

Integrating Science, Welfare,
and Economics in Practice

AASV

43rd Annual Meeting



March 10-13, 2012
Denver, Colorado

Message from the Program Chair, Dr. Tara Donovan



Welcome to Mile-High Denver!

Settled in the valley below the beautiful Rocky Mountains in Colorado, Denver is a majestic location for the 43rd AASV Annual Meeting. The inspiring peaks provide the perfect backdrop to stimulate our minds on how to integrate the new information we learn into our businesses.

“Integrating Science, Welfare and Economics in Practice” is the theme of this year’s meeting; it is what we strive to do every day. Giving sound medical advice and treatments backed by science is expected by owners, clients, and consumers; and as practitioners, it’s our commitment to excellence to meet their expectations. With that challenge, our program committee has delivered on the task of bringing the AASV a meeting carefully planned to include the most up-to-date information on our core areas of science as well as keeping our appetite for new technologies and innovative ideas satisfied.

“With the turbulent economic situation in our country, improving business viability is the key to success”

The pre-session line-up on Saturday and Sunday provides 11 choices that reflect the wide ranging scope of our members’ interests. There is sure to be one that will provide you with information you can take home and apply to your business or practice. Don’t forget that the Research Topics session is on Sunday morning. Sunday afternoon is packed with four session options, the always popular and sought-after Student Seminar along with three Industrial Partners sessions that provide a look at the industries’ leading technical innovations.

On Monday morning our keynote speaker delivering the Howard Dunne Memorial Lecture is Dr. Dean Boyd. His message will focus on “How to integrate science into practice to improve business viability.” With the turbulent economic situation in our country, improving business viability is the key to success. In pork production, business viability is directly influenced by the health and performance of the pig.

Dr. Lisa Tokach will follow on Monday morning asking the question: "Science, welfare, and economics: Are they cornerstones or just a balancing act?" in her presentation of the Alex Hogg Memorial Lecture. She will challenge you with some thought-provoking scenarios about the realities we are faced with in practice, and relates these to her recent experiences in the Heifer International Program.

Our mid-morning session on Monday sets the foundation for the afternoon sessions. We start with understanding the immunological response to disease in both individual pigs and in pig populations, then delve into evidence based medicine to make decisions, and the impacts of disease on pig welfare. The afternoon program expands further into three specific areas of pig disease: respiratory, enteric, and the effects of nutrition on animal health.

As a follow-up to last year's meeting agenda, we have dedicated the majority of Tuesday morning to PRRS virus. Preceding the PRRS updates, Dr. Amy Vincent

"...Dr. Amy Vincent will share her research perspective on how swine influenza virus continues to evolve as a serious threat to global pig health..."

will share her research perspective on how swine influenza virus continues to evolve as a serious threat to global pig health and how its potential for zoonotic disease further strengthens the need for continued research and surveillance in pigs. PRRS hasn't changed from being the most economically devastating pathogen in the swine industry. We have entire conferences dedicated to this virus, so the task of providing adequate time for presentations surrounding PRRS virus at the AASV meeting was daunting. The AASV PRRS Task Force was charged with organizing this part of the program and I think you will find that they delivered on your expectations.

Before I end this welcome message, I want to take the opportunity to thank the terrific group of members that formed the planning committee. Their volunteered time and devotion are what make this organization so outstanding. The AASV staff deserves more accolades than I can give for their help in making this meeting a success.

Enjoy your time in Denver!
~ Tara Donovan

Program Committee

Tara Donovan, Chair

Matt Anderson

Isabelle Moreau

Steve Dritz

Bob Morrison

Mike Eisenmenger

Deb Murray

Christa Irwin

Brian Payne

Eva Jablonski

Jeremy Pittman

Randy Jones

Sarah Probst Miller

Mike Kuhn

Paul Ruen

Ian Levis

Montse Torremorell

Jim Lowe

Keith Wilson

Rodger Main

Barry Wiseman

Jay Miller



Registration & Fees

Registration

Registration desk located in Centennial Foyer

Saturday, March 10	7:00 AM – 5:00 PM
Sunday, March 11	7:00 AM – 5:00 PM
Monday, March 12	7:00 AM – 5:00 PM
Tuesday, March 13	7:00 AM – 12:00 PM

Fees

Register online at www.aasv.org/annmtg

AASV member pre-registration	\$320
AASV member registration after Feb. 17	\$355
Nonmember veterinarian registration	\$440
Add'l Tech Table representatives (limit 3)	\$440

Meeting Hotel

Hyatt Regency Denver
650 15th Street
Denver, CO 80202
Tel: 303-436-1234
Fax: 303-486-4450

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.

Officers

President

Dr. Randy Jones
Livestock Veterinary Services
3501 Lakeview Trail
Kinston, NC 28504
Tel: 252-527-4960
rjones@livestockvet.com

President-Elect

Dr. Tara Donovan
The Hanor Company
E 4614 Hwy 14-60
PO Box 460
Spring Green, WI 53588
Tel: (608) 588-9170 x 9627
tdonovan@hanorusa.com

Vice President

Dr. Matt Anderson
Suidae Health & Production
2200 Hwy 18 E
PO Box 598
Algona, IA 50511
Tel: (515) 295-8777
matt_anderson@suidaehp.com

Past President

Dr. Paul Ruen
Fairmont Veterinary Clinic
1275 Highway 15 South
Fairmont, MN 56031
Tel: 507-238-4456
pruen@fmtvets.com

Board of Directors

District 1

Dr. William Minton
108 West Franklin Street
Chickasaw, OH 45826
USA

District 2

Dr. Matthew Turner
4651 Taylors Bridge Hwy
PO Box 438
Clinton, NC 28329
USA

District 3

Dr. Bill Starke
12200 NW Ambassador,
Suite 225
PO Box 20044
Kansas City, MO 64195
USA

District 4

Dr. John Baker
8866 Telephone Road
Chandler, IN 47610
USA

District 5

Dr. Doug Groth
Carthage Veterinary
Service Ltd.
PO Box 220
Carthage, IL 62321
USA

District 6

Dr. Kent Schwartz
Veterinary Diagnostic
Laboratory
Iowa State University CVM
Ames, IA 50011
USA

District 7

Dr. William DuBois
628 Elder Lane
Mustang, OK 73064
USA

District 8

Dr. Brian Schantz
304 Wakefield Street
PO Box 687
Laurel, NE 68745
USA

District 9

Dr. Scott Dee
Pipestone Veterinary Clinic
PO Box 188
Pipestone, MN 56164
USA

District 10

Dr. Alberto Stephano
Villa De Guadalupe 234
Villas Del Campestre
Leon, GTO 37129
MEXICO

District 11

Dr. George Charbonneau
225 Oak Street
Stratford, ON N5A 8A1
CANADA

Student Delegate

William Shamus Brown III
505 N 16th Street
Indianola, IA 50125
USA

Technical Tables

Academy of Rural Veterinarians
Accles & Shelvoke Limited
ADM Alliance Nutrition
AgroSoft
Airguard
Alltech
Animal Health International
APC
ARKO Laboratories
Automated Production Systems
AVMA PLIT
Bayer Animal Health
BEI
BioChek USA
Biovet
Boehringer Ingelheim
CHR Hansen
Danbred North America
Destron Fearing/Alflex USA
Elanco
Feedstuffs
Gallant Custom Laboratories
Genesis
GlobalVetLink
GlycoMyr – Wean-D
Harrisvaccines
Hog Slat
IDEXX
IMV Technologies
ITL Animal Healthcare
IVESCO
Life Technologies
Merck Animal Health
Micron Bio-Systems

Technical Tables

Minitube of America
MVP Laboratories
MWI Veterinary Supply
National Hog Farmer
National Pork Board
National Pork Producers Council
Nedap Agri North America
Neogen Corporation
Newport Laboratories
Newsham Choice Genetics
Norsvin
Novartis Animal Health US
Novus
Pfizer Animal Health
Pharmacosmos
Pharmgate Animal Health
Phibro Animal Health
PIC
PigCHAMP
PigKnows
Preserve International
Prima Tech USA
PureTek Genetics
Ralco Animal Health
ReproQuest
Ro-Main
Stuart Products
TechMix
Tetracore
TOPIGS USA
Tri-M AI
Trouw Nutrition USA
USDA APHIS Veterinary Services
Zinpro Performance Minerals

Breakfast, Luncheons,

SATURDAY, MARCH 10

PIC 50th ANNIVERSARY CELEBRATION RECEPTION

Sponsored by: PIC

5:00 – 7:00 PM

Centennial FGH

SUNDAY, MARCH 11

PRAISE BREAKFAST

Sponsored by: Newsham Choice Genetics and Boehringer Ingelheim Brothers and Sisters in Christ

7:00 – 8:00 AM

Mineral DEFG

WELCOME RECEPTION

Sponsored by Pfizer Animal Health

6:30 – 8:30 PM

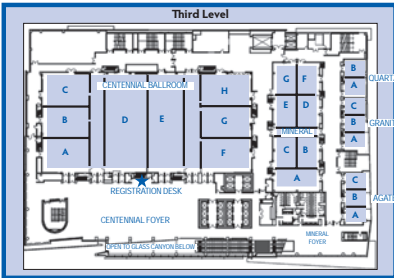
Capitol Ballroom

STUDENT RECEPTION

Sponsored by Merck Animal Health

8:30 – 11:00 PM

MAP



Turn to the back cover of this program booklet for a fold-out map of the Hyatt Convention Center.

Receptions & More!

MONDAY, MARCH 12

SPOUSE HOSPITALITY SUITE

7:00 – 9:00 AM

Agate ABC

AASV LUNCHEON

Sponsored by Boehringer Ingelheim

12:30 – 2:00 PM

Capitol Ballroom

AASV AWARDS RECEPTION & FOUNDATION AUCTION

Sponsored by Elanco Animal Health

6:30 – 8:30 PM

Capitol Ballroom

TUESDAY, MARCH 13

AASV BUSINESS BREAKFAST

Tuesday, March 12

7:00 – 8:00 AM

Centennial E

Internet Kiosk

Sponsored by: **GlobalVetLink**

**Check your email
or search the Web**

Located in the Centennial Foyer

Risk Assessment Training

Web-based PRRS Risk Assessment Training for the Breeding Herd

Date: Saturday, March 10, 2012

Time: 7:30 AM – 12:30 PM

Location: Mineral A (third level)

Fee: No charge

Limit: 20 participants, AASV members only

Coordinator: Derald Holtkamp

Description:

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 and Kevin Vilaca
- 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:
Interpreting results
Derald Holtkamp
- 12:30 Training concludes

Seminar 1

Applying Evidence Based Medicine (EBM) in Practice

Date: Saturday, March 10, 2012

Time: 1:00 – 5:00 PM

Location: Centennial A (third level)

Fee: \$95.00

Seminar co-chairs: Alex Ramirez, Darin Madson

Description:

This seminar is focused on improving the implementation of evidence-based medicine (EBM) in swine medicine. The workshop will be centered on field applications of EBM, not institutional research. Individual and group discussion will be solicited to help guide EBM concepts in both a simple as well as a complex field scenario.

After a brief, interactive introduction, individuals will be split into groups. Each group will be facilitated by a member of a practitioner panel recruited to help with this seminar. Groups will work on discussing how they would implement a field trial in their practice to provide evidence on the effectiveness of a new vaccine.

A second group activity will involve a more complex clinical problem (mulberry heart disease mortality). This complex problem will be broken down into smaller parts focused on decision-making based on evidence. How do you define the problem? What information is already known? How do you decide on prioritizing interventions as well as how do you monitor the outcomes of the interventions?

The goal of this workshop is for participants to understand what EBM is as well as to be aware of how to better implement and interpret information/results from studies (institutional research as well as field research). Ultimately, this workshop will help practitioners improve their implementation of EBM in swine practice.

Seminar 1

- 1:00 Welcome and introduction to EBM
Alex Ramirez and Darin Madson
- 1:15 Background for examples and case studies
Alex Ramirez
- 2:00 Example 1: Vaccine effectiveness
Interactive group with practitioner panel member
- 2:45 How to formulate an answerable clinical question;
the difference between statistical and clinical
significance
Alex Ramirez
- 3:00 BREAK
- 3:20 Example 2: Investigating mulberry heart disease
mortality
Darin Madson
- 5:00 Seminar concludes

Seminar 2

Preventing Profit-Robbing Events in Growing Pig Populations

Date: Saturday, March 10, 2012

Time: 1:00 – 5:00 PM

Location: Centennial D (third level)

Fee: \$95.00

Seminar chair: Mike Eisenmenger

Description:

In today's competitive environment, we can't afford to give away profit by allowing preventable profit-robbing events to happen. This session will feature speakers that have "real life" experiences to share. They have dealt with these events and have solutions for you to take home to prevent them from occurring in work or practice.

Speakers will focus on ventilation events that cause dead pigs as well as the science behind why this happens, biosecurity practices that lead to sustainable health, lessons learned in the transportation of weaned pigs through market loads to prevent deaths, and finally, a focus on feed-outs and nutrition as it relates to preventable losses.

You should leave this session with clear ideas and strategies on how to prevent loss events associated with feed, water, air, biosecurity and transportation.

- 1:00 Opening comments
 Mike Eisenmenger
- 1:15 Understanding and preventing ventilation events
 that cause production losses
 Mike Brumm
- 2:15 Wean-to-finish biosecurity: Lessons learned
 Jana Grauerholz-Morgan
- 3:00 BREAK
- 3:15 Understanding and preventing transportation losses
 from the wean event to the packing plant
 Chris Rademacher

Seminar 2

- 4:00 Strategies to maximize pig performance: Role of feed and feeding events in wean-to-finish production
Chad Hastad
- 4:45 Roundtable Q & A
All speakers
- 5:00 Seminar concludes

PIC 50th Anniversary Celebration



Sponsored by: **PIC**

Saturday, March 10
5:00 – 7:00 PM

Centennial FGH (third level)

Seminar 3

Crisis Management

Date: Saturday, March 10, 2012

Time: 1:00 – 5:00 PM

Location: Centennial B (third level)

Fee: \$95.00

Seminar chair: Mike Kuhn

Description:

Raising pigs is easy. We all know the basics of good pig health and management, but more and more we are asked to step into new roles. These roles can include such things as managing transportation, euthanasia and weather-related catastrophes. We also continue to grow in our role in various social issues and in social media. The speakers in this session will give insights into their experiences dealing with some of these challenges.

- 1:00** What's the balance in your reputation bank account?
Amy Richards

- 1:45** Rapid response in a weather event: "When the
 floods came"
Carly Dorazio

- 2:15** Transportation: "Planning for the unexpected"
Jennifer Woods

- 3:00** BREAK

- 3:30** Dealing with a mass euthanasia event
Egan Brockhoff

- 4:15** When you see your company on YouTube
Howard Hill

- 5:00** Seminar concludes

Seminar 4

Providing Solutions with Impact: Practice Tips with a Twist

Date: Saturday, March 10, 2012

Time: 1:00 – 5:00 PM

Location: Centennial E (third level)

Fee: \$80.00

Seminar chair: Jay Miller

Description:

Have you attended or participated in the fun and interactive “practice tips” idea-sharing session? This pre-conference seminar takes practice tips to a new level by providing a panel of expert judges that will select one of the presentations to receive the “most impact” award, replacing the audience vote used in past years. Eight veterinarians will present a case, project, or experience they feel would impact the attendees by providing a new solution or approach to a problem. As in the past, these busy veterinarians have not been required to write a paper. The wide range of possibilities for new ideas is sure to provide some take-home solutions with impact!

- 1:00 Evaluation of flow-based *Mycoplasma hyopneumoniae* challenges
Clayton Johnson
- 1:25 Atypical PRRS stability management in a 2500-head sow farm
Marlin Hoogland
- 1:50 Farrow-to-finish vertical *Mycoplasma hyopneumoniae*; Pay now or pay later
Todd Wolff
- 2:15 A no-good, very bad week
Cameron Schmitt
- 2:40 Rotavirus A, B, and C case study in suckling pigs
Dyneah Classen
- 3:05 BREAK

Continued on next page

Seminar 4

- 3:30 The value of the diagnostician's discretion
Nathan Schaefer
- 3:55 Add \$2.00+ per head to a client's profit without half-dosing any vaccine
Jason Kelly
- 4:20 Something different
Ian Levis
- 4:45 Roundtable Q & A
All speakers
- 5:00 Seminar concludes

Seminar 5

The Changing Face of Swine Health and Swine Practice around the Globe

Date: Saturday, March 10, 2012

Time: 1:00 – 5:00 PM

Location: Centennial C (third level)

Fee: No charge

Seminar co-chairs: Patrick Webb, Rodger Main

Co-sponsored by USDA

Description:

Curious about what the major disease issues are outside of North America? Ever wonder what it would be like to consult in other parts of the world where foreign animal diseases are just another facet in a herd health plan? Wonder what is going on with foreign animal disease planning and policy in the United States? Then come spend an afternoon to learn about the changing face of swine health and practice around the globe.

In this informative seminar, participants will learn about major swine health issues from regions around the globe and hear from various AASV members about their consulting experiences in European countries, Russia, and China. Participants will also get up-to-date overviews of foreign animal disease preparedness and response strategies in the United States from USDA and the pork industry. So if you're curious about international consulting or just want to catch up on emergency preparedness, then this is the seminar for you!

- 1:00** Swine health: A global perspective
Dave Pyburn
- 1:30** Opportunities and experiences practicing in emerging markets: Russia
Hans Rotto
- 2:00** Opportunities and experiences practicing in emerging markets: Eastern Europe
Mike Mohr

Continued on next page

Seminar 5

- 2:30 Opportunities and experiences practicing in emerging markets: China
Donna Harris and Dale Hendrickson
- 3:00 BREAK
- 3:30 USDA foreign animal disease response strategies and policies
Jon Zack
- 4:15 Pork industry foreign animal disease preparedness
Patrick Webb
- 4:45 Roundtable Q & A
All speakers
- 5:00 Seminar concludes

PRAISE BREAKFAST

Sunday, March 11

7:00 – 8:00 AM

Location:
Mineral DEFG

Coordinator:
Dave Smidt

Co-sponsored by:
Newsham Choice Genetics

Boehringer Ingelheim
Brothers and Sisters in Christ

For many, Sunday is a day to gather with family and friends for spiritual nourishment and encouragement in faith. So bring your family and join your AASV friends for a devotion, music, and fellowship at the AASV Praise Breakfast!

This year we will enjoy a presentation from a special guest, Dr. Keith Flanagan, Christian Veterinary Mission-Haiti. He will share how God is at work in this country as well as recent experiences with *Teschovirus*. Then, join in musical worship led by the members of the praise and worship band: Drs. Monte Fuhrman, Harold Tilstra, and Tom Wetzell.

Your free-will offering, along with support from our sponsors, 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

Applied Diagnostics and Algorithms

Date: Sunday, March 11, 2012

Time: 8:00 AM – 12:00 PM

Location: Centennial ABC (third level)

Fee: \$95.00

Seminar chair: Eva Jablonski

Description:

To start the seminar, two expert diagnosticians from Iowa State University and the University of Minnesota will team up to share step-wise diagnostic algorithms by system/syndrome. Focus areas will include enteric disease, respiratory disease, septicemia/joints/CNS disease, and metabolic disease. Discussion will focus on step-wise diagnostic methodology, primary rule-outs, capabilities and limitations of diagnostic tools, and gold-standard tests for confirmatory diagnosis. Seminar participants will leave with a take-home reference guide on how to take a clinical presentation and end up with a treatable pathogen.

After a refreshing break, we will reconvene to discuss the next development in oral fluid technology, understanding the use and performance of PRRS ELISA adapted for oral fluids, followed by field experiences from two practitioners who have implemented oral fluid PCR testing in their system/practice. They will share their insights on how oral fluid testing has added value to their practice and diagnostic methods.

Finally, as many practitioners struggle with managing the plethora of diagnostic data that we collect, the session will wrap up with a glance at one unique method of handling diagnostic data.

8:00 A systematic approach to swine diagnostics
Jerry Torrison and Bruce Janke

10:00 BREAK

10:30 Performance of a commercial PRRS ELISA adapted for the detection of PRRS antibodies in oral fluids
Jeff Zimmerman

11:00 Grow-finish surveillance using oral fluids
Jana Grauerholz-Morgan

Seminar 6

- 11:20 Practical application of oral fluid testing in multiplication
Laura Schulz-Dalquist
- 11:40 Critical vs clinical thinking about health challenges:
The role of data aggregation
Jim Lowe
- 12:00 Seminar concludes

Seminar 7

Precision Pharming: The Future of Practical Pharmacology

Date: Sunday, March 11, 2012

Time: 8:00 AM – 12:00 PM

Location: Centennial F (third level)

Fee: \$95.00

Seminar chair: Sarah Probst Miller

Description:

In the future, our responsibility for judicious use of antibiotics will only increase. What does this mean? What will our role be? What tools do we have available to have good “antibiotic housekeeping” on the farms we serve? How can we not inadvertently shut down the US export market? What can we do to reduce the development of antibiotic resistance? This seminar works to answer these questions while providing tools to help us prepare practically for the future.

- 8:00** The urgency of our responsibility and role, and the reality of our increased future responsibility
Paul Ruen
- 8:30** Good Housekeeping challenge: Structural considerations on decision making
Scott Hurd
- 9:00** Practical knowledge to keep yourself from shutting down the US export market: A real-life example and solution
Mary Battrell and Mike Apley
- 10:00** BREAK
- 10:15** How do we practice medicine to minimize antibiotic resistance?
Joseph Blondeau
- 11:15** Practical daily decision making (large system and practice): What influences our choices? What are our limitations? What makes us biased?
Matthew Turner and Egan Brockhoff
- 12:00** Seminar concludes

Seminar 8

Pork Processing Plant 101

Date: Sunday, March 11, 2012

Time: 8:00 AM – 12:00 PM

Location: Centennial GH

Fee: \$95.00

Seminar chair: Barry Wiseman

Description:

The objectives of this program are to introduce the participants to the activities and resources available in the pork processing plant. We will have FSIS veterinarians as well as plant employees discuss what happens from the time the truck gets to the plant until the carcasses have been processed. This will include humane handling in the barn as well as all areas of carcass inspection, specifically where pigs are lost. We will discuss detection of antibiotic residues in meat, which is particularly relevant to the export market. And, we will review different plant matrix plans. Our goal is that you should learn everything you never knew you wanted to know about processing plants.

- 8:00** Which way is up in the pork processing plant?
Barry Wiseman
- 8:30** Role and activities of the Food Safety Inspection Service (FSIS)
Maria Esteras
- 9:10** Understanding matrices
Peter Bahnson
- 9:40** BREAK
- 9:55** FSIS
To be announced
- 10:35** Update on antibiotic residues
Robert Salter
- 11:05** Operations at a HIMP* plant
Selina Hallan
- 11:45** Roundtable Q & A
All speakers
- 12:00** Seminar concludes

*HIMP = HACCP-based Inspection Models Project
(HAACP = hazard analysis critical control points)

Seminar 9

Swine Production and Medicine for Veterinary “Students”

Date: Sunday, March 11, 2012

Time: 8:00 AM – 12:00 PM

Location: Centennial E (third level)

Fee: \$95.00; No charge for veterinary students or 2010 or 2011 DVM graduates

Seminar co-chairs: Jeremy Pittman,
Angie Supple

Description:

The goal of this year's student pre-conference seminar is to provide information in areas we feel are essential for new and recent graduates based on the experiences of recent graduates. This seminar will supplement the students' veterinary curriculum, and while focused on swine, the concepts are applicable to all fields of veterinary medicine. The seminar will include topics on development of differential disease lists, interpretation of diagnostic reports and "putting it all together." A popular component will return: an interactive case study where students will work step-wise through a case in small groups. To end the seminar, we will have an open question and answer session with a panel of recent graduates representing various areas of the industry.

Not just for students! While the session is geared towards students, we strongly feel the information and interaction is applicable to all members of AASV.

- 8:00** Differentials, diagnostics, and decisions
Clayton Johnson
- 8:45** "Poly-ology": (pol-ee-ol-uh-jee) noun, 1. the process of combining your vet classes to solve a problem; verb, 2. what vets do every day.
Carissa Odland
- 9:30** BREAK
- 10:00** Interactive case study
Jeremy Pittman and Angie Supple
- 11:15** Roundtable Q & A for students
Panel of recent graduates from varied portions of the swine industry
- 12:00** Seminar concludes

Research Topics

Research Topics

Date: Sunday, March 11, 2012

Time: 8:00 AM – 12:00 PM

Location: Centennial D (third level)

Session chair: Chris Rademacher

- 8:00 Diagnostic performance of a commercial PRRS serum antibody ELISA adapted to oral fluid specimens: longitudinal response in experimentally-inoculated populations
Apisit Kittawornrat
- 8:15 Diagnostic performance of a commercial PRRS serum antibody ELISA adapted to oral fluid specimens: field samples
Apisit Kittawornrat
- 8:30 Economic analysis of PRRS virus elimination from a herd
Derald Holtkamp
- 8:45 Use of commercial subunit and chimeric vaccines in 5-day-old piglets is effective in protecting from PCV2 viremia and PCVAD in a PCV2, PPV and PRRSV triple challenge model
Tanja Opriessnig
- 9:00 Evaluation study of interventions for reducing the risk of PRRSV introduction into filtered farms via retrograde air movement (back-drafting) through idle fans
Carmen Alonso
- 9:15 The effect of PRRS MLV vaccine given by exposure to vaccine saturated ropes
Darwin Reicks
- 9:30 Evaluating aspirin for reduction of fever and improvement of performance in isowean pigs with uncomplicated PRRS virus infection
Mark Wagner
- 9:45 BREAK

Continued on next page

Research Topics

- 10:15 Enrofloxacin treatment affects the colonization stage of *Haemophilus parasuis* in weaned pigs
Nubia Macedo
- 10:30 Bacterial infection of the navel cord in neonatal piglets: A follow up on prevalence and clinical outcomes
Laura Greiner
- 10:45 Antimicrobial susceptibility patterns associated with virulence factors in swine *Escherichia coli* isolates
Tim Frana
- 11:00 Detection of antibodies against influenza A virus nucleoprotein (NP) in porcine oral fluid specimens using a commercial blocking ELISA
Yaowalak Panyasing
- 11:15 Detection of airborne swine influenza A virus in experimentally infected pigs under the presence of maternally derived immunity
Cesar Corzo
- 11:30 Detection of airborne swine influenza A under field conditions
Cesar Corzo
- 11:45 Influenza A virus genetic diversity in immune pigs
Carlos Diaz
- 12:00 Session concludes

Welcome Reception

Sponsored by:
PFIZER ANIMAL HEALTH

Sunday, March 11
6:30 – 8:30 PM

Capitol Ballroom (fourth level)



Sunday Session #1

Student Seminar

Date: Sunday, March 11, 2012

Time: 1:00 – 5:15 PM

Location: Centennial ABC (third level)

Session co-chairs: Peter Davies, Alex Ramirez

Sponsored by Pfizer Animal Health

- 1:00 A pilot study to evaluate the PRRSV carrier status of vasectomized boars in herds attempting PRRSV elimination
Sam Holst, University of Minnesota
- 1:15 Use of buffered Swiffer® cloth for collection of PRRSV from the snout and face of growing pigs
Kevin Dobesh, Iowa State University
- 1:30 Assessing production parameters and economic impact of swine influenza, PRRS and *Mycoplasma hyopneumoniae* on finishing pigs in a large production system
Cara Haden, Iowa State University
- 1:45 *Haemophilus parasuis* seroprofiling with OppA universal test
Bethany Stammen, Ohio State University
- 2:00 Indirect transmission of PRRS virus in the farrowing rooms of a 6000-sow herd
Megan Thompson, University of Minnesota
- 2:15 Investigation of a novel retrograde air movement intervention to prevent aerosol transmission of PRRSV
Michael Nagorske, University of Minnesota
- 2:30 Effect of waste environment on survival of *Brachyspira hyodysenteriae*
Trevor Schwartz, Iowa State University
- 2:45 BREAK

Continued on next page

Sunday Session #1

- 3:15 Early weaning impairs gut mucosal defense and exacerbates clinical disease in F18 *E. coli* infection
Brittney McLamb, North Carolina State University
- 3:30 An evaluation of Stalosan F powder for deactivation of PRRSv
Casey Rabbe, University of Minnesota
- 3:45 A new wrinkle in PRRSv PCRs for swine oral fluid specimens
Marisa Rotolo, Iowa State University
- 4:00 A pilot study evaluating prevalence of PCV2 viremia in the breeding herd
Kelsey Altholz, North Carolina State University
- 4:15 Comparison of the effect of ceftiofur crystalline free acid and procaine penicillin-G administered at either birth or processing on suckling piglet health and performance
Jonathan Tangen, Iowa State University
- 4:30 Survey of vitamin D levels in swine serum across different stages of production
Jessica Abbott, Iowa State University
- 4:45 Evaluation of using oral fluids from *Mycoplasma hyopneumoniae* positive gilts to acclimate weaning age pigs
Emily Kuntz, University of Illinois
- 5:00 Evaluation of sample collection and handling strategies to increase success of PRRSv-ORF5 sequencing in oral fluids
Paul Thomas, Iowa State University
- 5:15 Session concludes

Student Reception



Sponsored by:
MERCK ANIMAL HEALTH

Sunday, March 11
8:30 – 11:00 PM

Centennial EFGH (third level)

Sunday Session #2

Industrial Partners

Date: Sunday, March 11, 2012

Time: 1:00 – 5:00 PM

Location: Centennial D (third level)

Session chair: Isabelle Moreau

- 1:00 Laboratory studies on Circumvent® PCV M combination *Mycoplasma hyopneumoniae* porcine circovirus type 2 vaccine
Speaker: Brad Thacker
Sponsor: MERCK ANIMAL HEALTH
- 1:15 Field evaluations of Circumvent® PCV M: combination *Mycoplasma hyopneumoniae* and porcine circovirus type 2 vaccine
Speaker: Brad Thacker
Sponsor: MERCK ANIMAL HEALTH
- 1:30 Scientific and practical considerations regarding the use of a novel, injectable anti-infective in swine: Zuprevo® from Merck Animal Health
Speaker: Timothy Kniffen
Sponsor: MERCK ANIMAL HEALTH
- 1:45 Effects of administering non-steroidal anti-inflammatory drugs (aspirin or ibuprofen) through the water as possible interventions to mitigate the adverse effects of vaccination on nursery pig performance
Speaker: Scott Fry
Sponsor: AKEY
- 2:00 Mycotoxin solutions from Novus International Inc. mitigate the negative effects of deoxynivalenol on pigs
Speaker: Karen Lehe
Sponsor: NOVUS INTERNATIONAL
- 2:15 Tylan premix impact on Full Value Pig metrics
Speaker: Ginger Pelger
Sponsor: ELANCO ANIMAL HEALTH

Continued on next page

Sunday Session #2

- 2:30 Evaluation of fecal shedding by a high-throughput qPCR assay in a *Lawsonia intracellularis* challenge
Speaker: Dana Beckler
Sponsor: ELANCO ANIMAL HEALTH
- 2:45 BREAK
- 3:15 Utilization of a blend of novel feed ingredients improves lactating and reproductive performance of sows during summer heat stress
Speaker: Joseph Hahn
Sponsor: ADM ALLIANCE NUTRITION
- 3:30 Aivlosin® (tylvalosin) a new oral macrolide developed for veterinary use in swine
Speaker: Elizabeth Abbott
Sponsor: ECO ANIMAL HEALTH
- 3:45 A molecular approach to the characterization and intra-species differentiation of porcine *Pasteurella multocida* strains associated with pneumonia and progressive atrophic rhinitis
Speaker: Boh Chang Lin
Sponsor: MVP LABORATORIES
- 4:00 A review of recent supplemental iron industry practices and current usage of Uniferon® 200 (iron dextran complex injection, 200mg/ml) in baby pigs
Speaker: Herschel Gaddy
Sponsor: PHARMACOSMOS
- 4:15 Effect of Solutein™ given to boars in isolation on discard rate and sperm quality
Speaker: Darwin Reicks
Sponsor: APC
- 4:30 Efficacy of PCV2 vaccination with Circovac® under Mexican conditions
Speaker: Rodolfo Sanchez
Sponsor: MERIAL
- 4:45 Impact of sow longevity on lifetime performance
Speaker: Sasha Gibson
Sponsor: PigCHAMP
- 5:00 Session concludes

Sunday Session #3

Industrial Partners

Date: Sunday, March 11, 2012

Time: 1:00 – 5:00 PM

Location: Centennial E (third level)

Session co-chairs: Tom Gillespie, Erin Johnson

- 1:00 Updated reagents for amplification of a new North American porcine reproductive and respiratory syndrome virus strain
Speaker: Cate O'Connell
Sponsor: LIFE TECHNOLOGIES
- 1:15 The effects of dietary bacitracin on gut health and performance in heat stressed pigs
Speaker: Adam Moeser
Sponsor: PFIZER ANIMAL HEALTH
- 1:30 Fostera PCV2 efficacy
Speaker: Greg Nitzel
Sponsor: PFIZER ANIMAL HEALTH
- 1:45 PRRS attenuation of a virulent North American PRRS virus isolate on CD163-expressing cell lines, and demonstration of efficacy against a heterologous challenge
Speaker: Jay Calvert
Sponsor: PFIZER ANIMAL HEALTH
- 2:00 The positive effect of genomic selection on genetic progress
Speaker: John Sonderman
Sponsor: DANBRED NORTH AMERICA
- 2:15 Use of statistical process control analysis and a proforma spreadsheet to evaluate the effects of Regano in gestation and lactation diets on sow enteric health and piglet performance
Speaker: Thomas Gillespie
Sponsor: RALCO ANIMAL HEALTH

Continued on next page

Sunday Session #3

- 2:30 Review of the Phibro Animal Health *Brachyspira* spp survey project
Speaker: Douglas Weiss
Sponsor: PHIBRO ANIMAL HEALTH
- 2:45 BREAK
- 3:15 *Clostridium difficile* antitoxin in neonatal swine
Speaker: David Carter
Sponsor: MG BIOLOGICS
- 3:30 A comparison of injection site lesions and performance differences in nursery pigs vaccinated with PCV2-*Mycoplasma hyopneumoniae* combination vaccines
Speaker: Erin Johnson
Sponsor: BOEHRINGER INGELHEIM VETMEDICA
- 3:45 Evaluation of airborne shedding of Ingelvac PRRS modified live vaccine from growing pigs raised under commercial conditions
Speaker: Paul Yeske
Sponsor: BOEHRINGER INGELHEIM VETMEDICA
- 4:00 The effect of PCV2 vaccination on semen quality in mature breeding boars
Speaker: Amanda Sponheim
Sponsor: BOEHRINGER INGELHEIM VETMEDICA
- 4:15 Reviewing skip-a-heat
Speaker: Juan Carlos Pinilla
Sponsor: PIC NORTH AMERICA
- 4:30 Mixed-sex vs. split-sexed penning. Does it matter?
Speaker: Gene Shepherd
Sponsor: PIC NORTH AMERICA
- 4:45 The many uses of CDCD pigs in human research
Speaker: Rexanne Struve
Sponsor: STRUVE LABS
- 5:00 Session concludes

Sunday Session #4

Industrial Partners

Date: Sunday, March 11, 2012

Time: 1:00 – 5:15 PM

Location: Centennial FGH (third level)

Session co-chairs: Michael Strobel,
Keith Erlandson

- 1:00 Electronic sow feeding; Individual animal care in a group-housed barn
Speaker: Jeff Schoening
Sponsor: AUTOMATED PRODUCTION SYSTEMS
- 1:15 Commercial test herd use: Data partnership to increase genetic progress in prolificacy and longevity
Speaker: Justin Fix
Sponsor: NATIONAL SWINE REGISTRY
- 1:30 The effect of topical anti-infective application at castration and tail docking of baby pigs versus doing nothing
Speaker: Michael Strobel
Sponsor: VETERINARY PROVISIONS and AURORA PHARMACEUTICAL
- 1:45 The evaluation of Wean-D on suckling pig performance
Speaker: Aaron Schaffer
Sponsor: CARTHAGE VETERINARY SERVICE/ INNOVATIVE SWINE SOLUTIONS
- 2:00 Evaluation of the efficiency of one dose of autogenous MJPRRS[®] vaccine in reducing PRRS virus replication and mortality in PRRS naive 21-day old pigs prior to and during viremia
Speaker: Mark Wagner
Sponsor: MJ BIOLOGICS
- 2:15 Electrostatic particle ionization (EPI) improves nursery pig performance and air quality
Speaker: Chris Rademacher
Sponsor: BAUMGARTNER ENVIRONICS
- 2:30 Unique strategies to address bacterial contamination of boar semen
Speaker: Isaac Huerta
Sponsor: MAGAPOR

Sunday Session #4

- 2:45 BREAK
- 3:15 What AVMA PLIT can do for you and your business
Speaker: Rodney Johnson
Sponsor: AVMA PLIT
- 3:30 Nursery, finishing and wean-to-finish benchmarking analysis
Speaker: Tom Stein
Sponsor: METAFARMS
- 3:45 Protection against swine influenza virus following replicon particle vaccination
Speaker: Ryan Vander Veen
Sponsor: HARRISVACCINES
- 4:00 Replicon particle administration prior to challenge reduces PRRSV viremia
Speaker: Mark Mogler
Sponsor: HARRISVACCINES
- 4:15 Impact of in-feed antibiotic regimens on pig performance and expression of clinical and subclinical diseases
Speaker: Michael Brumm
Sponsor: NOVARTIS ANIMAL HEALTH
- 4:30 Impact of Denagard® plus chlortetracycline in pigs on improving disease control as measured by improved growth performance
Speaker: Keith Erlandson
Sponsor: NOVARTIS ANIMAL HEALTH
- 4:45 Examining the impact of water line cleaning, disinfection, and pH reduction on nursery pigs
Speaker: Andrea Pitkin
Sponsor: PRESERVE INTERNATIONAL and IVESCO
- 5:00 Fat-soluble vitamin needs for nursing and weaned pigs
Speaker: Rob Stuart
Sponsor: STUART PRODUCTS
- 5:15 Session concludes

Poster Session

Veterinary Student Posters

Location: Centennial Foyer (third level)

Date: Sunday, March 11

Time: 12:00 PM – 5:00 PM

Authors present: 12:00 – 1:00 PM

Date: Monday, March 12

Time: 9:00 AM – 5:00 PM

Sponsored by Pfizer Animal Health

1. Evaluating the response of pigs vaccinated with two half and two full doses of Circumvent® PCV from sows vaccinated with Circumvent PCV preparturition
Natalie Baker, Purdue University
2. Making lemonade from lemons: a case study of eradicating PRRS from a naïve 650 sow two-site farm after an acute PRRS outbreak and simultaneously eliminating *Mycoplasma hyopneumoniae*
Joshua Barker, Mississippi State University
3. Using field serum samples to compare qualitative results between *Lawsonia intracellularis* ELISA and IPMA at the individual and herd levels
Brian Bishop, Iowa State University
4. Detection of PRRSV and SIV in oral fluids from pigs one week postweaning
Shamus Brown, Iowa State University
5. Does maternally-derived immunity or PCV2 viremia adversely affect PCV2 vaccination response?
Paisley Canning, University of Guelph
6. Comparing feed efficiency and reproductive performance of gestating sows housed in conventional and group gestation
Paisley Canning, University of Guelph
7. Effect of joint sampling technique on bacterial load in synovial fluid samples of swine in a commercial setting
Deanne Day, Iowa State University

Continued on next page

Poster Session

Veterinary Student Posters

8. Surveillance of *Brachyspira hyodysenteriae* in sows and suckling piglets
Joshua Duff, North Carolina State University
9. Identification of a flow-based *Salmonella* challenge using a multi-site necropsy survey in a swine production system
Jordan Graham, Iowa State University
10. Comparison of early wean to finish mortality diagnoses between trained veterinary student interns and a diagnostic laboratory
Aubrey Hauswirth, Iowa State University
11. Comparison of various diagnostic samples as a means of diagnosing *Mycoplasma hyosynoviae*
Jared Jacobson, Iowa State University
12. Hypernatremic dehydration of newborn piglets secondary to insufficient lactation
Attila Mihály Kertész, Szent István University, Budapest
13. Is diarrhea preceded by changes in the normal intestinal microbiota?
Heather Kittrell, Louisiana State University
14. A comparison of tracheobronchial, oropharyngeal, and nasal swabs to determine the *Mycoplasma hyopneumoniae* status in suckling piglets
Kurt Kuecker, Iowa State University
15. Effectiveness of clove oil (*Eugenia aromaticum*) as an anthelmintic
Amy Kunkel, Iowa State University
16. Retrospective analysis of pig condemnation data: Implications for national disease surveillance
Jeffrey Ling Min Than, Massey University

Poster Session

Veterinary Student Posters

17. Outlining the need for better sow hoof management: A study into the correlations between long phalanges and reproductive performance
Wesley Lyons, University of Tennessee
18. Modification of swine oral fluid samples to enhance the sensitivity for detecting porcine reproductive and respiratory syndrome virus (PRRSv) isolation and genomic sequencing
Daren Miller, Purdue University
19. The role of colostral immunity in reducing PRRS virus replication and its impact on survivability in the suckling pig
Michael Nagorske, University of Minnesota
20. Characterization of pre-wean mortality in a sow farm
Amelia Naher, Washington State University
21. Diagnosis of *Mycoplasma hyorhinis* and *Mycoplasma hyosynoviae* in pre-slaughter animals by serology and real-time PCR
Brent Pepin, Iowa State University
22. Prevalence of shoulder sores on three sow farms
Anna Petrowiak, University of Minnesota
23. Risk assessment of PRRS vaccine virus transmission from a vaccinated nursery to a PRRSv negative sow farm through weaned pig trailers
Casey Rabbe, University of Minnesota
24. Evaluation of rope chewing method to acclimate PRRS virus for replacement gilts
Abigail Redalen, University of Minnesota
25. Estimating the role of geography as a risk factor for porcine reproductive and respiratory syndrome virus infection in the growing pig
Caleb Robb, Iowa State University

Continued on next page

Poster Session

Veterinary Student Posters

26. Impact of number of females per pen on fallout rate in group gestation
Elissa Schlueter, University of Minnesota
27. Detection of *Mycoplasma hyopneumonia* cell-mediated immunity in a field case study
Megan Schnur, Purdue University
28. An evaluation of the effects of environmental enrichment on the incidence of 2-week pre-farrow vulva biting in a pen-gestated sow farm with individual electronic sow feeders
Michael Slattery, Iowa State University
29. Use of fine needle aspiration and cytology to describe injection site lesions post-PCV2 vaccination
Renee Taphorn, Iowa State University
30. Finding the keepers: The influence of observed parameters on gilt retention and productivity
Lisa Thompson, North Carolina State University
31. Automated control and synchronization of gilt inseminations via electronic sow feeding
Jonathan Van Blarcom, University of Pennsylvania
32. Patterns of pig behavior relevant to oral fluid sample collection
Drew White, Iowa State University

Poster Session

Research Topics Posters

Location: Centennial Foyer (third level)

Date: Sunday, March 11

Time: 12:00 PM – 5:00 PM

Authors present: 12:00 – 1:00 PM

Date: Monday, March 12

Time: 9:00 AM – 5:00 PM

1. Visualisation and estimation of pig losses due to disease (PRRS) or other management problems
Andreanne Caron
2. Influenza viruses from swine with increased genetic diversity
Susan Detmer
3. Adaptation of a commercial PRRS serum antibody ELISA to oral fluid specimens
Apisit Kittawornrat
4. Evaluation of cross-protection of FluSure XP® against a heterologous gamma cluster H1N1 swine influenza virus challenge
Mike Kuhn
5. Comparison of whole herd exposure programs to produce PRRSv negative offspring from PRRSv positive breeding herds
Daniel Linhares
6. New discoveries in anti-PRRSV immunity
Michael Murtaugh
7. Comparison of serological assays for *Actinobacillus pleuropneumoniae* (serotypes 1-9) using serum from pigs experimentally infected with APP or vaccinated with APP bacterins
Tanja Opriessnig
8. Herd closure for 140 days after PCV2 exposure stabilizes the population
Tanja Opriessnig

Continued on next page

Poster Session

9. Automated feedback of autogenous pathogens in large pen gestation to reduce piglet diarrhea
Thomas Parsons
10. Effect of Denagard® liquid concentrate on plasma and milk concentrations of tiamulin in sows
Paul Pitcher
11. Novel PRRSV ORF5a protein is not immunoprotective but drives GP5 glycosylation
Sally Robinson
12. PCV2 shedding after challenge by infected semen in PCV2 vaccinated and non-vaccinated conventional gilts
Giuseppe Sarli
13. The incomplete elimination of PRRS virus using traditional methods; A retrospective case study in 7 herds
Gordon Spronk

Poster Session

Industrial Partners Posters

Location: Centennial Foyer (third level)

Date: Sunday, March 11

Time: 12:00 PM – 5:00 PM

Authors present: 12:00 – 1:00 PM

Date: Monday, March 12

Time: 9:00 AM – 5:00 PM

1. Recent developments in euthanasia equipment
Presenter: Clive Scrivens
Sponsor: ACCLES & SHELVOKE
2. The effect of space and feeder type on grow-finish performance
Presenter: Darwin Kohler
Sponsor: BABCOCK GENETICS
3. An ELISA kit (Swinecheck mix-APP®) to detect serum antibodies to the most prevalent serotypes of *Actinobacillus pleuropneumoniae*
Presenter: André Broes
Sponsor: BIOVET
4. Control, stabilization and elimination of a 1-4-4 PRRS field strain from a breeding herd utilizing Ingelvac® PRRS MLV as a tool
Presenter: Noel Garbes
Sponsor: BOEHRINGER INGELHEIM VETMEDICA
5. PRRSV vaccination trials using replicon particles
Presenter: Mark Mogler
Sponsor: HARRISVACCINES
6. Evaluation of the efficacy of a live yeast (Levucell SB®) against porcine proliferative enteropathy (PPE or ileitis) in a challenge model
Presenter: Dan Rosener
Sponsor: LALLEMAND ANIMAL NUTRITION
7. Post-cervical insemination (PCIA): Timing and implementation at the sow farm
Presenter: Isaac Huerta
Sponsor: MAGAPOR

Continued on next page

Poster Session

8. Diagnostic and treatment strategies for controlling ascarid infestations in sow herds
Presenter: Jeremy Pittman
Sponsor: MERCK ANIMAL HEALTH

9. Effect of a Husbandry Education™ program on high value nursery pigs
Presenter: Lucina Galina
Sponsor: PFIZER ANIMAL HEALTH

10. Preventing iron deficiency by avoiding an iron gap in modern pig production
Presenter: Stefaan Van Gorp
Sponsor: PHARMACOSMOS

Spouse Hospitality Suite



Monday, March 12

Time: 7:00 – 9:00 AM

Location: Agate ABC
(third level)

Visit and enjoy a continental breakfast with other AASV spouses, courtesy of AASV. Come, make new friends and catch up with old acquaintances!

Spouse Tour

AQUARIUM ADVENTURE & LUNCHEON

Monday, March 12

Time: 9:30 AM – 2:30 PM

Meet in Hyatt Regency Lobby (first level)
at 9:15 AM for departure

Fee: \$75.00

Explore one of Denver's most popular attractions, the Downtown Aquarium. With over a million gallons of underwater exhibits, the aquarium houses more than 500 species of animals. As you learn about the many aquatic ecosystems found around the world, you'll marvel at the infinite variety and beauty of creatures on display: everything from angelfish and barracuda to stingrays, zebra sharks, and more!

Tour at your own pace, and then join the rest of the AASV attendees in the aquarium restaurant for a delicious buffet luncheon prepared especially for our group. While you dine, you'll be treated to a floor-to-ceiling view of the 50,000-gallon centerpiece aquarium swimming with more than 100 species of colorful tropical fish.

The registration fee includes transportation, aquarium admission, self-guided tour, buffet luncheon, and applicable taxes and service fees. Space is limited; pre-registration is required!

AASV Foundation Auction



Monday, March 12

Location: Capitol Foyer & Ballroom

The AASV Foundation Auction Committee is setting its sights high in the mile-high city of Denver! In an effort to continue the success of recent fundraising auctions, the committee has gathered an impressive array of items for your bidding enjoyment! You'll find artwork, collectibles, and hand-crafted items as well as hunting adventures, sports event tickets, and even a John Deere lawnmower on the auction block! For the complete description of items up for bid, see the printed auction catalog or go to www.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 on a variety of items during the day on Monday, March 12. 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.

**So – Dig Deep, Reach High...
and Everybody Bid-a-now!**

AASV Foundation **RAFFLE**



AASV Foundation Auction Chairman Dr. Warren Wilson is always thinking of fun new ways to generate support for the AASV Foundation. Here's one event that everyone can participate in!

We have 500 "Dig Deep & Reach High" buttons and we will sell them at the meeting – while they last – for \$10 each. Buy a button (or ten) and show your support for the AASV Foundation!

But that's not all – each button is numbered. At the conclusion of the AASVF Live Auction on Monday evening, we will draw numbers to award three prizes: \$250, \$150, and \$100. You must be present at the raffle drawing with the winning button to claim the prize.

So dig deep, buy a button, and we will see you at the AASV Foundation Auction!

Monday General Session

Integrating Science, Welfare, and Economics in Practice

Date: Monday, March 12, 2012

Time: 8:00 AM – 12:30 PM

Location: Centennial ABCD (third level)

Program chair: Tara Donovan

- 8:00** **Howard Dunne Memorial Lecture**
Integrating science into practice to improve business viability – and getting it right
Dean Boyd
- 9:00** **Alex Hogg Memorial Lecture**
Science, welfare, and economics: Are they cornerstones or just a balancing act?
Lisa Tokach
- 10:00** BREAK
- 10:30** Swine immunology: What does it take to make the immune response “take”?
Chris Chase
- 11:15** Evidence-based population medicine: Reactive and proactive decision making in a commercial setting
Daniel U. Thomson
- 12:05** The behavior of the diseased or injured pig: How do we aid convalescence and improve pig welfare?
Suzanne Millman
- 12:30** LUNCHEON

AASV Luncheon



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

Monday, March 12
12:30 – 2:00 PM

Capitol Ballroom (fourth level)

Monday Session #1

Rotavirus and Dysentery: Physiology, Immunology, and Practical Knowledge

Date: Monday, March 12, 2012

Time: 2:00 – 5:30 PM

Location: Centennial ABCD (third level)

Session chair: Brian Payne

Moderator: Adam Moeser

- 2:00 Physiology and immunology of the gut
Adam Moeser
- 2:30 Rotavirus: Viewpoint of a diagnostician
Kurt Rossow
- 3:00 Rotavirus: Practical control and treatment
Luc Dufresne
- 3:30 BREAK
- 4:00 Dysentery: Strengths and limitations of current
Brachyspira diagnostic methods
Eric Burrough
- 4:30 Dysentery: Practical control and treatment
Egan Brockhoff
- 5:00 Roundtable Q & A
All speakers
- 5:30 Session concludes

AASV Awards Reception



Sponsored by:
ELANCO ANIMAL HEALTH

Monday, March 12
6:30 – 8:30 PM

Capitol Ballroom (fourth level)

Monday Session #2

Respiratory and Systemic Disease

Date: Monday, March 12, 2012

Time: 2:00 – 5:30 PM

Location: Centennial E (third level)

Session chair: Deborah Murray

- 2:00 PCV2 infection/disease in the breeding herd:
An update
Darin Madson
- 2:15 PCV2 vaccination in sows: What other factors to consider?
Julie Ménard
- 2:30 Update on immunology, vaccinology, and diagnostic trends for swine mycoplasmas
Erin Strait
- 2:45 *Mycoplasma hyorhinis*: Not just an incidental finding
Deborah Murray
- 3:00 Managing *Mycoplasma hyosynoviae* in grow-finish pigs
Laura Bruner
- 3:15 Roundtable Q & A
Madson, Menard, Strait, Murray, Bruner
- 3:30 BREAK
- 4:00 Brief overview of flu vaccinology and immunology
Marie Gramer
- 4:15 Pigs and flu: What to do?
Matt Allerson and Carissa Odland
- 4:30 SIV: Sow farm vaccination strategies
Laura Schulz-Dalquist
- 4:45 Successful strategies for pushing SIV out of sow farms
Aaron Lower

Monday Session #2

- 5:00 Roundtable Q & A
Gramer, Allerson, Odland, Schulz-Dalquist,
Lower
- 5:30 Session concludes

COMMERCIAL EXHIBIT

Technical Tables Open



Monday, March 12
9:00 AM – 5:00 PM

Tuesday, March 13
8:00 AM – 12:00 PM

Centennial Foyer

Monday Session #3

When Nutrition is the Differential

Date: Monday, March 12, 2012

Time: 2:00 – 5:30 PM

Location: Centennial FGH (third level)

Session chair: Rodger Main

- 2:00 What's "known" about the effects of nutrition on animal health?
Rodger Main
- 2:30 Today's economic realities...the game has changed
Steve Dritz
- 3:00 BREAK
- Series of case-based examples:
- 3:30 DDGS: Nutrient variability can affect performance
Harold Tilstra
- 3:50 Metabolic bone disease
Megan Potter
- 4:10 Influence of particle size
Ian Levis
- 4:30 What veterinarians should know about feed quality assurance/quality control
Wayne Cast
- 5:00 What do I submit and what's normal?
Darin Madson
- 5:30 Session concludes

TUESDAY BREAKFAST

AASV Breakfast
and Business Meeting

Tuesday, March 12
7:00 – 8:00 AM

Centennial E (third level)



Tuesday General Session

Influenza and PRRS

Date: Tuesday, March 13, 2012

Time: 8:00 AM – 12:00 PM

Location: Centennial ABCD (third level)

Session co-chairs: Tara Donovan,
Montse Torremorell

- 8:00 Global coordination for swine influenza virus surveillance and research: What are we missing from the big picture?
Amy Vincent
- Regional Control and Elimination of PRRS**
- 9:00 Regional PRRS elimination update: Where are we, where are we going?
Bob Morrison and Lisa Becton
- 9:30 What are regional programs trying to accomplish: Control vs elimination? Protocols for advancing on the PRRSV herd classification scale
Jim Lowe
- 10:15 BREAK
- 10:45 Toolkit for regional success and some challenges along the way
Noel Garbes
- 11:05 It's all about people: The role of community expectations
Dyneah Classen
- 11:25 Exposing the brutal facts and challenges of PRRSV regional elimination in pig-dense areas
Tim Loula
- 11:45 Panel discussion and take-home messages: What have we learned from these cases?
All speakers
- 12:00 Meeting concludes

Speakers

Elizabeth Abbott	London, UK
Jessica Abbott	Ames, IA
Matt Allerson	Shoreview, MN
Carmen Alonso	St Paul, MN
Kelsey Altholz	Raleigh, NC
Mike Apley	Manhattan, KS
Peter Bahnson	Stoughton, WI
Natalie Baker	Chandler, IN
Joshua Barker	Starkville, MS
Mary Battrell	Warsaw, NC
Dana Beckler	Fergus Falls, MN
Lisa Becton	Johnston, IA
Brian Bishop	Ames, IA
Joseph Blondeau	Saskatoon, SK
R. Dean Boyd	Franklin, KY
Egan Brockhoff	Canmore, AB
André Broes	St-Hyacinthe, QC
Shamus Brown	Indianola, IA
Mike Brumm	North Mankato, MN
Laura Bruner	Belle Plaine, MN
Eric Burrough	Ames, IA
Jay Calvert	Kalamazoo, MI
Paisley Canning	Kitchener, ON
Andreanne Caron	Quebec, QC
David Carter	Ames, IA
Wayne Cast	Princeton, MO
Chris Chase	Brookings, SD
Dyneah Classen	Carthage, IL
Cesar Corzo	St Paul, MN
Deanne Day	Ames, IA
Susan Detmer	Saskatoon, SK
Carlos Diaz	St Paul, MN
Kevin Dobesh	Wahoo, NE
Carly Dorazio	Oakville, IA
Steve Dritz	Manhattan, KS
Joshua Duff	Raleigh, NC
Luc Dufresne	Shawnee Mission, KS
Keith Erlandson	Roland, IA
Maria Esteras	Greeley, CO
Justin Fix	West Lafayette, IN
Tim Frana	Ames, IA
Scott Fry	Lewisburg, OH

Speakers

Herschel Gaddy	St Joseph, MO
Lucina Galina	Hendersonville, TN
Noel Garbes	Bethany, IL
Sasha Gibson	Fairmont, MN
Thomas Gillespie	Rensselaer, IN
Jordan Graham	Ames, IA
Marie Gramer	St Paul, MN
Jana Grauerholz-Morgan	Clear Lake, IA
Laura Greiner	Carthage, IL
Cara Haden	Ames, IA
Joseph Hahn	Ames, IA
Selina Hallan	Austin, MN
Donna Harris	Holland, MI
Chad Hastad	Jackson, MN
Aubrey Hauswirth	Ames, IA
Dale Hendrickson	Farmland, IN
Howard Hill	Iowa City, IA
Sam Holst	Roseville, MN
Derald Holtkamp	Ames, IA
Marlin Hoogland	Orange City, IA
Isaac Huerta	Minneapolis, MN
Scott Hurd	Ames, IA
Jared Jacobson	Ames, IA
Bruce Janke	Ames, IA
Clayton Johnson	Carlyle, IL
Erin Johnson	Mahomet, IL
Rodney Johnson	Chicago, IL
Jason Kelly	Algona, IA
Attila Mihály Kertész	Kaposvár, HUNGARY
Apsit Kittawornrat	Ames, IA
Heather Kittrell	Baton Rouge, LA
Timothy Kniffen	Waukee, IA
Darwin Kohler	Rochester, MN
Kurt Kuecker	Ames, IA
Mike Kuhn	Cascade, IA
Amy Kunkel	Ames, IA
Emily Kuntz	Savoy, IL
Karen Lehe	West Lafayette, IN
Ian Levis	Guymon, OK
Boh Chang Lin	Omaha, NE
Jeffrey Ling Min Than	Palmerston North, NEW ZEALAND

Speakers

Daniel Linhares	Falcon Heights, MN
Tim Loula	St Peter, MN
Jim Lowe	Albers, IL
Aaron Lower	Seymour, IL
Wesley Lyons	Maryville, TN
Nubia Macedo	St Paul, MN
Darin Madson	Maxwell, IA
Rodger Main	Ames, IA
Brittney McLamb	Raleigh, NC
Julie Ménard	Ange Gardien, QC
Daren Miller	West Lafayette, IN
Suzanne Millman	Ames, IA
Adam Moeser	Raleigh, NC
Mark Mogler	Ames, IA
Mike Mohr	Wake Forest, NC
Bob Morrison	St Paul, MN
Chris Mowrer	Ames, IA
Deborah Murray	Jackson, MN
Michael Murtaugh	St Paul, MN
Michael Nagorske	St Paul, MN
Amelia Naher	Pullman, WA
Greg Nitzel	Kalamazoo, MI
Cate O'Connor	Austin, TX
Carissa Odland	Pipestone, MN
Tanja Opriessnig	Ames, IA
Yaowalak Panyasing	Ames, IA
Thomas Parsons	Kennett Square, PA
Ginger Pelger	Greenfield, IN
Brent Pepin	Ames, IA
Anna Petrowiak	Fairmont, MN
Juan Carlos Pinilla	Hendersonville, TN
Paul Pitcher	West Grove, PA
Andrea Pitkin	Fairmont, MN
Jeremy Pittman	Wakefield, VA
Dale Polson	Ankeny, IA
Megan Potter	Abilene, KS
David Pyburn	Ankeny, IA
Casey Rabbe	St Paul, MN
Chris Rademacher	Ames, IA
Alex Ramirez	Ames, IA
Abigail Redalen	Fountain, MN
Darwin Reicks	St Peter, MN

Speakers

Amy Richards	Hartland, WI
Caleb Robb	Ames, IA
Sally Robinson	St Paul, MN
Dan Rosener	LeMars, IA
Kurt Rossow	St Paul, MN
Marisa Rotolo	Ames, IA
Hans Rotto	Ames, IA
Paul Ruen	Fairmont, MN
Robert Salter	Lawrence, MA
Rodolfo Sanchez	El Marques, MEXICO
Giuseppe Sarli	Bologna, ITALY
Nathan Schaefer	Iowa Falls, IA
Aaron Schaffer	Manhattan, KS
Elissa Schlueter	St Paul, MN
Cameron Schmitt	Independence, IA
Megan Schnur	West Lafayette, IN
Jeff Schoening	Assumption, IL
Laura Schulz-Dalquist	Lafayette, MN
Trevor Schwartz	Ames, IA
Clive Scrivens	Sutton Coldfield, UK
Gene Shepherd	Hendersonville, TN
Michael Slattery	Ames, IA
John Sonderman	Columbus, NE
Amanda Sponheim	Osage, IA
Gordon Spronk	Pipestone, MN
Bethany Stammen	New Weston, OH
Tom Stein	Burnsville, MN
Erin Strait	Gilbert, IA
Michael Strobel	Northfield, MN
Rexanne Struve	Manning, IA
Rob Stuart	Bedford, TX
Angie Supple	Algona, IA
Jonathan Tangen	Ames, IA
Renee Taphorn	Ames, IA
Brad Thacker	Columbia, MD
Paul Thomas	Ames, IA
Daniel Thomson	Manhattan, KS
Lisa Thompson	Princeton, NC
Megan Thompson	Hayward, MN
Harold Tilstra	Luverne, MN
Lisa Tokach	Abilene, KS
Jerry Torrison	St Paul, MN

Speakers

Matthew Turner	Clinton, NC
Jon Van Blarcom	Columbia Cross Roads, PA
Stefaan Van Gorp	Ukkel-Brussel, BELGIUM
Ryan Vander Veen	Ames, IA
Kevin Vilaca	Listowel, ON
Amy Vincent	Ames, IA
Mark Wagner	Ceylon, MN
Patrick Webb	Clive, IA
Douglas Weiss	Clive, IA
Drew White	Ames, IA
Barry Wiseman	Olathe, KS
Todd Wolff	Prole, IA
Jennifer Woods	Blackie, AB
Paul Yeske	St Peter, MN
Jonathan Zack	Riverdale, MD
Jeff Zimmerman	Ames, IA

THANK YOU TO OUR SPONSORS

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

BOEHRINGER INGELHEIM VETMEDICA
AASV Luncheon
Veterinary Student Poster Awards

ELANCO ANIMAL HEALTH
AASV Awards Reception
AASV Foundation Veterinary Student Scholarships

GLOBALVETLINK
Internet Kiosk

MERCK ANIMAL HEALTH
Student Reception

NEWSHAM CHOICE GENETICS
Prayer Breakfast

**NEWPORT LABORATORIES
and the AASV FOUNDATION**
Veterinary Student Travel Stipends

PFIZER ANIMAL HEALTH
Welcome Reception
AASV Student Seminar and Student Poster Session
AASV Foundation Veterinary Student Scholarship

PIC
Anniversary Reception



Saturday, March 10

7:00 AM

Registration Desk open

Location: Centennial Foyer

Committee Meetings

7:30 AM

PRRS Risk Assessment Training (page 12)

Location: Mineral A

8:00 AM

ABVP Entrance Examination

Location: Agate A

ABVP Oral Examination

Location: Agate B

1:00 PM

SEMINARS

#1 Applying Evidence Based Medicine (EBM) in Practice (page 14)

Location: Centennial A

#2 Preventing Profit-Robbing Events in Growing Pig Populations (page 16)

Location: Centennial D

#3 Crisis Management (page 18)

Location: Centennial B

#4 Providing Solutions with Impact: Practice Tips with a Twist (page 19)

Location: Centennial E

#5 The Changing Face of Swine Health and Swine Practice around the Globe (page 21)

Location: Centennial C

5:00 – 7:00 PM

PIC 50th Anniversary Reception

Sponsored by PIC

Location: Centennial FGH

7:00 PM

OPEN EVENING

Sunday, March 11

6:30 AM

AASV Student Breakfast
Location: Mineral ABC

7:00 AM

Praise Breakfast
Sponsored by **NEWSHAM CHOICE GENETICS** and
**BOEHRINGER INGELHEIM BROTHERS AND
SISTERS IN CHRIST**
Location: Mineral DEFG

Registration Desk open
Location: Centennial Foyer

8:00 AM

Canadian Swine Veterinarians
Location: Granite ABC

SEMINARS

#6 Applied Diagnostics and Algorithms (page 24)
Location: Centennial ABC

#7 Precision Pharming: The Future of Practical
Pharmacology (page 26)
Location: Centennial F

#8 Pork Processing Plant 101 (page 27)
Location: Centennial GH

#9 Swine Production and Medicine for Veterinary
"Students" (page 28)
Location: Centennial E

RESEARCH TOPICS (page 29)
Location: Centennial D

Sunday, March 11

12:00 PM

AASV FOUNDATION LUNCHEON

(Advance registration required)

Location: Mineral ABC

POSTER SESSION OPEN

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

Location: Centennial Foyer

Veterinary Student Posters (page 39)

Sponsored by **PFIZER ANIMAL HEALTH**

Research Topics Posters (page 43)

Industrial Partners Posters (page 45)

1:00 PM

CONCURRENT SESSIONS

#1 Student Seminar (page 31)

Sponsored by **PFIZER ANIMAL HEALTH**

Location: Centennial ABC

#2 Industrial Partners (page 33)

Location: Centennial D

#3 Industrial Partners (page 35)

Location: Centennial E

#4 Industrial Partners (page 37)

Location: Centennial FGH

6:30 PM – 8:30 PM

WELCOME RECEPTION

Sponsored by **PFIZER ANIMAL HEALTH**

Location: Capitol Ballroom (fourth level)

8:30 PM – 11:00 PM

STUDENT RECEPTION

Sponsored by **MERCK ANIMAL HEALTH**

Location: Centennial EFGH (third level)

Monday, March 12

7:00 AM

Registration Desk open

Location: Centennial Foyer

Spouse Hospitality Suite open (page 47)

Location: Agate ABC

Spouse Tour Participants meet in Hyatt Regency Lobby (first level) at 9:15 AM for departure

8:00 AM – 12:30 PM

GENERAL SESSION (page 50)

Location: Centennial ABCD

Howard Dunne Memorial Lecture: Dr. Dean Boyd
Integrating science into practice to improve business viability – and getting it right

Alex Hogg Memorial Lecture: Dr. Lisa Tokach
Science, welfare, and economics: Are they cornerstones or just a balancing act?

9:00 AM – 5:00 PM

COMMERCIAL TECHNICAL TABLES

Location: Centennial Foyer

POSTER SESSIONS

Location: Centennial Foyer

12:30 PM

LUNCHEON

Sponsored by **BOEHRINGER INGELHEIM VETMEDICA INC.**

Location: Capitol Ballroom (4th level)

2:00 – 5:30 PM

CONCURRENT SESSIONS

#1 Rotavirus and Dysentery (page 51)

Location: Centennial ABCD

#2 Respiratory and Systemic Disease (page 52)

Location: Centennial E

#3 When Nutrition is the Differential (page 54)

Location: Centennial FGH

6:30 PM – 8:30 PM

AASV AWARDS RECEPTION

Sponsored by **ELANCO ANIMAL HEALTH**

Location: Capitol Ballroom

AASV FOUNDATION AUCTION (page 48)

Tuesday, March 13

7:00 AM

Registration Desk open

Location: Centennial Foyer

BREAKFAST and AASV ANNUAL BUSINESS MEETING

Location: Centennial E

8:00 AM

GENERAL SESSION (page 55)

Influenza and PRRS

Location: Centennial ABCD

8:00 AM – 12:00 PM

COMMERCIAL TECHNICAL TABLES

Location: Centennial Foyer

12:00 PM

MEETING CONCLUDES

1:00 PM

AASV BOARD OF DIRECTORS MEETING

Location: Mineral FG



**Plan now to
attend the**

**AASV
44TH**

**Annual
Meeting**

March 2-5, 2013

Manchester Grand Hyatt

**SAN DIEGO
CALIFORNIA**

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.