

2020: A VISION FOR THE FUTURE

DISEASE PREVENTION

TECHNOLOGY

SWINE HEALTH

NUTRITION

PPRS

ASF



WELFARE

VACCINES

BIOSECURITY

AASV Annual Meeting
March 7-10, 2020
Atlanta, Georgia

Message from the Program Chair, Dr. Jeff Harker

Welcome to Atlanta, Georgia, known to some as the “Big Peach.” Fresh peaches are one of my favorite foods, so I will be looking for the “peachiest” taste I can find! This is AASV’s first meeting here, and I think you will find the southern hospitality enjoyable. You can certainly expect warmer air than most of us are used to during this time of year.



The year 2020 offers a unique theme opportunity because of the meaning of “2020” in the optometry profession. My hope with the theme of this meeting is that all attendees can go home with “20/20 vision for the future of swine veterinarians.” This meeting also marks the first year of the next 50 years of AASV. I can only dream what this meeting will look like 50 years from now, as I’m sure the founding members only ever dreamed that AASV annual meetings would be this impactful 50 years later! As you attend sessions and listen to speakers, challenge yourself to apply the message 1, 5, 10, or maybe even 50 years into the future.

Monday’s general session includes a wide range of speakers, starting with Dr. Bret Marsh, Indiana’s state veterinarian, presenting the Howard Dunne Memorial Lecture. Dr. Marsh has served the state in that capacity for over 25 years. His title, “Trust the people,” embodies how he has navigated through many challenges faced by state veterinarians. The Alex Hogg Memorial Lecture presented by Dr. Bill Hollis will then give us some guidance on “Choosing a pathway forward in practice.” To continue with the diversity after the break, Dr. Locke Karricker will explain likely future changes in swine medicine education. Then to change gears again,

economist Dr. Steve Meyer will help us understand global markets. To wrap up the morning session, Dr. Betsy Charles will inspire us to think positive: it's never as bad as it seems. This is the "big picture" portion of the meeting; attending the other great concurrent sessions and pre-conference seminars will give you all the details you need in order to go home with something new to apply.

I greatly enjoy the social aspects of the AASV Annual Meeting and learning the background and development of our award recipients is one of my favorite parts of the meeting. Please commit to attending the Awards Reception and Foundation Auction. Plan to bid and buy at the auction; there are certainly many options that should appeal to all tastes (peaches from the Harker orchard?). Don't forget about the Welcome Reception and Student Reception on Sunday evening. It is wonderful to meet people face to face that you have communicated with by phone or email over the past year.

This has been an amazing year planning the annual meeting. I would like to thank the program committee and the AASV staff for their hard work in bringing the program to fruition. I would also like to thank the speakers who go above and beyond for this meeting unlike any other I attend. And finally, thanks to the students who attend and provide the meeting with a true "vision for the future" by being a part of this incredible, forward-thinking, swine-focused conference.

Jeff Harker

Program Chair

PROGRAM COMMITTEE

Jeff Harker, Program Chair

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Mary Battrell
C Scanlon Daniels
Todd Distad
Bethany Heitkamp
Ross Kiehne
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Deborah Murray
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Matthew Turner
Patrick Webb
Nathan Winkelman

PROGRAM & PROCEEDINGS

MOBILE APP

Keep track of when and where you need to be with the free AASV mobile conference app! It's loaded with the most up-to-date schedule, speaker and exhibitor details, maps of the meeting rooms, and links to proceedings papers. Use it to create your personal schedule and "to do" list. The app will be available for download to iOS and Android devices using the code emailed to conference registrants February 24.

PROCEEDINGS

AASV members and conference attendees will be able to download all proceedings papers (including seminar papers) from the AASV website prior to and during the meeting. Attendees may purchase the proceedings on USB drive for a small additional fee.

For more information:
aasv.org/annmtg



Register online at aasv.org/annmtg

REGISTRATION & FEES

REGISTRATION

Registration desk located in Centennial Foyer

Saturday, March 7	7:00 AM – 5:00 PM
Sunday, March 8	7:00 AM – 5:00 PM
Monday, March 9	7:00 AM – 5:00 PM
Tuesday, March 10	7:00 AM – 12:00 PM

FEES

AASV member pre-registration by Feb 14	\$355
AASV member registration after Feb 14	\$455
Non-member veterinarians	\$500
Add'l Tech Table representatives (limit 3)	\$500

Veterinary students:

Register for free if you are a 2019-20 AASV Student Member. Join/register at aasv.org/annmtg

Graduate students:

Join AASV (½ regular member dues) and register for the meeting at ½ the member rate.

Non-veterinarians:

Must meet eligibility criteria to attend.
See aasv.org/annmtg/2020/reginfo.php

**Register online at
aasv.org/annmtg**

February 14: Last day for pre-registration rate

February 24: Last day to register online

February 25: Registration CLOSED until Mar 7

CONFERENCE HOTEL

Hyatt Regency Atlanta

265 Peachtree Street NE

Atlanta, Georgia 30303

800-233-1234

aasv.org/annmtg/2020/lodging.php

CONTINUING EDUCATION CREDIT

Up to twenty (20) credit hours of veterinary continuing education are available for attendance during the regular meeting sessions on Sunday 8:00 AM through Tuesday 12:00 PM. Four (4) additional credit hours are available for attendance at a Saturday pre-conference seminar.

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TECHNICAL TABLES EXHIBITORS

Location: Grand Hall West

Monday: 9:00 AM – 5:00 PM

Tuesday: 8:00 AM – 12:00 PM

AAF Flanders

ABVP

AgCreate Solutions & Pork Avenue Training Portal

Allflex USA/Destron Fearing

Alltech

Animal Biotech

Animal Health International

Animal Science Products

AP

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Cambridge Technologies

Camfil

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DNA Genetics

DSM Nutritional Products

Elanco Animal Health

TECHNICAL TABLES EXHIBITORS

Endovac Animal Health
Eurofins BioDiagnostics
Fast Genetics
Feed Energy
Feedstuffs/National Hog Farmer
Furst-McNess Company
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GVL
HIPRA
Hog Slat
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Merck Animal Health
Minitube USA
MWI Animal Health
National Pork Board
National Pork Producers Council
Nedap Livestock Management
Neogen
Newport Laboratories
Norbrook
NutriQuest

TECHNICAL TABLES EXHIBITORS

Olmix
OPS Diagnostics
Pharmacosmos
Pharmgate Animal Health
Phibro Animal Health Corporation
PIC
PigCHAMP
PigKnows
PMI
PrairieE Systems
Provimi
PureTek Genetics
Quality Technology International
Ralco
Ro-Main
Stuart Products
Swine Health Information Center
Swine Medicine Education Center (SMEC)
SwineTech
TechMix
Tetracore
Thermo Fisher Scientific Animal Health
Tonistry
Topics Norsvin
United Animal Health
USDA APHIS Veterinary Services
Virox Animal Health
Wilson's Prairie View Farm
Zinpro Performance Minerals
Zoetis

Thank you

TRAVEL ADVISORY

International Travelers:

PRIORITIZE BIOSECURITY



As you travel to the AASV Annual Meeting, be sure to do your part to protect the US swine herd from foreign animal diseases, including African swine fever (ASF), classical swine fever (CSF), and foot-and-mouth disease (FMD).

If you are traveling from a country or have recently visited a country with cases of ASF, CSF, or FMD, remember to prioritize biosecurity:

- Declare international farm visits upon entry into the United States
- Do not bring prohibited foods into the United States
- Follow farm biosecurity measures and downtime requirements (recommended minimum 5 nights with no swine contact) if visiting a US farm
- Do not wear any items, including footwear, from your international farm visit to a US farm

RECEPTION SPONSOR
Merck Animal Health

THANK
you .



**MERCK
ANIMAL HEALTH**

**for your generous
and faithful support of
the AASV Annual Meeting!**

MERCK has sponsored the Student Reception since 2012, the Student Trivia Event since 2016, and the AASV Awards Reception since 2018.

DID YOU KNOW?

Food and beverage is the #1 cost associated with the annual meeting. Without support from companies like Merck, the opportunities for large gatherings and social interaction would be greatly reduced – or the cost to attend the conference would increase dramatically.

Please thank your Merck representative for their sponsorship.

RECEPTION SPONSOR
Zoetis

THANK
you .



ZOETIS

for your generous
and faithful support of
the AASV Annual Meeting!

ZOETIS has sponsored the AASV
Welcome Reception since 2014
(and as Pfizer before that, since 2010).

DID YOU KNOW?

*Food and beverage is the #1 expense
associated with the annual meeting.*

*Hosting a “y’all come”
event for 800+ attendees at
a conference hotel represents a
substantial financial investment
in the association and its members.*

*Please thank your Zoetis
representative for their
sponsorship.*

LUNCHEON SPONSOR
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THANK
you.



**BOEHRINGER INGELHEIM
ANIMAL HEALTH**

for your generous
and faithful support of
the AASV Annual Meeting!

2020 marks the 18th year that
BOEHRINGER INGELHEIM
has sponsored the AASV Luncheon.

DID YOU KNOW?

Food and beverage is the #1 expense associated with the annual meeting. Boehringer Ingelheim's annual support not only provides conference attendees with a delicious luncheon, it helps assure the profitability of the conference, which is essential to fund AASV programs throughout the year.

Please thank your Boehringer Ingelheim representative for their sponsorship.

SATURDAY, MARCH 7

Daily Schedule

7:00 AM

Registration Desk open

Location: Centennial Foyer (Lower Level 1)

AASV Committee Meetings (page 19)

Location: Lower Level 3

8:00 AM

ABVP Entrance Examination

ABVP Certification Examination

Location: Vinings (Lower Level 3)

1:00 PM

SEMINARS (additional fees apply)

#1 Practice Tips for the Porcine Practitioner (page 20)

Location: Hanover DE (Lower Level 2)

#2 Media Training (page 22)

Location: Grand Hall East B (Lower Level 2)

#3 Emerging Technologies for the Swine Industry

(page 23)

Location: Hanover C (Lower Level 2)

#4 Conducting Effective Outbreak Investigations II

(page 25)

Location: Hanover AB (Lower Level 2)

#5 #ImNewAtThis (page 27)

Location: Grand Hall East CD (Lower Level 2)

#6 What's Your Diagnosis? (page 28)

Location: Hanover FG (Lower Level 2)

5:00 PM

OPEN EVENING

There is no reception scheduled for Saturday evening.

Enjoy Atlanta!

7:00 PM

VETERINARY STUDENT TRIVIA EVENT (page 24)

Sponsored by: **MERCK ANIMAL HEALTH**

Location: To be determined

SUNDAY, MARCH 8

Daily Schedule

6:00 AM

“Body Attack” Exercise Class (page 29)

Hosted by: **DSM NUTRITIONAL PRODUCTS**

Location: Courtland (Lower Level 3)

6:30 AM

AASV Student Breakfast

Location: Regency V (Lower Level 1)

7:00 AM

Praise Breakfast (page 30)

Sponsored by: **STUART PRODUCTS**

Location: Regency VI (Lower Level 1)

Registration Desk open

Location: Centennial Foyer (Lower Level 1)

8:00 AM

SEMINARS (additional fees apply)

#7 Pigs are Easy; People Are Hard (page 32)

Location: Hanover G (Lower Level 2)

#8 Sow Productivity: A Vision for the Future (page 33)

Location: Hanover E (Lower Level 2)

#9 Ahhchoo! How to Succeed Against the Flu (page 34)

Location: Hanover CD (Lower Level 2)

#10 Swine Medicine for Students (page 36)

Location: Hanover AB (Lower Level 2)

#11 Foreign Animal Disease (page 37)

Location: Hanover F (Lower Level 2)

8:00 AM

RESEARCH TOPICS (page 38)

Location: Centennial IV (Lower Level 1)

Continued on next page

SUNDAY, MARCH 8

Daily Schedule

12:00 PM

POSTER SESSION OPEN

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

Location: Grand Hall West (Lower Level 2)

Veterinary Student Posters (page 48)

Sponsored by: **ZOETIS**

Research Topics Posters (page 52)

Industrial Partners Posters (page 54)

AASV FOUNDATION LUNCHEON

(Advance registration required)

Location: Regency V (Lower Level 1)

1:00 PM

CONCURRENT SESSIONS

#1 Student Seminar (page 40)

Sponsored by: **ZOETIS**

Location: Centennial I (Lower Level 1)

#2 Industrial Partners (page 42)

Location: Centennial II (Lower Level 1)

#3 Industrial Partners (page 44)

Location: Centennial III (Lower Level 1)

#4 Industrial Partners (page 46)

Location: Centennial IV (Lower Level 1)

6:30 PM – 8:30 PM

WELCOME RECEPTION

Sponsored by: **ZOETIS**

Location: Grand Hall West (Lower Level 2)

8:30 PM – 11:00 PM

STUDENT RECEPTION

Sponsored by: **MERCK ANIMAL HEALTH**

Location: Regency V-VI (Lower Level 1)

MONDAY, MARCH 9

Daily Schedule

7:00 AM

Registration Desk open

Location: Centennial Foyer (Lower Level 1)

Spouse Hospitality Suite open (page 58)

Location: Chicago AB (Lower Level 2)

8:00 AM – 12:30 PM

GENERAL SESSION: 2020: A Vision for the Future (page 60)

Location: Centennial III-IV (Lower Level 1)

Howard Dunne Memorial Lecture: Dr. Bret Marsh *Trust the people*

Alex Hogg Memorial Lecture: Dr. Bill Hollis *Choosing a pathway forward in practice*

9:00 AM – 5:00 PM

TECHNICAL TABLES EXHIBIT OPEN (pages 7-9)

Location: Grand Hall West (Lower Level 2)

12:15 PM

LUNCHEON

Sponsored by:

BOEHRINGER INGELHEIM ANIMAL HEALTH USA

Location: Regency Ballroom (Lower Level 1)

2:00 PM – 5:30 PM

CONCURRENT SESSIONS

#1 Disease Prevention, Control, and Elimination (page 61)

Location: Centennial III-IV (Lower Level 1)

#2 Biosecurity: Keeping Bad Stuff Out (page 62)

Location: Centennial II (Lower Level 1)

#3 Pharmaceutical Issues (page 64)

Location: Centennial I (Lower Level 1)

6:30 PM – 8:30 PM

AASV AWARDS RECEPTION

Sponsored by: MERCK ANIMAL HEALTH

Location: Regency Ballroom (Lower Level 1)

AASV FOUNDATION AUCTION (page 56)

Location: Regency Ballroom (Lower Level 1)

TUESDAY, MARCH 10

Daily Schedule

7:00 AM

Registration Desk open

Location: Centennial Foyer (Lower Level 1)

BREAKFAST and AASV ANNUAL BUSINESS MEETING

Location: Centennial II (Lower Level 1)

8:00 AM

**GENERAL SESSION: Swine Welfare and Foreign
Animal Disease Prevention (page 65)**

Location: Centennial Ballroom III-IV (Lower Level 1)

8:00 AM – 12:00 PM

TECHNICAL TABLES EXHIBIT OPEN (pages 7-9)

Location: Grand Hall West (Lower Level 2)

12:00 PM

MEETING CONCLUDES

Mother's room



**Need a quiet,
private place to
nurse or pump?**

**AASV has set aside
a room for this purpose
on Lower Level 1.**

*Pick up the key at the AASV registration desk.
When registration is closed, see Dr. Abbey Canon.*

SATURDAY MORNING Committee Meetings

Any AASV member or student member may attend the committee meetings; however, only committee members are eligible to vote. For information on committee activities, or to join a committee, see aasv.org/aasv/committee.php.

Date: Saturday, March 7

Location: All committee meetings held on Lower Level 3. See room assignments below; map located on page 66.

7:00 – 9:30 AM

Meeting room

Communications

Auburn

Pork Safety

Techwood

PRRS Task Force

Lenox

7:00 AM – 12:00 PM

Early Career

Greenbrier

Influenza

Fairlie

Pharmaceutical Issues

Dunwoody

Transboundary/Emerging Diseases

Spring

Welfare

Courtland

10:00 AM – 12:00 PM

Boar Stud

University

Human Health/Safety

Kennesaw

Nutrition

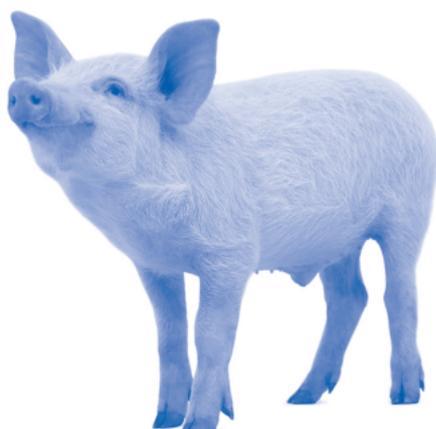
Techwood

Operation Main Street

Auburn

Student Recruitment

Inman



SATURDAY SEMINAR 1

Practice Tips

Why Didn't I Think of That?!

Practice Tips for the Porcine Practitioner

Date: Saturday, March 7

Time: 1:00 – 5:00 PM

Location: Hanover DE (Lower Level 2)

Fee: \$95

Seminar chair: Tyler Bauman

Trying to envision the future without having to read a bunch of abstracts? Then this is the place for you! Commonly referred to as the highlight of AASV, this session encompasses a wide range of cutting-edge practice tips from experienced practitioners of all ages. Come learn the newest tricks of the trade while witnessing the presenters compete for the elusive title of “Most Talented Tipster” and a cash prize.

1:00 Taking care of your most important patient: you
Emily Byers

1:15 Less is more: deep tracheal sampling and improvising on farm
Brandi Burton

1:30 Different strokes for the same folks: utilizing animal care associates as vet techs
Corrine Stoffel

1:45 The pre-call plan for practitioners: achieving the best outcomes from the limited meeting times with clients and stakeholders
Brian Payne

2:00 Livestock, a legacy, and live-streaming
Taryn Pfeiffer

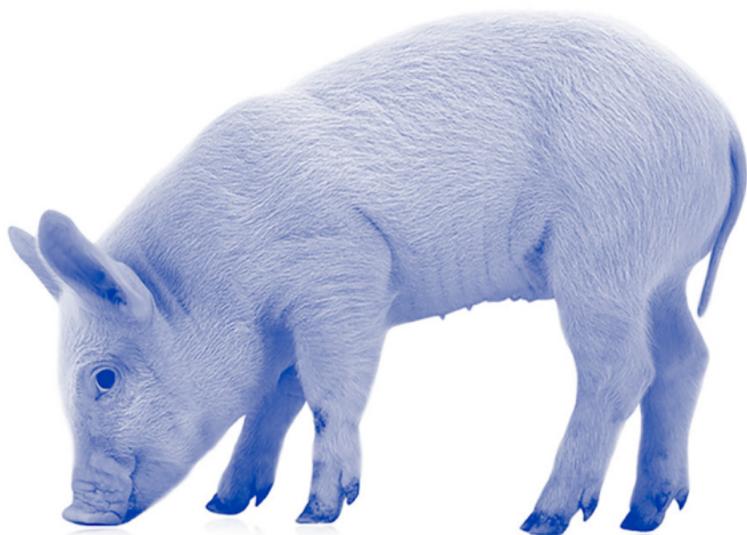
2:15 ORF5 and me. Developing your own PRRS family tree
Christine Mainquist-Whigham

2:30 Water medication: overcoming Murphy's law
David Nolan

SATURDAY SEMINAR 1

Practice Tips

- 2:45** REFRESHMENT BREAK – Co-sponsored by
QUALITY TECHNOLOGY INTERNATIONAL
- 3:15** Weekly *Mycoplasma* surveillance via
mortality swabs
Tim Overmiller
- 3:30** How can you prepare? Emergency response
and rollovers
Justin Brown
- 3:45** Optical scanning in diagnostics
Perry Harms
- 4:00** Taking the sour out of scours with 2 easy steps
Chris Sievers
- 4:15** Greasing the wheels before they come off: tips to
maximizing Secure Pork Supply
Nick Lauterbach
- 4:30** Stepfathers for the breeding herd: large boar
epidectomy
Kayla Blake and Robyn Fleck
- 4:45** Congratulations, you've graduated! Now what ...
Emily Mahan-Riggs
- 5:00** Seminar concludes



SATURDAY SEMINAR 2

Media Training

Media Training

Date: Saturday, March 7

Time: 1:00 – 5:00 PM

Location: Grand Hall East B (Lower Level 2)

Fee: \$95

Limit: 30 participants

Seminar chair: Mary Battrell

What is the first thing you do when you're asked to participate in a media interview? Hide? Panic? Wing it? Well, there will be no need to avoid another media interview after you experience this 4-hour, interactive, engaging, and experiential training session that will help you gain control of an interview setting and apply what you learn to many other communication situations. With new skills, tactics, and perspective, you will represent your profession and your industry with confidence in your next media interview.

1:00 Did they hear what you thought you said?
A guide to powerful media interviews
Wendy Pinkerton

2:45 REFRESHMENT BREAK – Co-sponsored by
QUALITY TECHNOLOGY INTERNATIONAL

5:00 Seminar concludes



SATURDAY SEMINAR 3

Emerging Technologies

Emerging Technologies for the Swine Industry

Date: Saturday, March 7

Time: 1:00 – 5:00 PM

Location: Hanover C (Lower Level 2)

Fee: \$95

Seminar co-chairs: Chris Rademacher and Dale Polson

Internet-of-Things (IoT) technologies and ecosystems increasingly touch every aspect of our lives. The number of IoT technologies available to us is growing exponentially ... virtually everything is becoming cloud-connected and integrated within highly connected digitized ecosystems. The livestock “version” of IoT – Precision Livestock Farming (PLF) – is experiencing explosive growth globally. The number of start-up companies bringing new technology innovations is rapidly increasing. Also, companies who historically have had nothing to do with livestock are adapting technologies used in other industries and markets and bringing them to the farm. This seminar represents a good mix of presentations on a number of new, adapted, and emerging technologies that will change (for the better) how we do business in pig and pork production.

- 1:00** The future of connectivity in rural areas
Dale Polson

- 1:30** Machine learning, big data, and forecasting disease in epidemiology
Kimberly VanderWaal; Igor Paploski

- 1:50** Use of precision livestock farming (PLF) in poultry
Craig Rowles

- 2:10** Use of sensors in swine
Tammy Brown-Brandl

- 2:30** Pig counting technology
Annie Lerner

- 2:50** REFRESHMENT BREAK – Co-sponsored by
QUALITY TECHNOLOGY INTERNATIONAL

- 3:10** Digital technologies for weight estimation in swine
Juan Francisco Chica

Continued on next page

SATURDAY SEMINAR 3

Emerging Technologies

- 3:30** Using technology for improved biosecurity
Manon Racicot
- 3:50** Digital platforms for pork production system operations
Joel Stave
- 4:10** Blockchain in the food chain
Andy Brudtkuhl
- 4:30** Brief overview of next-generation sequencing, metagenomics, and point-of-care diagnostics
Jianqiang Zhang
- 5:00** Seminar concludes

STUDENT TRIVIA EVENT

Veterinary students, join us on Saturday, March 7, for a fun-filled, interactive evening of Swine Veterinary Medicine Trivia! Hors d'oeuvres and beverages will be served, thanks to sponsor Merck Animal Health. Check in your registration packet for the event location; teams will be arranged when you arrive at the venue.

Sponsored by:

MERCK ANIMAL HEALTH



Saturday, March 7

7:00 PM

Location: To be determined



SATURDAY SEMINAR 4

Outbreak Investigations

Conducting Effective Outbreak Investigations: Learning from Our Mistakes, Part 2

Date: Saturday, March 7

Time: 1:00 – 5:00 PM

Location: Hanover AB (Lower Level 2)

Fee: \$95

Seminar chair: Derald Holtkamp

Want to help producers learn from outbreaks of endemic diseases like PRRS and PED, and become better prepared for transboundary diseases like ASF? This seminar will introduce participants to concepts and resources to efficiently and comprehensively conduct epidemiological investigations of outbreaks in swine herds for the purpose of identifying where herds are most vulnerable to the introduction of pathogens. If you attended last year's seminar by the same name, you will find it worth attending Part 2, as this year's seminar is more focused on the application of the concepts. The seminar will offer several examples of approaches and tools, including outbreak investigations, used to prioritize where biosecurity improvements are needed on individual farms and in larger production systems.

Participants will be introduced to resources (forms, examples, training videos, etc) available online through the Swine Health Information Center's (SHIC) Rapid Response Program (RRP) for conducting epidemiological investigations of outbreaks. The seminar will provide participants in SHICS's RRP with additional training to prepare them to conduct investigations in response to a new transboundary or emerging swine disease in the US. All participants will learn how to use the program materials in their practice or production system to conduct more effective epidemiological investigations of endemic disease (eg, PRRS or PED) outbreaks.

1:00 Preparing for the next transboundary or emerging disease: what the industry needs to do and what it is doing to prepare
Paul Sundberg

Continued on next page

SATURDAY SEMINAR 4

Outbreak Investigations

- 1:20** Introduction to the SHIC-funded Rapid Response Program (RRP) for conducting epidemiological investigations of outbreaks
Chelsea Ruston
- 1:50** Identifying vulnerabilities on sow farms and making decisions to invest in biosecurity
Jay Miller
- 2:15** Identifying vulnerabilities on sow farms and prioritizing biosecurity improvements
Clayton Johnson
- 2:40** REFRESHMENT BREAK – Co-sponsored by
QUALITY TECHNOLOGY INTERNATIONAL
- 3:00** Value of conducting outbreak investigations on sow farms: what we learned
Kate Dion
- 3:25** Why biosecurity on growing pig sites is so scary
Katie Wedel
- 3:50** Systematic, comprehensive, and consistent: approaching outbreak investigations like a surgeon to learn faster from our mistakes
Derald Holtkamp
- 4:50** Seminar wrap-up; Roundtable questions/answers
All speakers
- 5:00** Seminar concludes



SATURDAY SEMINAR 5

#ImNewAtThis

#ImNewAtThis

Date: Saturday, March 7

Time: 1:00 – 5:00 PM

Location: Grand Hall East CD (Lower Level 2)

Fee: \$95

Seminar chair: Shamus Brown

The target audience for this seminar is recent veterinary graduates (0-3 years post-graduation) and veterinary students. The objective is to provide an introductory overview to five topics (outside of “bugs and drugs”) that tend to be areas of interest and potential struggle for new veterinarians in the profession. Each speaker’s topic is broad enough to be an independent session; the goal is to provide general strategies and recommended resources that participants can pursue if they decide a specific topic is an area they need to focus on.

- 1:00** Forming leadership habits and attitudes
Noel Williams
- 2:00** A broader perspective: from health to holistic management
Tyler Te Grotenhuis
- 2:45** REFRESHMENT BREAK – Co-sponsored by
QUALITY TECHNOLOGY INTERNATIONAL
- 3:15** Strategies and tactics to help prioritize and ensure key obligations are fulfilled
Jean Paul Cano
- 3:45** Finding the right culture and fit
Aaron Lower
- 4:15** Financial strategies for young veterinarians
Tim Heiller
- 5:00** Seminar concludes



SATURDAY SEMINAR 6

Diagnostics

What's Your Diagnosis?

Date: Saturday, March 7

Time: 1:00 – 5:00 PM

Location: Hanover FG (Lower Level 2)

Fee: \$95

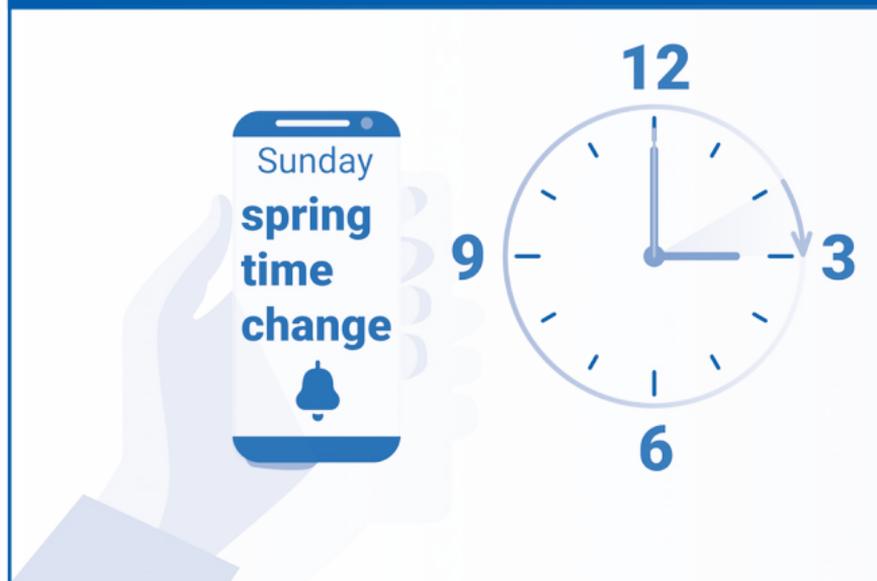
Seminar chair: Deborah Murray

Test your diagnostic skills on some unusual and challenging diagnostic cases during this interactive seminar. Bring your phone as you'll need to download Poll Everywhere to join in the fun.

- 1:00** Case presentations
Eric Burrough, Brad Lage, Fabio Vannucci
- 2:30** REFRESHMENT BREAK – Co-sponsored by
QUALITY TECHNOLOGY INTERNATIONAL
- 3:00** Case presentations resume
Eric Burrough, Brad Lage, Fabio Vannucci
- 5:00** Seminar concludes

REMINDER:

Be prepared! The change to Daylight Savings Time takes place in the early morning hours on Sunday. Plan accordingly on Saturday night.



SUNDAY MORNING “Body Attack” Exercise



Date: Sunday, March 8

Time: 6:00 – 6:30 AM

Location: Courtland (Lower Level 3)

Hosted by
DSM NUTRITIONAL PRODUCTS

Join us for a fun, high-energy, 30-minute fitness class with moves suitable for total beginners to confirmed addicts.

Ben Pratte, a LES MILLS™ instructor, will lead a BODYATTACK® class, which is a sports-inspired cardio workout for building strength and stamina. BODYATTACK combines athletic movements like running, lunging, and jumping with strength exercises such as push-ups and squats. Accompanied by energizing tunes, Ben will lead you through the workout – challenging your limits and leaving you with a sense of achievement.

BODYATTACK is a pre-choreographed program that is done in more than 80 countries around the world. Just like the other Les Mills Programs, whenever you go to a BODYATTACK Class, you can expect it to run with the same format.

**No equipment is required other than workout clothes and shoes.
Spouses are welcome.**

**THERE ARE NO FEES OR REGISTRATION.
JUST COME!**

SUNDAY MORNING Praise Breakfast

Praise Breakfast

Sunday, March 8
7:00 – 8:00 AM

Location:
Regency VI
(Lower Level 1)

Coordinators:

Mark Brinkman, Dave Baum, Mitch Christensen,
Monte Fuhrman, Sarah Probst Miller

Sponsored by STUART PRODUCTS

Bring your family and join your AASV friends for breakfast, music, and fellowship at the AASV Praise Breakfast!

The opportunity to sing praises to our Lord with the AASV praise team will be followed by a God-directed message from a member of the AASV.

Your free-will offering, along with support from Stuart Products, will defray the cost of the breakfast.

The program will conclude by 8:00 AM to allow you to attend the meeting sessions, but feel free to stay and visit.



***All AASV meeting attendees and
their family members are welcome!***

SUNDAY - MONDAY - TUESDAY Member Services

SOCIAL MEDIA CENTER

Sponsored by
ELANCO ANIMAL HEALTH
Location: Centennial Foyer

#AASV2020

Questions about social media?

You'll find answers and assistance
at the AASV Social Media Center.

Get help creating accounts and navigating
popular social media platforms.

Follow AASV on Facebook, Twitter, and Instagram:



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@AASwineVets

AASV WELL-BEING CENTER

Location:
Centennial Foyer

NEW THIS YEAR!

Learn about veterinary
well-being and take
advantage of resources
and activities at the
AASV Well-Being Center.



Pick up an AVMA "Wheel of Well-Being" to
take home and share with your co-workers and
employees. Take this opportunity to learn how
to help a colleague, client, friend, and yourself!

SUNDAY SEMINAR 7

People Skills

Pigs are Easy; People are Hard

Date: Sunday, March 8

Time: 8:00 AM – 12:00 PM

Location: Hanover G (Lower Level 2)

Fee: \$95

Seminar chair: Ross Kiehne

It often happens that we neglect the people side of swine veterinary medicine. We do a great job with the pigs and a less-than-stellar job with the people. This includes not selling our ideas enough, not showing leadership to get the job done, not recognizing how we communicate to get the best effectiveness, and lastly, not always recognizing the stress in colleagues' and clients' lives. This seminar will attempt to help us in each of these areas.

8:00 Using the power of influence for your success
Carol Perriccio

9:50 REFRESHMENT BREAK

10:10 Using social style programs (DiSC) to improve team effectiveness
Tim Heiller

11:05 Prevention and treatment of stress isn't just for pigs
Athena Diesch

12:00 Seminar concludes

Security Message

In the event a person or group attempts to disrupt the meeting, report their activities immediately to hotel security personnel or an AASV staff member. Do not engage or incite anyone exhibiting disruptive behavior.



SUNDAY SEMINAR 8

Sow Productivity

Sow Productivity: A Vision for the Future

Date: Sunday, March 8

Time: 8:00 AM – 12:00 PM

Location: Hanover E (Lower Level 2)

Fee: \$95

Seminar chair: Matthew Turner

The future of sow production will continue to focus on efficiency. Weaning more pigs with fewer resources will separate the best from the average. This seminar will provide participants with a mix of best practices today with a vision of what the future holds.

- 8:00** Gilt development
Jason Ross
- 8:45** Genetics of reproductive efficiency
Kent Gray
- 9:15** Sow mortality/longevity
Jason Ross
- 10:00** REFRESHMENT BREAK
- 10:30** Gilt fertility investigation
Todd Williams
- 11:15** Circovirus-associated infertility
Todd Distad
- 11:45** Panel discussion
All speakers
- 12:00** Seminar concludes



SUNDAY SEMINAR 9

Influenza

Ahhchoo! Discussions about How to Succeed against the Flu

Date: Sunday, March 8

Time: 8:00 AM – 12:00 PM

Location: Hanover CD (Lower Level 2)

Fee: \$95

Seminar chair: Amy Maschhoff

Still frustrated with influenza? This virus affects many sectors of the swine industry, from county fairs to production systems to the people that care for pigs. This seminar is full of experts who will speak about diagnostics and new technologies that impact field decisions, along with practitioners sharing their perspectives and success stories.

- 8:00** Making sense of molecular and serological diagnostic tests for influenza
Phil Gauger
- 8:25** Interpreting sequence data and new tools
Tavis Anderson
- 8:50** It's not all fun and games down at the county fair
Andrew Bowman
- 9:15** A game to rule them all: improving public health knowledge through play
Heather Fowler
- 9:40** REFRESHMENT BREAK
- 10:00** Towards weaning an influenza-negative pig
Montserrat Torremorell
- 10:20** Eliminating and monitoring influenza in small herds
Adam Mueller
- 10:40** Influenza management considerations in a breed-to-wean herd
Aaron Lower
-

SUNDAY SEMINAR 9

Influenza

- 11:00** Controlling flu in a large production system and considering biosecurity
Todd Wolff
- 11:20** Experience with controlling influenza in Manitoba sow herds
Karine Talbot
- 11:40** Roundtable questions/answers
All speakers
- 12:00** Seminar concludes



SUNDAY SEMINAR 10

Swine Medicine for Students

Swine Medicine for Students

Date: Sunday, March 8

Time: 8:00 AM – 12:00 PM

Location: Hanover AB (Lower Level 2)

Fee: \$95; No charge for veterinary students or 2018 or 2019 DVM graduates

Seminar co-chairs: Jeremy Pittman and Angela Supple

This session is designed to be a supplement to veterinary students' education at their respective schools on topics of swine medicine. This year's topic will focus on diagnostics. A practitioner will explain collecting the proper samples and sample types based on clinical presentation on the farm. Following this, a diagnostician will present what happens to those samples once they are at the lab, the basics of diagnostic tests, and interpretation of the results. Following these reviews, students will participate in several interactive cases where they will use their new knowledge to make diagnostic decisions for some real-world cases.

- 8:00** What do I collect? Diagnostic sampling on the farm
Shamus Brown
- 9:00** What do I test for? Diagnostic testing at the lab
Bailey Arruda
- 10:00** REFRESHMENT BREAK
- 10:30** Interactive cases
Jeremy Pittman and Angela Supple
- 12:00** Seminar concludes

STUDENT RECEPTION



Sponsored by:

MERCK ANIMAL HEALTH

Sunday, March 8

8:30 – 11:00 PM

Regency V-VI

SUNDAY SEMINAR 11

Foreign Animal Disease

Foreign Animal Disease

Date: Sunday, March 8

Time: 8:00 AM – 12:00 PM

Location: Hanover F (Lower Level 2)

Fee: \$95

Seminar chair: Brent Pepin

This seminar focuses on current and relevant information as it pertains to foreign animal disease (FAD). The speakers all have experience in different areas and topics relating to the control and management of FADs. The seminar will focus on African swine fever but will cover and apply to other relevant transboundary and foreign animal diseases as well.

- 8:00** Pig movement shutdowns, euthanasia, and disposal plans
Aaron Lower
- 8:25** Foreign animal disease coordination between 4 regional states
Scanlon Daniels
- 8:45** Lessons learned from a 14-state tabletop exercise
Barbara Porter-Spalding
- 9:10** AgView and Secure Pork Supply
Patrick Webb and Pamela Zaabel
- 9:45** REFRESHMENT BREAK
- 10:15** Foreign animal disease vaccines
Manuel Borca
- 10:35** ELISAs for foreign animal disease
Korakrit Poonsuk
- 10:50** What to do about feral swine, show pigs, and garbage feeders?
Rod Hall
- 11:15** Eastern Europe and African swine fever: disease-free pigs in endemic areas?
Darryl Ragland and Roman Pogranichniy
- 12:00** Seminar concludes
-

SUNDAY MORNING Research Topics

Research Topics

Date: Sunday, March 8

Time: 8:00 AM – 12:00 PM

Location: Centennial IV (Lower Level 1)

Session chair: Chris Rademacher

- 8:00** Effect of two PRRS MLV doses compared to a single dose vaccination program on the wild-type virus shedding and mortality of growing pigs from endemic sources
Cesar Moura
- 8:15** Swine fecal samples contain ELISA-detectable antibodies against PRRSV
Alexandra Henao-Diaz
- 8:30** Use of an adapted commercial serum antibody enzyme-linked immunosorbent assay (ELISA) for the detection of anti-PRRSV antibody isotypes in processing fluid specimens
Will Lopez
- 8:45** Increasing the functionality of your processing fluid toolbox beyond PRRSV monitoring: PCV2, PEDV, and PDCoV
Giovani Trevisan
- 9:00** Estimating the sensitivity of two sample types for detection of *Mycoplasma hyopneumoniae* early and late after experimental and natural infection
Amanda Sponheim
- 9:15** Development of cost-effective surveillance protocols to minimize the risk of *Mycoplasma hyopneumoniae* introduction to sow farms
Alyssa Betlach
- 9:30** Impact of using nurse sows or custom-made vaccines in the occurrence of influenza A in pigs prior to weaning
Jorge Garrido-Mantilla
- 9:45** REFRESHMENT BREAK
-

SUNDAY MORNING Research Topics

- 10:15** Persistent atypical porcine pestivirus (APPV) infection in gilts
Alexandra Buckley
- 10:30** Efficacy of an inactivated Seneca Valley virus vaccine in pregnant sows
Alexandra Buckley
- 10:45** Pseudorabies virus (PRV) antibody detection in swine serum and oral fluid specimens
Ting-Yu Cheng
- 11:00** Susceptibility of attenuated *Salmonella* vaccines intended for swine to zinc oxide in vitro
Eric Burrough
- 11:15** Candidate virulence-associated genes identified by genome analysis of *Streptococcus suis* strains from the United States
April Estrada
- 11:30** Importance of capsular immunity in protection against *Glaesserella parasuis*
Samantha Hau
- 11:45** Scoring lesions in slaughtered pigs through artificial intelligence technology: the first extensive investigation
Abigail Trachtman
- 12:00** Session concludes

WELCOME RECEPTION



Sponsored by:

ZOETIS

Sunday, March 8

6:30 – 8:30 PM

Grand Hall West

SUNDAY SESSION #1

Student Seminar

Student Seminar

Date: Sunday, March 8

Time: 1:00 – 5:15 PM

Location: Centennial I (Lower Level 1)

Session co-chairs: Andrew Bowman and Perle Zhitnitskiy

Sponsored by ZOETIS

Zoetis provides a \$750 travel stipend to each Student Seminar participant.

These veterinary students are competing for scholarships sponsored by **ZOETIS** and **ELANCO ANIMAL HEALTH**.

- 1:00** Effects of duration of ultraviolet-C radiation exposure on porcine reproductive and respiratory syndrome virus
Alexia Riley, University of Minnesota
- 1:15** A comparison of alternative media for *Mycoplasma hyopneumoniae* aerosol exposure
Kelly Hewitt, Iowa State University
- 1:30** Impact on piglet behavior after use of flunixin meglumine at time of castration
Kathleen Kalbian, University of Pennsylvania
- 1:45** Evaluation of location and fogger type on disinfectant surface area coverage of supplies entering a commercial sow farm
Kristen Leuck, University of Illinois
- 2:00** Assessing sampling strategies for optimal detection of influenza A virus in endemically infected pigs post weaning
Molly Neiley, University of Illinois
- 2:15** A spatial and temporal analysis of cull sow movements
Melissa Hermes, University of Illinois
- 2:30** A fluid dynamics approach for the evaluation of chemical disinfection via fogger
Rebekah Schultz, University of Illinois
- 2:45** REFRESHMENT BREAK – Co-sponsored by **DIAMOND V**
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SUNDAY SESSION #1

Student Seminar

- 3:15** Causes of lameness in sows euthanized for lameness
Nathan Fanzone, University of Pennsylvania
- 3:30** Lung homogenate optimization for successful *Mycoplasma hyopneumoniae* exposure in gilts during acclimation
Megan McMahon, University of Minnesota
- 3:45** Effect of time and temperature on decontamination of supplies entering a farm
Jessica Kordas, University of Illinois
- 4:00** Screening the vulnerability of porcine reproductive and respiratory syndrome virus (PRRSV) introduction in breeding herds using a short survey
Broc Mauch, Iowa State University
- 4:15** Evaluating the dilution effect for detection of *Mycoplasma hyopneumoniae* in processing fluids by PCR
Gabrielle Fry, Purdue University
- 4:30** Evaluation of foggers and stir fans to improve coverage of fogged disinfectants used in supply entry rooms
Jamie Madigan, North Carolina State University
- 4:45** Field evaluation of a liquid *Saccharomyces cerevisiae* fermentation product on lactation performance in sows
Sabra McCallister, North Carolina State University
- 5:00** Genetic analysis of swine and human influenza A virus subtype H3N2 from 2015-2018 in the United States
Dayna Kinkade, University of Illinois
- 5:15** Session concludes



SUNDAY SESSION #2

Industrial Partners

Industrial Partners

Date: Sunday, March 8

Time: 1:00 – 5:15 PM

Location: Centennial II (Lower Level 1)

Session co-chairs: Todd Distad and Terri Specht

- 1:00** Evaluation of reported PCV2 sequences for evidence of recombination
Meggan Bandrick
ZOETIS
- 1:15** A heterologous prime boost mass vaccination protocol for IAV-S control
Bob Thompson
ZOETIS
- 1:30** Progress towards improved *Mycoplasma hyopneumoniae* surveillance
Marisa Rotolo
PIC
- 1:45** Activated medium chain fatty acids: a multifaceted tool
Stacie Crowder
PMI
- 2:00** Estimation of water-soluble zinc amino acid complex supplementation on growth performance and immune response of nursery pigs
Pornpim Aparachita
ZINPRO PERFORMANCE MINERALS
- 2:15** Efficacy of Vigilex™ in reducing PEDV contamination risk in complete feed and impact of PEDV transmission and nursery performance in pigs infected via non-feed vectors
Kari Saddoris-Clemons
PROVIMI
- 2:30** Porcine circovirus type 3: update on field experiences with Sequivity™ vaccination for this emerging pathogen
Jack Creel
MERCK ANIMAL HEALTH

SUNDAY SESSION #2

Industrial Partners

- 2:45** REFRESHMENT BREAK – Co-sponsored by
DIAMOND V
- 3:15** Field experiences with PCV2-unstable sow herds and downstream pig flows
Jamie Lehman
MERCK ANIMAL HEALTH
- 3:30** Updates on influenza A vaccination using the Sequivity™ technology
Channing Sebo
MERCK ANIMAL HEALTH
- 3:45** Field evaluation of a liquid *Saccharomyces cerevisiae* fermentation product on breeding performance in sows
Sabra McCallister
DIAMOND V
- 4:00** A multifaceted approach to selection for postweaning pig survival
Matt Romoser
FAST GENETICS
- 4:15** Provent® ECL, a unique bacillus-based direct-fed microbial (DFM), as a tool to improve wean-to-first service distribution and sow productivity
Terri Specht
UNITED ANIMAL HEALTH
- 4:30** Benefits of feeding M-Mobilize™, a mycotoxin mitigation product with *Bacillus* strains, in the presence and absence of toxin-contaminated diets
Adrienne Woodward
UNITED ANIMAL HEALTH
- 4:45** The effect of sulfated polysaccharides from macro-algae on gut health and immunity
Paul Olsen
OLMIX, NA
- 5:00** Detection of *Mycoplasma hyopneumoniae* in oral fluids?
Kent Doolittle
IDEXX LABORATORIES
- 5:15** Session concludes

SUNDAY SESSION #3

Industrial Partners

Industrial Partners

Date: Sunday, March 8

Time: 1:00 – 5:30 PM

Location: Centennial III (Lower Level 1)

Session co-chairs: Taylor Engle and J. Tyler Holck

- 1:00** Successful *Mycoplasma hyopneumoniae* elimination using tilmicosin (Pulmotil AC®) water medication with a shortened herd closure
Andrew Bents
ELANCO ANIMAL HEALTH
- 1:15** Prevacent® PRRS: determining safety
Pat Hoffmann
ELANCO ANIMAL HEALTH
- 1:30** Utilizing LeeO™ individual animal identification system in commercial research
Paul Yeske
PRAIRIE SYSTEMS
- 1:45** VFD inspections update: education to enforcement
J. Tyler Holck
GVL
- 2:00** Diagnostic trends of swine nursery systemic pathogens
Eduardo Fano
BOEHRINGER INGELHEIM ANIMAL HEALTH USA
- 2:15** Farmera™: a new generation of farm management
Jens Kjaer
BOEHRINGER INGELHEIM ANIMAL HEALTH USA
- 2:30** Role of vaccine-derived immunity for heterologous protection against PRRS: what we have learned
Reid Philips
BOEHRINGER INGELHEIM ANIMAL HEALTH USA
- 2:45** REFRESHMENT BREAK – Co-sponsored by
DIAMOND V

SUNDAY SESSION #3

Industrial Partners

- 3:15** Comparison of two water-soluble chlortetracyclines, with and without agitation
David Nolan
HUVEPHARMA
- 3:30** Prevalence and consequences of sow anemia
Glen Almond
PHARMACOSMOS
- 3:45** Field trial results: a second dose of injectable iron to maximize growth
Chris Olsen
PHARMACOSMOS
- 4:00** Is perception everything when it comes to disinfectants?
Jeff Odle
LANXESS CORPORATION
- 4:15** Fat-soluble vitamin update: an overview of recent results obtained with the utilization of oral and injectable fat-soluble vitamins
Rob Stuart
STUART PRODUCTS
- 4:30** Integrating environmental data from Maximus controls with sow production performance
Tom Stein
MAXIMUM AG TECHNOLOGIES
- 4:45** Killed *Streptococcus suis* vaccine elicits maternal immunity and protects piglets
Scott Dee
NEWPORT LABORATORIES
- 5:00** Genetic selection can be used as a viable tool to improve natural robustness to PRRS challenge
John Eggert
TOPIGS NORSVIN USA
- 5:15** Recent findings of the impact of *Lawsonia intracellularis* challenge on gut health
Fernando Leite
NEWPORT LABORATORIES
- 5:30** Session concludes

SUNDAY SESSION #4

Industrial Partners

Industrial Partners

Date: Sunday, March 8

Time: 1:00 – 5:15 PM

Location: Centennial IV (Lower Level 1)

Session co-chairs: Megan Potter and Sara Hough

- 1:00** Fly counts reduced up to 99% in swine barns with labor-free fly control ClariFly (diflubenzuron)
Gene Spellman
CENTRAL LIFE SCIENCES
- 1:15** Impacts of copper supplementation on performance during a natural PRRSV and influenza A disease challenge in a large-scale commercial research facility
Fredrik Sandberg
FURST-MCNESS COMPANY
- 1:30** Theory and practice of cleaning and disinfection in swine biosecurity
Jose Ramirez
VIROX ANIMAL HEALTH
- 1:45** Field experiences using Circo/MycoGard® in the US and beyond
Fabian Chamba
PHARMGATE ANIMAL HEALTH
- 2:00** Controlling an outbreak of *Mycoplasma hyopneumoniae* (Mhp) and reducing vertical shedding in a naive gilt population using Aivlosin® 17% (tylvalosin) Medicated Premix
Tess Faulkner
PHARMGATE ANIMAL HEALTH
- 2:15** Evaluation of the response to PRRSGard® administration in weaned pigs
Chad Smith
PHARMGATE ANIMAL HEALTH
- 2:30** Beyond bone: the importance of vitamin D for immune function in swine
Sara Hough
DSM NUTRITIONAL PRODUCTS
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SUNDAY SESSION #4

Industrial Partners

- 2:45** REFRESHMENT BREAK – Co-sponsored by
DIAMOND V
- 3:15** Differences in performance of PRRSV-positive pigs when using Swine Awake™ from NutriQuest®
Deb Murray
NUTRIQUEST
- 3:30** Development and validation of PRRS biosecurity survey for breeding herds
Daniel Torrents Gil
HIPRA
- 3:45** From depopulation to repopulation: a Chinese farm underwent African swine fever virus (ASFV) outbreak and survives with ASFV
Nardy Robben
THERMO FISHER SCIENTIFIC ANIMAL HEALTH
- 4:00** Reduction of piglet crushing with the use of the SmartGuard® system
Seth Krantz
SWINETECH
- 4:15** Study of testicles from boars eliminated from artificial insemination centers
Raquel Ausejo
MB SWINE REPRODUCTION
- 4:30** Trends of mycotoxin contamination in US corn harvests
Erika Hendel
BIOMIN AMERICA
- 4:45** Ensuring that a company's vision and mission are living on farm via pre-training and post-training animal care competency measurements
Sarah Probst Miller
AGCREATE SOLUTIONS
- 5:00** Where are all the low-viability pigs coming from?
John Sonderman
DNA GENETICS
- 5:15** Session concludes

SUNDAY - MONDAY

Veterinary Student Posters

Veterinary Student Posters (#1 - #39)

Location: Grand Hall West (Lower Level 2)

Sunday, March 8 12:00 – 5:00 PM

Authors present from 12:00 – 1:00 PM

Monday, March 9 8:00 AM – 5:00 PM

Sponsored by ZOETIS

Zoetis and AASV provide a \$250 travel stipend to each student poster presenter.

STUDENT POSTER COMPETITION: Posters #1-15 (*) have been selected for judging in the Student Poster Competition, sponsored by **UNITED ANIMAL HEALTH.**

- *1. Tonsil scrapings for porcine reproductive and respiratory syndrome virus detection
Heather Walker, Ohio State University
 - *2. Evaluating the detection of porcine circovirus type 3 in individual and pooled processing fluids before, during, and after sow herd vaccination
Rachel Stika, Iowa State University
 - *3. Assessing the impact of organic matrices on the germicidal capability of UVC light chambers utilized on commercial swine farms
Tyler Pieper, University of Illinois
 - *4. A comparison of sow fecal PRRS antibody levels to PRRS antibody levels measured in serum, colostrum, or milk samples
Sam Baker, Iowa State University
 - *5. Application of time of flight cameras for sow lameness detection
Matthew Boulanger, University of Pennsylvania
 - *6. Assessment of area spread of *Mycoplasma hyopneumoniae* during aerosol acclimation of gilts
Nicholas Benge, Iowa State University
 - *7. Analysis of porcine parvovirus maternal antibody decay in replacement gilts by hemagglutinin inhibition and enzyme-linked immunosorbent assays
Amanda Anderson, Iowa State University
-

SUNDAY - MONDAY

Veterinary Student Posters

- *8. Comparison of control methods in gestating gilts to protect piglets from rotavirus type A and C
William Boyd, Virginia-Maryland CVM
- *9. Comparing processing fluid to serum for antibody detection of porcine reproductive and respiratory syndrome virus, porcine circovirus 2 (PCV2), influenza A virus of swine (IAV-S) and *Mycoplasma hyopneumoniae* on commercial sow farms
Brian Johnson, University of Illinois
- *10. Environmental sampling for porcine epidemic diarrhea virus and porcine delta coronavirus to emphasize the importance of biosecurity practices
Calie Peterson, Iowa State University
- *11. Comparison of tulathromycin vs. tilmicosin at placement in porcine reproductive and respiratory syndrome virus-positive pigs
Krista Carroll, Iowa State University
- *12. A post-partum glucocorticoid may reduce inflammation and improve sow lactation performance
Yuqi Yan, Iowa State University
- *13. Evaluation of temperature variation within tissue boxes during shipment
Kris Kovach, Iowa State University
- *14. Evaluation of the T-cell immune response of Prevacent PRRS[®] vaccinated pigs compared to non-vaccinated control following challenge with a wild type PRRSV strain
Amberly Jergens, Iowa State University
- *15. Pen-side comparison of biochemical, blood gas, and hematological analytes between two common clinical conditions and case-controls: nursed-off sows and individual fallback piglets
Will Miller, Michigan State University
- 16. Evaluation of an RNA-particle platform vaccine for porcine circovirus type 3 (PCV3) in gilts prior to entry
Jordan Buchan, University of Guelph

Continued on next page

SUNDAY - MONDAY

Veterinary Student Posters

17. Telomere length as biomarker of welfare in breeding sows
Katherine Dorph, University of Pennsylvania
18. Comparison of standard and novel precision agriculture vaccination strategies and the effect on vaccine responses in weaned pigs
Gabrielle Doughan, Iowa State University
19. Efficient establishment of multi-site Secure Pork Supply plans for swine operational management
Catharine Found, Iowa State University
20. Evaluating the use of processing fluids for sow herd monitoring of porcine circovirus type 2
Karissa Frealy, Oklahoma State University
21. An attempt to determine within-sample variation of the swine fecal microbiome
Laura Glazik, University of Illinois
22. Effects on longevity and productivity for sows in pen gestation removed for lameness
Ashley Hollowell, University of Pennsylvania
23. Quantifying the effect of population-based vaccination of the breeding herd on various productive parameters
Maddie Herring, Iowa State University
24. Impact of parity on aggression between gestating sows upon entry into large-pen group housing
Nicole Johnson-Valladares, University of Pennsylvania
25. Utilizing colostrum and processing fluids for monitoring porcine circovirus type 2 on sow farms
Madison Kapraun, University of Illinois
26. Investigating the shedding and transmission of Enterisol® Ileitis
Erin Kettelkamp, University of Illinois
27. Porcine circovirus type 2 (PCV2) stabilization of replacement gilts by vaccination and the impact on offspring PCV2 status
Kate Mathes, Iowa State University
28. Investigating meteorological data and distance to slaughterhouses in the occurrence of PRRS outbreaks
Justin Moeller, Ohio State University

SUNDAY - MONDAY

Veterinary Student Posters

29. Efficacy of an additional *Mycoplasma hyopneumoniae* vaccination under field conditions
Lauren Nagel, University of Illinois
30. Analysis of farm management and intestinal parasite loads between two non-commercial systems: antibiotic-free sow farms and organic finisher farms
Katelyn Newcamp, University of Pennsylvania
31. Tracking pelvic organ prolapses in a breeding herd
Meredith Petersen, Iowa State University
32. Evaluation of injectable and water administered ileitis vaccines in finishing pigs
Anne Szczotka, Iowa State University
33. A comparison of diagnostic sampling techniques used to assess transmission risk of *Mycoplasma hyopneumoniae* from positive sourced boar studs
Zack Talbert, University of Illinois
34. Longitudinal assessment of PCV2/PCV3 viremia in PCV2-vaccinated and non-vaccinated animals under PCV2d field exposure
Ariel Taylor, Ohio State University
35. Ultrasonographic observation of ovarian structures and evaluation of serum progesterone levels in breeding gilts prior to synchronization: a descriptive study
Jonathan Tubbs, Auburn University
36. Resting heart rate of group-housed gestating gilts predicts judgement bias
Caitlyn Tukdarian, University of Pennsylvania
37. Evaluation of a replicon particle vaccine against porcine parainfluenza type 1 challenge in nursery pigs
Michael Welch, Iowa State University
38. *Streptococcus suis* in swine nurseries of a commercial production system
Kristen White, Texas A&M University
39. Dynamics of a rotavirus type A and C coinfection in colostrum deprived piglets
Zoe Wolfe, North Carolina State University

SUNDAY - MONDAY

Research Topics Posters

Research Topics Posters (#40 - #60)

Location: Grand Hall West (Lower Level 2)

Sunday, March 8 12:00 – 5:00 PM

Authors present from 12:00 – 1:00 PM

Monday, March 9 8:00 AM – 5:00 PM

40. Frequency of wild-type PRRSV infections in growing pigs in the Midwest US
Jose Angulo
41. Impact of within-farm movements of workers on production parameters for three US swine farms
Nicholas Black
42. Improving *Mycoplasma hyopneumoniae* sampling techniques for detection, bacterial recovery, and diagnosis of disease
Rachel Derscheid
43. Agreement between culture and PCR-based methods to detect *Brachyspira hyodysenteriae* and *Brachyspira pilosicoli* in feces and oral fluids
Megan Jacob
44. Viremia and mortality in piglets born to sows during a PRRSV outbreak
Mariana Kikuti
45. Does topical flunixin meglumine have potential to treat pain in pre-wean piglets?
Heather Kittrell
46. Use of live attenuated and killed virus vaccination to reduce the risk of zoonotic influenza A virus transmission at the human-swine interface
Josh Lorbach
47. Whole-herd drivers of wean-to-finish mortality in a midwestern USA swine production system
Edison Magalhaes
48. Effect of a lipid-based low pKa anti-pathogenic product on mitigating PRRSV in feed evaluated by quantitative RT-PCR and pig bioassay
Abdullah Mahfuz

SUNDAY - MONDAY

Research Topics Posters

49. National Senecavirus A seroprevalence and risk factors
Guilherme Milanez Preis
50. Comparison of sample types to diagnose Senecavirus A during later stages of infection
Guilherme Milanez Preis
51. Role of transportation stress on transmission of Senecavirus A in gilts
Guilherme Milanez Preis
52. Forecasting outbreaks of PEDV for near real-time data-informed decision making
Igor Paploski
53. Evolution of PRRSV: lessons from the last 10 years and implications for the future
Igor Paploski
54. Validating pain behavior methodologies in castrated piglets
Rachel Park
55. Distribution of PCV2 genotypes in clinical samples submitted to the University of Minnesota Veterinary Diagnostic Laboratory during 2017 and 2018
Albert Rovira
56. Investigation of gilts as a factor for delayed time-to-stability
Juan Sanhueza
57. Virulence and antibody responses of different US PEDV strains in pigs of different ages
Loni Schumacher
58. Genetic diversity of prevalent PRRSV RFLP types within and between US states during 2007-2019: implications for epidemiological investigations and control programs
Giovani Trevisan
59. *Brachyspira hyodysenteriae* eradication with a non-antibiotic Zn-chelate: the approach of the future?
Frederic Vangroenweghe
60. Biochemical evaluation of current erysipelas vaccines for emerging strains
Alan Young

SUNDAY - MONDAY

Industrial Partners Posters

Industrial Partners Posters (#61 - #77)

Location: Grand Hall West (Lower Level 2)

Sunday, March 8 12:00 – 5:00 PM

Authors present from 12:00 – 1:00 PM

Monday, March 9 8:00 AM – 5:00 PM

- 61.** AllBite™, a novel solution to reduce vice behaviors
Andrew Bents
ALLTECH
 - 62.** Effect of an oral live vaccine against *Lawsonia intracellularis* on the performance of pigs at a production system in Mexico
Johanna Ochoa
BOEHRINGER INGELHEIM ANIMAL HEALTH USA
 - 63.** Detection, PCR results, and sequencing of PEDV in swine manure pits over an extended period of time
Grant Allison
CENTRAL LIFE SCIENCES
 - 64.** Elimination of *Mycoplasma hyopneumoniae* in a multiplier herd to initiate elimination on all commercial sows
Mark Hammer
ELANCO ANIMAL HEALTH
 - 65.** Compliance and efficiency in swine health documentation
Chris Rademacher
GVL
 - 66.** Efficacy of a type 1 MLV PRRSV vaccine when applied intradermally in 2-week-old piglets under field conditions
Joel Miranda Alvarez
HIPRA
 - 67.** Evaluation of three commercial ELISAs for detection of antibodies against *Mycoplasma hyopneumoniae* in serum samples
Alvaro Hidalgo
IDEXX LABORATORIES
 - 68.** ButiPEARL™ Z: A novel encapsulated butyric acid and zinc source for intestinal health under various stress conditions for pigs: a review
Tom Marsteller
KEMIN ANIMAL NUTRITION & HEALTH
-

SUNDAY - MONDAY

Industrial Partners Posters

69. The use of a digital biosecurity system on three swine farms: preliminary results
Laslo Buza
MERCK ANIMAL HEALTH
70. Evaluation of the porcine gut microbiome response to *Lawsonia intracellularis* infection
Fernando Leite
NEWPORT LABORATORIES
71. The PRRS Calculator: an economic tool assessing the impact of PRRS and mitigation strategies
Rob Musser
NUTRIQUEST
72. The use of medium chain fatty acids to reduce porcine reproductive and respiratory syndrome virus replication in MARC-145 cells
Stacie Crowder
PMI
73. The value of LeeO™, an individual animal identification system adding value to the pork supply chain in The Netherlands
Peter ter Linde
PRAIRIE SYSTEMS
74. Efficacy of Vigilex™ feed ingredient in reducing PRRSV contamination risk in complete feed
Sara Ebarb
PROVIMI
75. Speculating trends in domestic pork consumption during a global swine health crisis
Dustin Boler
TOPIGS NORSVIN USA
76. DFM Pak®, a novel combination of *Bacillus* strains selected for corn fiber utilization and biofilm activity, shows beneficial impacts on environmental and storage characteristics of manure
Jake Lee
UNITED ANIMAL HEALTH
77. Meta-analysis of porcine circovirus type 2 (PCV2) vaccines used in growing pigs
Marnie Mellencamp
ZOETIS

MONDAY AASV Foundation Auction

A VISION FOR THE FUTURE!

Monday, March 9

Location: Regency Ballroom

The auction proceeds are a major source of revenue to support foundation programs that include scholarships, swine research grants, travel stipends for veterinary students, swine externship grants, tuition grants at the Swine Medicine Education Center, student debt relief, ACAW board certification efforts, and more.



SILENT AUCTION

Check out the items up for bid at aasv.org/foundation. They will be on display outside the Regency Ballroom on auction day: **Monday, March 9**.

Bid anytime from anywhere on your phone using *ClickBid*.

It will be “all-in, all-done” for the silent auction at 7:00 PM Eastern Daylight Time.

LIVE AUCTION

The Live Auction will be held at the conclusion of the AASV Awards Reception Monday evening. Don't miss it!



*Thank you for supporting
the AASV Foundation!*

aasv.org/foundation

AASV FOUNDATION PROGRAMS

Memorial Lectures

The foundation provides the speaker stipends for the annual Howard Dunne and Alex Hogg Memorial Lectures.

AASV Foundation Research Grants

Up to \$60,000 per year is awarded to fund research with direct application to the profession.

Hogg Scholarship

Named in honor of early AASP leader Dr. Alex Hogg, the \$10,000 Hogg Scholarship is awarded to a swine practitioner who has left practice to pursue a graduate degree in a field of study related to swine health and production.

Student Debt Relief

A \$5000 award is made annually to a recent veterinary graduate who has been an active AASV member and has significant student debt.

ACAW Scholarship

AASV members seeking board certification in the American College of Animal Welfare (ACAW) can apply for this expense reimbursement scholarship, with an incentive payment of \$10,000 for successful and timely achievement of certification.

Veterinary Student Scholarships

Numerous scholarships are available to veterinary students who participate in the AASV Student Seminar and Student Poster Competition, and to students who demonstrate promise and interest in pursuing a career in swine medicine. The scholarships are supported by contributions from Elanco Animal Health, Merck Animal Health, United Animal Health, and Zoetis.

Swine Externship Grants

Veterinary students who will complete a 2-week or longer externship in a swine practice or mixed-animal practice with a considerable swine component can apply to receive up to \$500 to defray expenses.

Travel Stipends

In partnership with Newport Laboratories, the foundation provides a \$200 travel stipend to veterinary students who attend the AASV Annual Meeting.

MONDAY MORNING Spouse Hospitality Suite

Spouse Hospitality Suite



Monday, March 9

7:00 – 9:00 AM

Location:

Chicago AB

(Lower Level 2)

**THE AASV IS PLEASED TO HOST
THE SPOUSE HOSPITALITY
SUITE AT THE *HYATT***

Spouses of meeting attendees are invited to enjoy complimentary breakfast pastries, juice, and coffee.

Make new acquaintances, visit with old friends, and plan the rest of your day with other AASV spouses and family members.

**MONDAY - TUESDAY
Technical Tables**

Technical Tables

Industry partners for professional success



VISIT THE TECHNICAL TABLES EXHIBIT!

Learn about the wide variety of products and services available from our many exhibiting companies and organizations.
See pages 7-9.

EXHIBITS OPEN

Monday, March 9
9:00 AM – 5:00 PM

Tuesday, March 10
8:00 AM – 12:00

Location

Grand Hall West (Lower Level 2)

All refreshment breaks on Monday and Tuesday take place in and around the exhibit tables. Spend some time visiting with our exhibitors, and be sure to thank them for supporting the AASV Annual Meeting!

MONDAY GENERAL SESSION 2020: A Vision for the Future

2020: A Vision for the Future

Date: Monday, March 9

Time: 8:00 AM – 12:15 PM

Location: Centennial III - IV (Lower Level 1)

Program chair: Jeff Harker

- 8:00** **Howard Dunne Memorial Lecture**
Trust the people
Bret Marsh
- 9:00** **Alex Hogg Memorial Lecture**
Choosing a pathway forward in practice
Bill Hollis
- 10:00** REFRESHMENT BREAK
Co-sponsored by HOG SLAT
- 10:30** Current and future vision of swine
medicine education
Locke Karriker
- 11:00** A vision for the future of global markets
Steve Meyer
- 11:30** Reset to positive
Betsy Charles
- 12:15** LUNCHEON

AASV LUNCHEON



Sponsored by:

BOEHRINGER INGELHEIM

Monday, March 9

12:15 – 2:00 PM

Regency Ballroom

MONDAY SESSION #1

Disease Control

Disease Control, Prevention, and Elimination

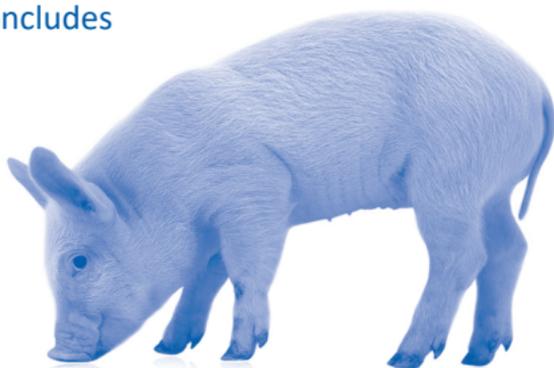
Date: Monday, March 9

Time: 2:00 – 5:30 PM

Location: Centennial III-IV (Lower Level 1)

Session chair: Paul Thomas

- 2:00** Field experiences managing PRRS through control, elimination, and prevention
Kylie Glisson
- 2:30** Which route of exposure is best for gilt acclimatization to *Mycoplasma hyopneumoniae*?
Ana Paula Poeta Silva
- 2:50** Are we there yet? The future of bacterial pathogen surveillance
Maria Jose Clavijo
- 3:10** A practitioner's perspective of managing bacterial pathogens
Brad Leuwerke
- 3:40** REFRESHMENT BREAK
- 4:10** Effect of different natural planned exposure (NPE) strategies on the shedding of rotavirus A, B, C, and pre-wean morbidity and mortality in an endemic sow farm
Attila Farkas
- 4:30** Ileitis prevention and elimination: we have the tools!
Nathan Winkelman
- 5:00** Batch farrowing for disease control
Clayton Johnson
- 5:30** Session concludes



MONDAY SESSION #2

Biosecurity

Biosecurity: Keeping Bad Stuff Out

Date: Monday, March 9

Time: 2:00 – 5:30 PM

Location: Centennial II (Lower Level 1)

Session chair: Andrea Pitkin

- 2:00** African swine fever response scenarios in Europe: effective strategies for control and eradication
Tim Snider
- 2:15** African swine fever “top 5” biosecurity strategies and considerations
Clayton Johnson
- 2:30** Survival and transmission of foreign animal diseases in feed
Megan Niederwerder
- 2:45** What’s new with feed mitigation?
Scott Dee
- 3:00** Applying biosecurity to the feed supply chain
Cassandra Jones
- 3:15** Efficacy of ultraviolet C disinfection for inactivating Senecavirus A on contaminated surfaces commonly found on swine farms
Derald Holtkamp
- 3:30** REFRESHMENT BREAK
- 4:00** Day-to-day transport biosecurity: the real world
Mike Eisenmenger

AASV AWARDS RECEPTION



Sponsored by:

MERCK ANIMAL HEALTH

Monday, March 9

6:30 – 8:30 PM

Regency Ballroom

MONDAY SESSION #2

Biosecurity

- 4:13** Transportation biosecurity: dos and don'ts from a breeding stock company perspective
Jean Paul Cano
- 4:25** Biosecurity lessons learned and action steps to reduce the risks associated with live animal transport
Amy Maschhoff
- 4:39** Transportation speaker panel question and answer roundtable
Mike Eisenmenger, Jean Paul Cano, and Amy Maschhoff
- 4:50** Evaluation of a staged loading procedure for the loadout of market pigs to prevent the transfer of swine pathogen-contaminated particles from livestock trailers to the barn
Chelsea Ruston
- 5:05** Pathogens in groundwater: entry, prevalence, distribution, long-term viability, testing, and remediation
Phil Olsen
- 5:30** Session concludes

AASV FOUNDATION AUCTION

Monday, March 9
Regency Ballroom



Silent Auction:

Items on display in foyer at noon; Use ClickBid to bid anytime!

Live Auction:

Immediately following the AASV Awards Reception

MONDAY SESSION #3

Pharmaceutical Issues

Pharmaceutical Issues

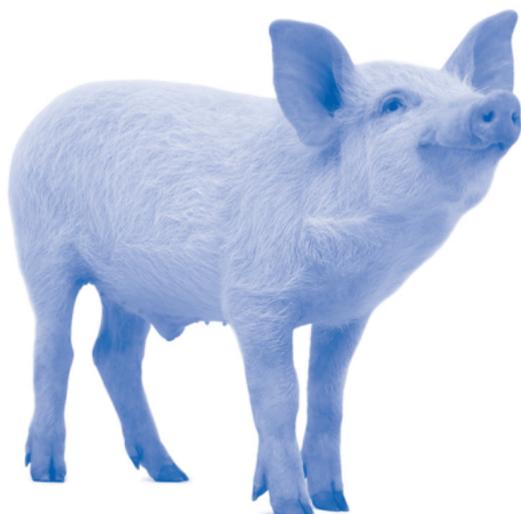
Date: Monday, March 9

Time: 2:00 – 5:30 PM

Location: Centennial I (Lower Level 1)

Session chair: Eugene Nemecek

- 2:00** Future regulation impact on pharmaceutical use
Liz Wagstrom
- 2:30** Customer pressure on future antibiotic use
Jarrold Sutton
- 3:00** The future of antibiotic resistance pressures on pork production
Peter Davies
- 3:30** REFRESHMENT BREAK
- 4:00** VFDs: past, present, and the future
Chris Rademacher
- 4:20** Future of the microbiome in the pig
Bailey Arruda
- 4:40** Future issues of antibiotic-free production
Michael Pierdon
- 5:00** Future of pain medication for pigs
Hans Coetzee
- 5:30** Session concludes



TUESDAY GENERAL SESSION

Swine Welfare / FAD Prevention

Swine Welfare and Foreign Animal Disease Prevention

Date: Tuesday, March 10

Time: 8:00 AM – 12:00 PM

Location: Centennial III-IV (Lower Level 1)

Session co-chairs: Sherrie Webb and Matt Ackerman

Swine Welfare

- 8:00** What a pig wants: advances in animal welfare science
Meghann Pierdon
- 8:30** Consumer perceptions, purchasing trends, and the evolving food marketing landscape
David Fikes

Foreign Animal Disease Prevention

- 9:00** African swine fever: what's working and not working in China
Joseph Yaros
- 9:30** US Customs and Border Protection: keeping foreign animal diseases out
Kevin Harriger
- 10:00** REFRESHMENT BREAK
- 10:30** National Swine Disease Council
Patrick Webb
- 11:00** Regionalization, compartmentalization, and maintaining exports during an FAD outbreak
Eric Jensen
- 11:30** The importance of transboundary animal disease economically, socially, and politically
Peter Fernandez
- 12:00** Session and meeting conclude

AASV BUSINESS BREAKFAST



Tuesday, March 10

7:00 – 8:00 AM

Centennial II

Plan now to attend the

52nd AASV Annual Meeting

February 27 - March 2, 2021

San Francisco Marriott Marquis
San Francisco, California



2022	Indianapolis	Feb 26-March 1
2023	Denver	March 4-7
2024	Nashville	Feb 24-27

Thank you!

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

BOEHRINGER INGELHEIM ANIMAL HEALTH
AASV Luncheon

DIAMOND V
Refreshment Break Co-sponsor

DSM NUTRITIONAL PRODUCTS
Exercise Class

ELANCO ANIMAL HEALTH
AASV Foundation Veterinary Student Scholarships
Social Media Center

HOG SLAT
Refreshment Break Co-sponsor

MERCK ANIMAL HEALTH
AASV Awards Reception
Student Trivia Event
Student Reception
AASV Foundation Veterinary Student Scholarships

NEWPORT LABORATORIES
Veterinary Student Travel Stipends

QUALITY TECHNOLOGY INTERNATIONAL
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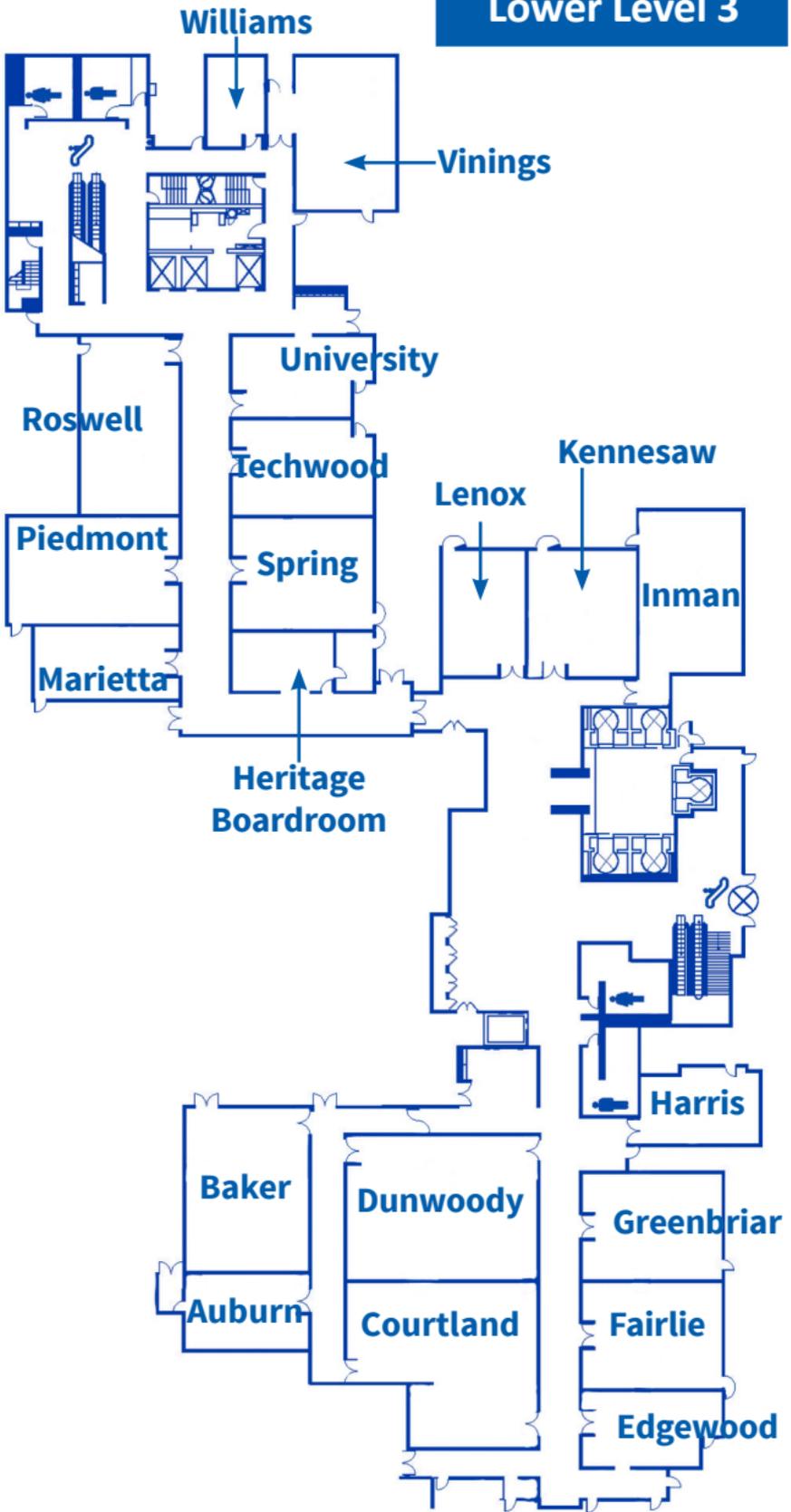
STUART PRODUCTS
Praise Breakfast

UNITED ANIMAL HEALTH
Veterinary Student Poster Awards

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

ATLANTA CONFERENCE CENTER

Lower Level 3



Hyatt Regency Atlanta

Ballroom Lower Level 1

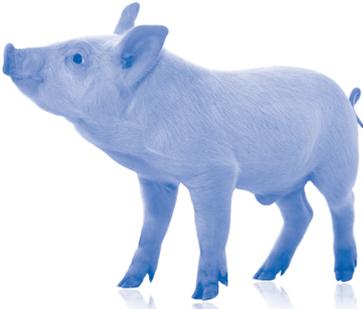
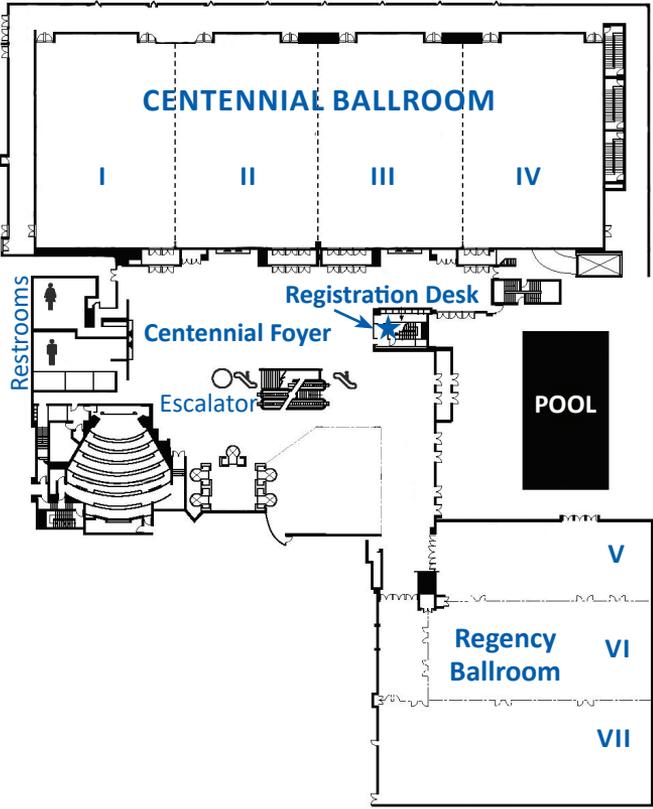


Exhibit Lower Level 2

