokinetic and pharmacodynamic principles
David Burch
NOVARTIS ANIMAL HEALTH US

Continued on next page

Sunday Session #4

- 2:45** BREAK
- 3:15** Evaluation of Tylan in a finishing pig subclinical ileitis challenge model
Greg Armbruster
ELANCO ANIMAL HEALTH
- 3:30** Skycis™ (narasin) safety evaluation in growing swine when fed in sequence or combination with tiamulin
Tom Weber
ELANCO ANIMAL HEALTH
- 3:45** Aligning a boar stud network to produce high quality and consistent semen
Todd Distad
GENETIPORC
- 4:00** Comparison of different *Mycoplasma hyopneumoniae* vaccination schedules in growing pigs with a seeder pig challenge
Amber Stricker
BOEHRINGER INGELHEIM VETMEDICA, INC
- 4:15** Comparative efficacy of Ingelvac MycoFLEX® in pigs at 3 weeks of age, from vaccinated and non-vaccinated sows
Jose Angulo
BOEHRINGER INGELHEIM VETMEDICA, INC
- 4:30** PRRSv control in finisher pigs; a large scale barn study in a high dense area in USA
Rebecca Robbins
BOEHRINGER INGELHEIM VETMEDICA, INC
- 4:45** Session concludes

Poster Session

Veterinary Student Posters (#1 – #52)

Location: Litrenta Foyer

Sunday, March 3

12:00 – 5:00 PM

Authors present from 12:00 – 1:00 PM

Monday, March 4

9:00 AM – 5:00 PM

Sponsored by PFIZER ANIMAL HEALTH

Posters #1-15 have been selected for judging in the Student Poster Competition, sponsored by **BOEHRINGER INGELHEIM VETMEDICA, INC**

1. A clinical study evaluating prevalence of PCV2 viremia in the breeding herd
Daniel Boykin, North Carolina State University
2. Swine influenza surveillance using FluDETECT® test kit
Stacy Brussell, University of Minnesota
3. Pharmacokinetic assessment of ceftiofur hydrochloride in pigs challenged with porcine reproductive and respiratory syndrome virus and *Streptococcus suis*
Deanne Day, Iowa State University
4. Hypocalcemia and calcium gluconate use in sows at parturition
Alexander Hintz, University of Wisconsin
5. Two whole-herd vaccinations as mitigation of influenza virus in breed-to-wean farms
Levi Johnson, Iowa State University
6. The effects of lidocaine and meloxicam on piglets during and post-castration
Michelle Lam, University of Guelph
7. A retrospective study of the prevalence of OmpA-RFLP patterns among U.S. field strains of *Haemophilus parasuis* as correlated to clinical signs and serotype
Dana Lembke, Iowa State University

Continued on next page

Poster Session

Veterinary Student Posters

8. Oral fluids collection in loose-housed gestating sows
Amy Martell, University of Pennsylvania
9. Use of buffered Swiffer cloth to assess the risk of PRRS virus spread by employees and fomites during warm weather
Brittney McLamb, North Carolina State University
10. Oral fluids sample collection and post-collection processing to enhance porcine reproductive and respiratory syndrome virus sequencing as applied in an area regional control program
Shonna Parker, University of Tennessee
11. Investigating the genetic variability of *Mycoplasma hyopneumoniae* strains circulating within a swine production system
Kalie Pettit, University of Minnesota
12. Effects of alternative farrowing systems on sow productivity and piglet growth and mortality
Shawna Rossini, University of Pennsylvania
13. Work in progress: Improved PCRs for oral fluids
Marisa Rotolo, Iowa State University
14. A serial study to determine piglet vaccination age based on maternal antibody decay, time of infection and potential aerosolization of *Mycoplasma hyorhinis*
Ethan Spronk, University of Minnesota
15. Evaluation of sleep-wake cycle and behavioral indicators of REM in gestating sows
Kathryn Sullivan, University of Pennsylvania
16. An investigation of sow lameness in relation to leg and foot conformation, lesions and hoof cracks
Sarah Ahola, University of Guelph
17. Enteric pathogen prevalence and association inquiry
Brian Bishop, Iowa State University

Poster Session

Veterinary Student Posters

18. Validation of Swiffer® collection technique for *Lawsonia intracellularis* on concrete surfaces
Daniel Borchers, Iowa State University
19. A comparison of the relative reduction in PCV2 viremia
Matthew Borgmann, North Carolina State University
20. Enterotoxin genes in *Staphylococcus aureus* isolates from pork and pigs
Danielle Botting, University of Minnesota
21. Field results of a modified vaccination protocol with Pfizer's Fostera PRRS vaccine
Alexandra Buckley, Michigan State University
22. Exploring the prevalence of *Mycoplasma hyorhinis*, *M. hyosynoviae*, and *M. hyopneumoniae* across various age groups using various sampling techniques
Samuel Copeland, North Carolina State University
23. Evaluation of oral fluid antibody enzyme-linked immunosorbent assay (ELISA) dynamics to detect wild-type PRRS virus exposure in pigs vaccinated with modified-live virus
Amy Daniels, University of Illinois
24. A comparison of serum and tonsillar swabs for the detection of porcine circovirus type 2 (PCV2) by polymerase chain reaction (PCR) in replacement gilts
Joshua Duff, North Carolina State University
25. Proportionality, public perception, and pigs: An overview of how we dealt with flu at the Minnesota State Fair
Jon Ertl, University of Minnesota
26. Evaluating the persistence of PRRSv in prior exposed vasectomized teaser boars, mature gilts, and young sows within a breeding herd
Will Fombelle, University of Illinois

Continued on next page

Poster Session

Veterinary Student Posters

27. Efficacy of a commercial disinfectant to deactivate PRRS virus in water lines
Marissa Garry, University of Minnesota
28. The effect of vitamin D supplementation on production parameters and immune function in pre-wean and nursery piglets
Cara Haden, Iowa State University
29. Effects of vitamin D supplementation on plasma 25-hydroxyvitamin D concentrations in suckling and nursery pigs
Cara Haden, Iowa State University
30. Evaluating sampling strategies to diagnose influenza virus in pre-weaned pigs
Christina Hill, University of Minnesota
31. A holistic approach to stabilizing porcine reproductive and respiratory syndrome virus from a dually infected farrow-to-finish herd
Megan Humphrey, University of Wisconsin
32. The importance of vaccination with MLV after stabilization of porcine reproductive and respiratory syndrome virus in a farrow-to-finish herd in an area regional control project
Megan Humphrey, University of Wisconsin
33. Evaluating the impact of PRRS vaccination and vaccine timing on antibody production to M hyo and PCV2
Justin Kuecker, Iowa State University
34. Impact of PRRS vaccination timing in pigs with different maternal immunity levels
Marie-Pier Labrecque, University of Montreal
35. Validating the need for and continued use of *E coli* vaccine in pregnant sows and gilts
Wesley Lyons, University of Tennessee

Poster Session

Veterinary Student Posters

36. Diagnostic survey of residential bacterial pathogens in Pipestone System sow barns to justify the use of Excede® (ceftiofur crystalline free acid)
Nicholas Mayer, University of Minnesota
37. Development of a standard protocol using PRRS modified live virus vaccine to control and reduce wild-type PRRSv in farrow to finish swine systems
Daniel Meyer, Iowa State University
38. Effect of oral Vitamin D supplementation on antibody response to PRRS virus
Andrea Petersen, University of Minnesota
39. A comparison of immunity, viremia, and performance between two commercial circovirus vaccines in a high-health swine system
Anna Petrowiak, University of Minnesota
40. Posterior paresis and paralysis associated with spinal cord vacuolation in late finisher pigs
Kristen Reynolds, University of Guelph
41. Use of slaughter checks to classify lesions identified at harvest
Charlie Robinson, University of Missouri
42. The effect of maternal antibodies on the efficacy of the porcine circovirus vaccine
Holly Rud, University of Minnesota
43. Cecal colonization and fecal shedding in rats inoculated with various *Brachyspira* spp
Kate Sawyer, Iowa State University
44. Investigation into sow mortality caused by sudden death
Megan Schnur, Purdue University
45. Effect of porcine reproductive and respiratory viral load when inoculating serologically positive sows
Chris Sievers, Iowa State University

Continued on next page

Poster Session

Veterinary Student Posters

46. The roll of serum calcium, vitamin D, and genetics in observations of kyphosis
Rae Sires, Iowa State University
47. Antimicrobials in lactation diets are transferred into the milk of dams
Bethany Stammen, The Ohio State University
48. Analgesia in the farrowing room
Ryan Tenbergen, University of Guelph
49. Investigation of *Mycoplasma hyorhinis* in the reproductive tract of mature gilts and boars
Katherine Wedel, University of Minnesota
50. Vitamin D3 dose titration at five dosage rates delivered in water in nursery pigs
Amanda West, University of Minnesota
51. Oral fluid sampling: sampling recommendations for “trained” vs “untrained” pigs
Drew White, Iowa State University
52. Investigating high levels of nursery mortality at a multisite system
Lisa Yeske-Livermore, Iowa State University



Poster Session

Research Topics Posters (#53 – #83)

Location: Litrenta Foyer

Sunday, March 3

12:00 – 5:00 PM

Authors present from 12:00 to 1:00 PM

Monday, March 4

9:00 AM – 5:00 PM

- 53.** Environmental impact of replacing physical castration with immunological castration when raising male pigs; results of an environmental life cycle assessment
Jim Allison
- 54.** Phylogenetic evaluation of historic PRRSV isolates from air filtered sow herds in North America
Carmen Alonso
- 55.** Intestinal mucosal PCV2-specific immune response in PCV2 vaccinated and non-vaccinated conventional gilts
Carlo Bianco
- 56.** Four-year assessment of influenza A virus infections in swine at agricultural exhibitions
Andrew Bowman
- 57.** Data summary of immunological castration impact in grow-finish performance of male pigs in the USA
Bobby Cowles
- 58.** Retention and growth of expertise in food animal and food safety medicine
Gail Cunningham
- 59.** Full genome of swine influenza A virus in immune pigs using next generation sequencing
Andres Diaz
- 60.** Swine influenza infection in sow farms over time
Andres Diaz
- 61.** Estimating corn savings through the use of immunological castration in male pigs
Dennis DiPietre

Continued on next page

Poster Session

Research Topics Posters

62. Detection of *Streptococcus suis* variants using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry
Tim Frana
63. Optimizing nursery pig survivability with a husbandry education program
Lucina Galina
64. Flexible vaccination with Stellamune® One in France: Experiences in 10 farrow-to-finish pig herds
Marc Henninger
65. Effect of triptorelin dose administered intravaginally in OvuGel™ on the timing of ovulation in mature gilts after estrus synchronization with MATRIX®
Robert Kraeling
66. Effect of PRRS on productivity in chronic infected Danish herds
Charlotte Sonne Kristensen
67. Survey of occupational health risks and protective practices of US swine veterinarians
Leticia Linhares
68. Behavior and handling of physically- and immunologically-castrated market pigs at home and going to market
John McGlone
69. Pre- and post-euthanasia concentrations of cortisol, norepinephrine and lactate in pigs
Morgan Morrow
70. Effect of influenza vaccination on influenza bioaerosol generation
Victor Neira-Ramirez
71. Effects of immunological castration on nutrient requirements of male pigs
Daniel Nelson

Poster Session

Research Topics Posters

72. Comparison of PCR assays for reliable, early and fast detection of PRRSV in different sample types from experimentally infected boars
Tanja Opriessnig
73. Investigation into emerging parvoviruses in the US pig population
Tanja Opriessnig
74. Detection of influenza A virus nucleoprotein antibody (IgM, IgA, IgG) in serum and oral fluid specimens
Yaowalak Panyasing
75. The effect of passive immunity to *Mycoplasma hyopneumoniae* and an extended lactation period on piglet immune development
Maria Pieters
76. Comparison of meat quality parameters of pork produced from immunologically castrated and physically castrated male pigs reared under US conditions
Aubrey Schroeder
77. Comparison of efficacy of tulathromycin (Draxxin®) and tildipirosin (Zuprevo®) in the treatment of *Mycoplasma hyopneumoniae* infection in pigs
Jim Eubank
78. Outbreak of influenza A (H3N2) in people and pigs at county fairs
Sabrina Swenson
79. Sow herd incidence and prevalence study
Steve Tousignant
80. Reproduction of periweaning failure to thrive syndrome in weaned pigs and effect of supplemental vitamin D
Steve Tousignant

Continued on next page

Poster Session

Research Topics Posters

81. *Mycoplasma hyopneumoniae* prevalence in Belgian and Dutch pig herds using a tracheo-bronchial swab technique and eventual seasonal effects
Frederic Vangroenweghe

82. Attenuation of virulence and loss of prophage-like elements in *Lawsonia intracellularis* after serial passages in vitro
Fabio Vannucci

83. Canadian Swine Health Board National Biosecurity Training Program: A model for enhancing adoption of biosecurity best management practices for the farm at a national level
Lucie Verdon

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Located in Litrenta Foyer
(2nd level)

Poster Session

Industrial Partners Posters (#84 – #98)

Location: Litrenta Foyer

Sunday, March 3

12:00 – 5:00 PM

Authors present from 12:00 to 1:00 PM

Monday, March 4

9:00 AM – 5:00 PM

- 84.** Barrier wound spray with pain relief for the health and welfare of baby pigs
Peggy Anne Hawkins
AURORA PHARMACEUTICAL, LLC
- 85.** PSY vs *PSY (profit/sow/year)
Darwin Kohler
BABCOCK GENETICS
- 86.** A comparison of injection site reactivity and growth rate in pigs vaccinated with single-dose PCV2 vaccines
Erin Johnson
BOEHRINGER INGELHEIM VETMEDICA, INC
- 87.** Exogenous enzyme impact on intestinal weights, histology, active nutrient transport and microbial population
Jon Ferrel
ELANCO ANIMAL HEALTH
- 88.** Efficacy of Lincofarm® TR (44% lincomycin) in the treatment of ileitis in naturally infected swine
Flávio Hirose
FARMABASE SAÚDE ANIMAL
- 89.** Development of an alphavirus RNA particle-based vaccine against swine dysentery
David Baum
HARRISVACCINES
- 90.** Physiological properties and mechanism of action of OvuGel®, a novel product containing the gonadotropin releasing hormone (GnRH) agonist, triptorelin acetate
Charles Francisco
JBS UNITED ANIMAL HEALTH

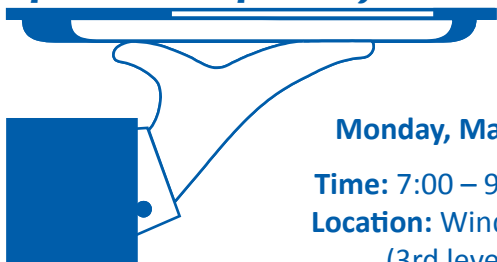
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Poster Session

Industrial Partners Posters

91. Semen quality assessment in extended doses and relationship between key parameters
Isaac Huerta
MAGAPOR, SL
92. Diagnostic laboratory survey of porcine circovirus type 2 and *Mycoplasma hyopneumoniae* maternally-derived antibodies
Brad Thacker
MERCK ANIMAL HEALTH
93. Non-productive days benchmark analysis
Thomas Stein
METAFARMS
94. Retrospective analysis by novel methodology of PRRSv field strains in a regional control project
Alan Snodgrass
MJ BIOLOGICS
95. IgG antibody response in young pigs after a booster vaccination with an autogenous *Mycoplasma hyosnyoviae* vaccine
Boh Chang Lin
MVP LABORATORIES
96. Investigating finishing pig performance and diarrhea: A standardized approach
Robert Evelsizer
NOVARTIS ANIMAL HEALTH US
97. Effects of Draxxin® (tulathromycin) at weaning in pigs on control of swine respiratory disease including “low” level of PRRS involvement and subsequent performance of pigs
Doug King
PFIZER ANIMAL HEALTH
98. In vitro susceptibility of Japanese, European and North American recent and historical isolates of various swine and poultry enteric, joint, and respiratory pathogens to tylvalosin (Aivlosin®)
John Tasker
PHARMGATE ANIMAL HEALTH

Spouse Hospitality Suite



Monday, March 4

Time: 7:00 – 9:00 AM

Location: Windsor BC
(3rd level)

The AASV is pleased to host the spouse hospitality suite at the Manchester Grand Hyatt. 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.

Create Your Own Spouse/Family Tour

San Diego is full of attractions close to AASV's meeting location as well as farther afield, including the San Diego Zoo, SeaWorld®, Historic Old Town, Balboa Park, La Jolla, Coronado Island, and many famous beaches.

AASV is not offering an organized tour this year, enabling you to choose the activities that appeal most to your personal sense of adventure!

Check out www.sandiego.com, and look for information about local attractions at the AASV registration desk and in the Spouse Hospitality Suite.

Enjoy and explore San Diego!



AASV Foundation Auction

Ensure Our Future Today – 100K!



Monday, March 4

Location: Manchester (2nd level)

The AASV Foundation Auction Committee is off and running towards the goal to raise more than \$100,000 at the 2013 fundraising auction in San Diego. With the promise from MVP Laboratories and MJ Biologics of a \$100,000 bonus if the goal is reached, the committee members are determined to cross the 100K finish line and win the prize. AASV members and industry supporters have already contributed an incredible variety of items for the auction – now we need your generous bids!

For the complete description of items up for bid, see the auction catalog or go to aasv.org/foundation. Since all of the items are donated, you can bid generously, knowing that 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

You'll have the opportunity to bid in the silent auction during the day on Monday, March 4. The bidding will close during the AASV Awards Reception on Monday evening, and we'll announce the names of the winning bidders at that time.

Live Auction

We're saving a few items for the Live Auction, to be held at the conclusion of the AASV Awards Reception Monday evening.

Everybody bid-a-now!

aasv.org/foundation

AASV Foundation Raffle

The AASV Foundation Raffle continues to get bigger and better. After all, we have 100K to raise! This year, you DON'T need to be present to win – so EVERYONE can participate, even if you're not going to be at the AASV Annual Meeting!

The raffle drawing will be held during the Live Auction on Monday, March 4. The following fabulous prizes will be awarded to four lucky ticket holders (drum roll please):

1ST PRIZE: Log Cabin Quilt
Donated by Hen and Chicks Studio
Pieced by Heidi Kaisand
Quilted by Kelly VanVliet

2ND PRIZE: \$1000

3RD PRIZE: 2014 AASV meeting registration

4TH PRIZE: 2014 AASV meeting registration

For \$100 per raffle ticket, you can support the AASV Foundation and have a chance to win one of these prizes. Contact the AASV office or one of the Auction Committee members to purchase your ticket(s) and invest in the AASV Foundation!

Monday General Session

Purpose-Inspired Practice

Date: Monday, March 4

Time: 8:00 AM – 12:30 PM

Location: Manchester A-F (2nd level)

Program chair: Matt Anderson

- 8:00** **Howard Dunne Memorial Lecture**
Perspective, passion, and the purpose-inspired practice
Craig Rowles
- 9:00** **Alex Hogg Memorial Lecture**
Mentoring with purpose
John Waddell
- 10:00** BREAK
- 10:30** Antibiotic use in swine: Pharmacology, residue avoidance, and foreign/domestic trade
Mike Apley
- 11:10** Antibiotic use in swine: Antibiotic resistance, regulation, veterinary oversight, FDA guidance, “Healthy Animals – Healthy Food”
Scott Hurd
- 11:50** Business continuity in the face of a foreign animal disease
Jim Roth
- 12:30** LUNCHEON

AASV Luncheon



Sponsored by:
**BOEHRINGER INGELHEIM
VETMEDICA, INC**

Monday, March 4
12:30 – 2:00 PM

Elizabeth DE (2nd level)

Monday Session #1

PRRSV

Date: Monday, March 4

Time: 2:00 – 5:30 PM

Location: Manchester A-F (2nd level)

Session chair: Jeff Zimmerman

- 2:00** Application of host genetics for PRRS resistance, tolerance, and the vaccine-ready pig
Bob Rowland
- 2:15** PRRSV half-life in manure
Daniel Linhares
- 2:30** PRRS diagnostics: Update on oral fluids
Jeff Zimmerman
- 2:50** Surveillance samples: Where? How many? How often?
Chong Wang
- 3:10** PRRSV elimination: How to prove herd negativity?
Montse Torremorell
- 3:30** BREAK
- 4:00** Challenges of air filtration: What are the new challenges?
Scott Dee
- 4:15** Challenges of air filtration: How do people and pigs safely enter/exit a filtered farm?
Jason Kelly
- 4:30** Challenges of air filtration: Where are the common air leaks and how do we fix them?
Jeff Feder
- 4:45** Challenges of air filtration: How does a filtered farm put it all together?
Jeff Kurt
- 5:00** Roundtable: Improving future PRRSV elimination success by identifying causes of past failure
Daniel Linhares, Jeff Zimmerman, Chong Wang, Montse Torremorell, Jason Kelly, Jeff Feder, and Jeff Kurt
Moderator: Scott Dee

Monday Session #2

Swine Influenza Virus

Date: Monday, March 4

Time: 2:00 – 5:30 PM

Location: Elizabeth H (2nd level)

Session chair: Tara Donovan

- 2:00** Summary of USDA SIV surveillance results
John Korslund
- 2:20** Influenza virus dynamics, transmission and diversity in pig farms
Montse Torremorell and **Matt Allerson**
- 2:55** Influenza vaccinology
Overview of vaccine research and technology: What's on the horizon and what do we need to move forward?
Marcus Kehrli
- 3:30** BREAK
- 4:00** Practitioner panel: Controlling influenza in the field: What has worked for us
- Sow farm strategies
4:00 Paul Yeske
4:15 Michelle Sprague
- Grow/finish strategies
4:30 Jay Miller
4:45 Mary Battrell
- 5:00** Practitioner panel discussion
Paul Yeske, Michelle Sprague, Jay Miller,
and **Mary Battrell**
- 5:30** Session concludes

AASV Awards Reception



Sponsored by:
ELANCO ANIMAL HEALTH

Monday, March 4
6:30 – 8:30 PM

Manchester A-F (2nd level)

Monday Session #3

Infectious Disease

Date: Monday, March 4

Time: 2:00 – 5:30 PM

Location: Elizabeth FG (2nd level)

Session chair: Kent Schwartz

- 2:00** Rotavirus and undifferentiated diarrhea in suckling piglets: What's NEW and diagnostic criteria
Greg Stevenson
- 2:15** Rotavirus and undifferentiated diarrhea in suckling piglets: Case management/control methods
Michelle Sprague
- 2:30** What do we really know about feedback to gestating dams?
Rebecca Robbins
- 2:45** *Mycoplasma hyorhinis*: What we are finding
Albert Rovira
- 3:00** *Mycoplasma hyopneumoniae*: What we are finding
Maria Pieters
- 3:15** *Mycoplasma hyosynoviae*: What we are finding and what it may mean
Carlos Neto
- 3:30** *Mycoplasma hyosynoviae*: Case management
Jeff Blythe
- 3:45** BREAK

Continued on next page

AASVF Auction



**Ensure Our Future
Today – 100K!**

Monday, March 4

Manchester (2nd level)

Monday Session #3

- 4:00** Swine dysentery: Diagnostic criteria and differentials; diagnostic strategies
Eric Burrough
- 4:15** Swine dysentery: Elimination from sow farm
Cary Sexton
- 4:30** Diagnosis of complex grow-finish enteritis and assessing interventions
Jeremy Pittman
- 5:00** Complex grow-finish enterocolitis: Case example/ intervention options
Jeff Blythe
- 5:15** Complex grow-finish enterocolitis: Case example/ intervention options
Cary Sexton
- 5:30** Session concludes

COMMERCIAL EXHIBIT

Technical Tables Open



Monday, March 4
9:00 AM – 5:00 PM

Tuesday, March 5
8:00 AM – 12:00 PM

Manchester GHI (2nd level)

Tuesday General Session

The Shaping of Purpose

Date: Tuesday, March 5

Time: 8:00 AM – 12:00 PM

Location: Manchester A-F (2nd level)

Session chairs: Matt Anderson

- 8:00** Pink slime and black swans
Guy Loneragan
- 9:00** When science and public perception disagree
Howard Hill
- 10:00** BREAK
- 10:30** Providing leadership and demonstrating value:
What our clients want and expect
Tim Loula
- 11:30** Panel discussion: The issues challenging our
industry today
**Guy Loneragan, Howard Hill, Tim Loula, Craig
Rowles, and John Waddell**
- 12:00** Meeting concludes

TUESDAY BREAKFAST



AASV Business Breakfast

Tuesday, March 5

7:00 – 8:00 AM

Elizabeth FG (2nd level)

Speakers

Matthew Ackerman	Greensburg, IN
Sarah Ahola	Brampton, ON
Matt Allerson	Shoreview, MN
Jim Allison	Madison, NJ
Carmen Alonso	St Paul, MN
Gary Althouse	Kennett Square, PA
Jose Angulo	GERMANY
Mike Apley	Manhattan, KS
Greg Armbruster	Corcoran, MN
Mary Battrell	Garland, NC
David Baum	Ames, IA
Lance Baumgard	Ames, IA
John Baumgartner	Olivia, MN
Michael Berkland	Ames, IA
Carlo Bianco	Bologna, ITALY
Melissa Farber Billing	Kenansville, NC
Brian Bishop	Ames, IA
Alyssa Blaustein	Philadelphia, PA
Jeff Blythe	Orange City, IA
Daniel Borchers	Ames, IA
Matthew Borgmann	Raleigh, NC
Danielle Botting	Roseville, MN
Andrew Bowman	Columbus, OH
Daniel Boykin	Raleigh, NC
Barbara Brito	Davis, CA
Egan Brockhoff	Canmore, AB
Mike Brumm	North Mankato, MN
Stacy Brussell	Roseville, MN
Alexandra Buckley	Lansing, MI
Eric Burrough	Ames, IA
Randy Bush	Flora, IN
Paisley Canning	London, ON
Jean Paul Cano	St Paul, MN
Jane Christopher-Hennings	Brookings, SD
Travis Clement	Brookings, SD
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Gail Cunningham	Kelsey, AB
Amy Daniels	Savoy, IL
Scanlon Daniels	Dalhart, TX
Donald Davidson	Taylor, AZ
Deanne Day	Ames, IA
Scott Dee	Pipestone, MN
Joel DeRouchey	Manhattan, KS
Andres Diaz	St Paul, MN
Dennis DiPietre	Columbia, MO

Speakers

Todd Distad	Morris, MN
Kevin Dobesh	Wahoo, NE
Bill DuBois	Mustang, OK
Joshua Duff	Raleigh, NC
Anne Duquette	Edina, MN
Steve Ensley	Ames, IA
Jon Ertl	St Paul, MN
Jim Eubank	Honey Brook, PA
Robert Evelsizer	Fairmont, MN
Jeff Feder	St Peter, MN
Lori Feldmann	Mapleton, MN
Jon Ferrel	Frankfort, IN
Larry Firkins	Mahomet, IL
Will Fombelle	Atwood, IL
Tim Frana	Ames, IA
Charles Francisco	Mahomet, IL
Wayne Freese	Worthington, MN
Monte Fuhrman	Canistota, SD
Lucina Galina	Hendersonville, TN
Duane Garner	Graeagle, CA
Marissa Garry	Falcon Heights, MN
Phil Gauger	Ames, IA
Christa Goodell	Ames, IA
Jordan Graham	Ames, IA
Jana Grauerholz-Morgan	Clear Lake, IA
Kelly Greiner	Carthage, IL
Laura Greiner	Carthage, IL
Cara Haden	Ames, IA
Mark Hammer	Greensboro, NC
Jeff Harker	Frankfort, IN
Peggy Anne Hawkins	Northfield, MN
Marc Henninger	FRANCE
Christina Hill	St Paul, MN
Howard Hill	Iowa Falls, IA
Alexander Hintz	Madison, WI
Flávio Hirose	BRAZIL
Sam Holst	Roseville, MN
Derald Holtkamp	Ames, IA
Marlin Hoogland	Orange City, IA
Isaac Huerta	Minneapolis, MN
Megan Humphrey	Edgerton, WI
Scott Hurd	Ames, IA
Clayton Johnson	Carlyle, IL
Erin Johnson	Mahomet, IL
Levi Johnson	Ames, IA

Speakers

Rod Johnson	Aurora, IL
Kurt Kamrud	Ames, IA
Joseph Katz	Philadelphia, PA
Marcus Kehrli	Ames, IA
Daniel Keil	Shawnee, KS
Jason Kelly	Algona, IA
Doug King	Otley, IA
Apisit Kittawornrat	Ames, IA
Robert Knox	Urbana, IL
Darwin Kohler	Rochester, MN
John Korslund	Fulton, MD
Robert Kraeling	Watkinsville, GA
Charlotte Sonne Kristensen	DENMARK
Justin Kuecker	Ames, IA
Michael Kuhn	Cascade, IA
Jeff Kurt	Fairmont, MN
Chris Kuster	Geneseo, IL
Marie-Pier Labrecque	St-Hyacinthe, QC
Michelle Lam	Guelph, ON
Kelsey LaVigne	Raleigh, NC
Karen Lehe	West Lafayette, IN
Jamie Lehman	DeSoto, KS
Dana Lembke	Ames, IA
Boh Chang Lin	Omaha, NE
Daniel Linhares	St Paul, MN
Leticia Linhares	St Paul, MN
Guy Loneragan	Lubbock, TX
Tim Loula	St Peter, MN
James Lowe	Albers, IL
Wesley Lyons	Maryville, TN
Nubia Macedo	St Paul, MN
Darin Madson	Maxwell, IA
Rodger Main	Ames, IA
Amy Martell	Paoli, PA
Nicholas Mayer	Roseville, MN
John McGlone	Lubbock, TX
Brittney McLamb	Raleigh, NC
Dan McManus	Dakota Dunes, SD
Daniel Meyer	Ames, IA
Robert Meyer	Mississippi State, MS
Jay Miller	Atlanta, IL
Mark Mogler	Ames, IA
Morgan Morrow	Raleigh, NC
Chris Mowrer	Ames, IA
Deborah Murray	Jackson, MN
Michael Murtaugh	St Paul, MN

Speakers

Victor Neira-Ramirez	St Paul, MN
Daniel Nelson	East Bethel, MN
Carlos Neto	Ames, IA
Betsy Newton	Eaton, OH
Chris Olsen	Johnston, IA
Tanja Opriessnig	Ames, IA
Yaowalak Panyasing	Ames, IA
Shonna Parker	Knoxville, TN
Tom Parsons	Kennett Square, PA
Brent Pepin	Ames, IA
Andrea Petersen	St Paul, MN
Anna Petrowiak	Fairmont, MN
Kalie Pettit	Falcon Heights, MN
Tom Petznick	Norfolk, NE
Maria Pieters	St Paul, MN
Juan Carlos Pinilla	Hendersonville, TN
Jeremy Pittman	Wakefield, VA
Dale Polson	Ankeny, IA
Alex Ramirez	Ames, IA
Darwin Reicks	St Peter, MN
Kristin Reynolds	Aurora, ON
Caleb Robb	Ames, IA
Rebecca Robbins	Warsaw, NC
Charlie Robinson	Columbia, MO
Dan Rosener	LeMars, IA
Shawna Rossini	Philadelphia, PA
Kurt Rossow	St Paul, MN
Jim Roth	Ames, IA
Marisa Rotolo	Ames, IA
Albert Rovira	St Paul, MN
Bob Rowland	Manhattan, KS
Craig Rowles	Carroll, IA
Holly Rud	St Paul, MN
Kate Sawyer	Ames, IA
Adam Schelkopf	Savoy, IL
Megan Schnur	West Lafayette, IN
Jeff Schoening	Assumption, IL
Aubrey Schroeder	Greenfield, IN
Jacob Schwartz	St Paul, MN
Kent Schwartz	Ames, IA
Cary Sexton	Deep Run, NC
Gene Shepherd	Hendersonville, TN
Chris Sievers	Ames, IA
Randall Singer	St Paul, MN
Rae Sires	Ames, IA
Alan Snodgrass	West Point, NE

Speakers

John Sonderman	Columbus, NE
Eric Spell	Clinton, NC
Michelle Sprague	Audubon, IA
Ethan Spronk	St Paul, MN
Bethany Stammen	New Weston, OH
Scott Stehlik	Ames, IA
Tom Stein	Burnsville, MN
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Greg Stevenson	Ames, IA
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Steve Tousignant	Jordan, MN
Frederic Vangroenweghe	BELGIUM
Fabio Vannucci	St Paul, MN
Jason Verbeck	Carterville, IL
Lucie Verdon	Ottawa, ON
John Verstegen III	Verona, WI
John Waddell	Troy, MO
Chong Wang	Ames, IA
Stephen Webel	Sheridan, IN
Tom Weber	Greenfield, IN
Katherine Wedel	Roseville, MN
Douglas Weiss	Clive, IA
Amanda West	Delano, MN
Drew White	Ames, IA
Keith Wilson	Worthington, MN
Ching Ching Wu	San Carlos, CA
Paul Yeske	St Peter, MN
Lisa Yeske-Livermore	Madrid, IA
Chad Yoder	Ames, IA
Ruurd Zijlstra	Edmonton, AB
Jeff Zimmerman	Ames, IA

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AASV Luncheon
Veterinary Student Poster Awards



Saturday, March 2

7:00 AM

Registration Desk open

Location: Litrenta Foyer (2nd level)

Committee Meetings

7:30 AM

PRRS Risk Assessment Training (see page 10)

Location: Windsor BC (3rd level)

8:00 AM

ABVP Entrance Examination

Location: Oxford (3rd level)

ABVP Oral Examination

Location: Connaught (3rd level)

1:00 PM

SEMINARS

#1 Purpose-Inspired Practice Tips (see page 12)

Location: Manchester A (2nd level)

#2 It's Not All Bugs and Drugs (see page 14)

Location: Manchester B (2nd level)

#3 Boar Stud Technology and Lameness Challenges in the Sow Herd (see page 15)

Location: Manchester C (2nd level)

#4 Turning Data into Knowledge (see page 16)

Location: America's Cup AB (4th level)

#5 Full Circle Sequencing (see page 17)

Location: America's Cup CD (4th level)

5:00 PM

OPEN EVENING

There is no reception scheduled for Saturday evening. Explore and enjoy San Diego!

Sunday, March 3

6:30 AM

AASV Student Breakfast

Location: Manchester D (2nd level)

AASV Fun Run/Walk (see page 19)

Location: Boardwalk behind Grand Hyatt

7:00 AM

Praise Breakfast

Location: Manchester E (2nd level)

Registration Desk open

Location: Litrenta Foyer (2nd level)

8:00 AM

Canadian Swine Veterinarians

Location: Emma AB (3rd level)

SEMINARS

#6 Feeding Group-Housed Sows and the Growing Herd Efficiently (see page 21)

Location: Manchester AB (2nd level)

#7 Business Management (see page 22)

Location: Elizabeth H (2nd level)

#8 How to Use Diagnostic Information in the Field (see page 23)

Location: Manchester C (2nd level)

#9 Swine Med for Students (see page 24)

Location: Elizabeth F (2nd level)

RESEARCH TOPICS (see page 25)

Location: Elizabeth G (2nd level)



Sunday, March 3

12:00 PM

POSTER SESSION OPEN

Authors in attendance: 12:00 – 1:00 PM

Location: Litrenta Foyer

Veterinary Student Posters (see page 35)

Sponsored by **PFIZER ANIMAL HEALTH**

Research Topics Posters (see page 41)

Industrial Partners Posters (see page 45)

AASV FOUNDATION LUNCHEON

(Advance registration required)

Location: Manchester D (2nd level)

1:00 PM

CONCURRENT SESSIONS

#1 Student Seminar (see page 27)

Sponsored by **PFIZER ANIMAL HEALTH**

Location: Manchester AB (2nd level)

#2 Industrial Partners (see page 29)

Location: Elizabeth F (2nd level)

#3 Industrial Partners (see page 31)

Location: Elizabeth G (2nd level)

#4 Industrial Partners (see page 33)

Location: Elizabeth H (2nd level)

6:30 PM – 8:30 PM

WELCOME RECEPTION

Sponsored by **PFIZER ANIMAL HEALTH**

Location: Elizabeth DE (2nd level)

8:30 PM – 11:00 PM

STUDENT RECEPTION

Sponsored by **MERCK ANIMAL HEALTH**

Location: Manchester DEF (2nd level)

Monday, March 4

7:00 AM

Registration Desk open

Location: Litrenta Foyer (2nd level)

Spouse Hospitality Suite open (see page 47)

Location: Windsor BC (3rd level)

8:00 AM – 12:30 PM

GENERAL SESSION (see page 50)

Location: Manchester A-F (2nd level)

Howard Dunne Memorial Lecture: Dr Craig Rowles
“Perspective, passion, and the purpose-inspired practice”

Alex Hogg Memorial Lecture: Dr John Waddell
“Mentoring with purpose”

9:00 AM – 5:00 PM

COMMERCIAL TECHNICAL TABLES

Location: Manchester GHI (2nd level)

12:30 PM

LUNCHEON

Sponsored by **BOEHRINGER INGELHEIM VETMEDICA, INC**

Location: Elizabeth DE (2nd level)

2:00 – 5:30 PM

CONCURRENT SESSIONS

#1 PRRSV (see page 51)

Location: Manchester A-F (2nd level)

#2 Swine Influenza Virus (see page 52)

Location: Elizabeth H (2nd level)

#3 Infectious Disease (see page 53)

Location: Elizabeth FG (2nd level)

6:30 PM – 8:30 PM

AASV AWARDS RECEPTION

Sponsored by **ELANCO ANIMAL HEALTH**

Location: Manchester A-F (2nd level)

AASV FOUNDATION AUCTION (see page 48)

Location: Manchester (2nd level)

Tuesday, March 5

7:00 AM

Registration Desk open

Location: Litrenta Foyer (2nd level)

BREAKFAST and AASV ANNUAL BUSINESS MEETING

Location: Elizabeth FGH (2nd level)

8:00 AM

GENERAL SESSION (see page 55)

The Shaping of Purpose

Location: Manchester A-F (2nd level)

8:00 AM – 12:00 PM

COMMERCIAL TECHNICAL TABLES (see page 8)

Location: Manchester GHI (2nd level)

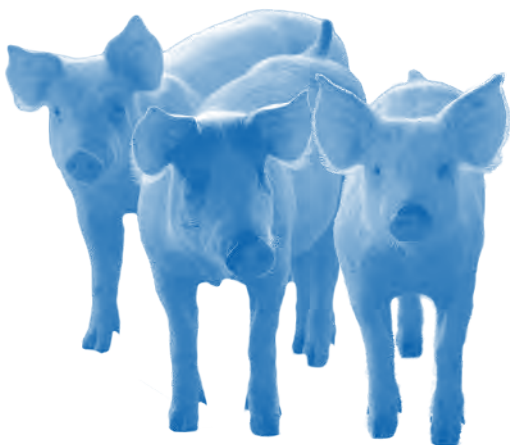
12:00 PM

MEETING CONCLUDES

1:00 PM

AASV BOARD OF DIRECTORS MEETING

Location: Connaught (3rd level)



**Plan now to
attend the
AASV 45TH
Annual Meeting
March 1-4, 2014
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2015 Orlando	Feb 28-Mar 3
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you!

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