

# 55<sup>th</sup> AASV Annual Meeting Program

February 24-27, 2024  
Nashville, Tennessee



[aasv.org/annmtg](http://aasv.org/annmtg)



Leading  
AASV

into the  
Future



*\*Photo courtesy of the  
National Pork Board,  
Des Moines, Iowa, USA*

# Welcome to Nashville and the AASV's 55<sup>th</sup> Annual Meeting!

Nashville is known as Music City. It is a city of storytellers and dreamers, where all are welcomed with an authentic, friendly, creative spirit. With that same spirit of adventure, the theme of this year's AASV meeting is "Leading AASV into the Future." AASV members have always played, and will continue to play, key roles in the future of swine production and provision of food for the world.



The challenge laid out before the program committee this year was to learn from the past and lead into the future. One of my favorite quotes is from Albert Einstein: "Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning." As you look at the amazing program that the committee created, I think we are learning from the past with a strong head of steam into the future.

However, please permit me to reflect on the last time the AASV meeting was in Nashville in 2001. The AASV officers were David Madsen, Lisa Tokach, Rick Sibbel, and Bob Morrison. The general session topics included pork safety, AMDUCA, foreign animal disease (we're not ready), and challenges in PRRS elimination. Why do these topics sound so familiar and relevant today; how far have we really come? Why haven't we eliminated PRRSV? These questions and many more will be topics for discussion during our conference.

## **Committee Involvement**

Saturday morning, February 24<sup>th</sup>, all AASV Committees will meet. I remember as a new graduate, a long time ago, wanting to become more active in service to the AASV. With encouragement from my mentors, John Waddell and Tom Gillespie, my service journey in numerous committees began. Committees are the place where members devote their time and talents to lead the organization and the swine industry forward. I challenge all members to become involved with a committee. If you are like me, you will gain so much more through your service.

## **The Preconference Seminars**

The program planning committee has created a stellar opportunity to learn from industry experts in 10 seminars. The challenge for many of us is selecting which seminars to attend.

## **General Session**

This year, Dr. Joel Nerem will deliver the Howard Dunne Memorial Lecture, entitled “Swine veterinarians: Who are we and where are we going?” I know Dr. Nerem will challenge us to reflect on the past and project a path forward. During the Alex Hogg Memorial Lecture, Dr. Chris Rademacher will focus on past, present, and future challenges for the swine veterinary profession. The additional general session speakers will highlight historical disease eradication, elimination of *Mycoplasma*, the never-ending story of PRRS, and a zombie apocalypse approach to disease control and elimination. I cannot wait to get my zombie on!

## **Concurrent Sessions**

The challenge of wanting to be in multiple sessions will be real. The student session, featuring 15 students competing for scholarships, is one of my favorite sessions as it displays the coming leaders of our organization. Monday’s concurrent sessions will continue the discussion about disease elimination, the evolution of the swine industry, and immunology for today and tomorrow.

## **The Big Finale**

Be sure to keep your seat in the Tuesday General Session. Dr. Bill Hollis has developed a roadmap into the future: Driving Demand and Protecting the Product. This session will challenge us to keep an eye on the prize-- economically producing wholesome, safe, and high-quality pork. Learn about your role as a veterinarian or producer in driving demand and meeting global market expectations. I expect some very robust discussions to evolve from this session!

I am humbled by the opportunity to serve as this year’s program chair. The efforts of the program committee, AASV staff, and the speakers who devote their time and share their knowledge are monumental and make the AASV meeting exceptional. Please let me express my gratitude for the commitment that each of you have made toward the success of this year’s AASV meeting.

Now, let’s get this party started and **“Lead AASV into the Future.”**

Sincerely,

**Angela Baysinger**  
Program chair

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# SCHEDULE AT A GLANCE

## Saturday, February 24

### 7:00 AM

**Registration Desk open until 5:00 PM**

Presidential Lobby (Level 2)

**AASV Committee Meetings** (page 13)

Presidential Mezzanine (Level M)

### 1:00 PM

**PRECONFERENCE SEMINARS:**

*(additional fees apply)*

**#1 Max Rodibaugh Memorial Practice Tips Seminar**

(page 14)

Ryman Ballroom A (Level 0)

**#2 Maximizing the Value of Big Diagnostic Data**

(page 16)

Ryman Ballroom C (Level 0)

**#3 Disease Preparedness: Lessons and Updates**

(page 18)

Ryman Ballroom D (Level 0)

**#4 Swine Savvy: Mastering the Art of Swine Business**

(page 20)

Ryman Ballroom B/E (Level 0)

**#5 Pig Livability: What Works, What Doesn't**

(page 22)

Ryman Ballroom F (Level 0)

### 5:00 PM

**OPEN EVENING**

### 6:00 – 8:00 PM

**VETERINARY STUDENT TRIVIA EVENT** (page 56)

Sponsored by: **MERCK ANIMAL HEALTH**

Delta Ballroom B (Level 2)

### 8:00 PM – 2:00 AM

**SHUTTLE to and from Broadway Street** (page 56)

Sponsored by: **SWINETECH**

Departs from: Presidential Portico

# SCHEDULE AT A GLANCE

## Sunday, February 25

### 6:00 AM

**YOGA EXERCISE CLASS** (page 57)

Hosted by: **DSM-FIRMENICH**

Jackson D (Level M)

### 6:30 AM

**AASV STUDENT BREAKFAST**

Old Hickory (Atrium)

### 7:00 AM

**PRAISE BREAKFAST** (page 57)

Co-sponsored by **STUART PRODUCTS**

and the **AASV FOUNDATION**

Lincoln C/D/E (Level M)

**Registration Desk open until 5:00 PM**

Presidential Lobby (Level 2)

### 8:00 AM

**PRECONFERENCE SEMINARS:**

*(additional fees apply)*

**#6 Biosecurity** (page 24)

Ryman Ballroom A (Level 0)

**#7 Much Ado about Flu** (page 26)

Ryman Ballroom C (Level 0)

**#8 Case Reports, Case Studies, and Field**

**Trials – Oh, My!** (page 28)

Ryman Ballroom D (Level 0)

**#9 Swine Health through Nutrition**

(page 30)

Ryman Ballroom B/E (Level 0)

**#10 Swine Medicine for Students** (page 31)

Ryman Ballroom F (Level 0)

**RESEARCH TOPICS** (page 32)

Presidential A (Level 2)

# SCHEDULE AT A GLANCE

## Sunday, February 25

### 12:00 PM

#### POSTER SESSION OPEN

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

Presidential Lobby (Level 2)

- **Veterinary Student Posters** (page 42)

Funded by the **ZOETIS FOUNDATION**

- **Research Topics Posters** (page 44)

- **Industrial Partners Posters** (page 47)

### 1:00 PM

#### CONCURRENT SESSIONS:

- #1 Student Seminar** (page 34)

Funded by the **ZOETIS FOUNDATION**

Presidential A (Level 2)

- #2 Industrial Partners** (page 36)

Presidential B (Level 2)

- #3 Industrial Partners** (page 38)

Presidential C (Level 2)

- #4 Industrial Partners** (page 40)

Presidential E (Level 2)

### 8:30 – 11:00 PM

- STUDENT RECEPTION** (page 58)

Sponsored by **MERCK ANIMAL HEALTH**

Presidential A/B/C/E (Level 2)

# SCHEDULE AT A GLANCE

## Monday, February 26

### 6:30 AM

#### **MONDAY SPECIAL SESSION: Beagles and Bagels**

(page 49)

Presidential Chamber B (Level 2)

### 7:00 AM

#### **Registration Desk open until 5:00 PM**

Presidential Lobby (Level 2)

### 8:00 AM – 12:30 PM

#### **GENERAL SESSION:**

#### **Leading AASV into the Future (page 50)**

Presidential D (Level 2)

#### **Howard Dunne Memorial Lecture:**

Swine veterinarians: Who are we and where are we going?

Dr. Joel Nerem

#### **Alex Hogg Memorial Lecture:**

Past, present, and future challenges for the swine veterinary profession

Dr. Chris Rademacher

### 8:00 AM – 5:00 PM

#### **HEARING TESTING (page 55)**

Presidential Chamber A (Level 2)

### 9:00 AM – 5:00 PM

#### **TECHNICAL TABLES EXHIBIT OPEN (pages 62-64)**

Presidential A/B (Level 2)

### 12:30 PM

#### **AASV-AASVF LUNCHEON (page 59)**

Co-sponsored by **AASV** and the **AASV FOUNDATION**

Ryman Exhibit Hall B1/B2 (Level 0)



# SCHEDULE AT A GLANCE

## Monday, February 26

**2:00 – 5:30 PM**

**CONCURRENT SESSIONS:**

**#1 Disease Elimination: Theory to Move Us Forward**

(page 51)

Presidential D (Level 2)

**#2 Sustaining the Farm in the Face of Evolution**

(page 52)

Presidential C (Level 2)

**#3 Immunology Toolbox: Today and Tomorrow**

(page 53)

Ryman Ballroom (Level 0)

**6:30 – 7:00 PM**

**AASV PRE-RECEPTION SOCIAL** (page 59)

Presidential Lobby (Level 2)

**7:00 PM**

**AASV FOUNDATION SILENT AUCTION CLOSES**

View items and bid at <https://aasvf.cbo.io>

**7:00 – 9:00 PM**

**AASV AWARDS RECEPTION** (page 59)

Co-sponsored by **AASV** and **MERCK ANIMAL HEALTH**

Presidential C/D/E (Level 2)

**AASV FOUNDATION LIVE AUCTION** (page 61)

Presidential C/D/E (Level 2)

# SCHEDULE AT A GLANCE

## Tuesday, February 27

**7:00 AM**

**Registration Desk open until 12:00 PM**

Presidential Lobby (Level 2)

**BREAKFAST and AASV ANNUAL BUSINESS MEETING**

Presidential C (Level 2)

**8:00 AM**

**GENERAL SESSION: Driving Demand and Protecting the Product** (page 54)

Presidential D (Level 2)

**8:00 AM – 12:00 PM**

**TECHNICAL TABLES EXHIBIT OPEN** (pages 62-64)

Presidential A/B (Level 2)

**12:00 PM**

**MEETING 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.*



# MOBILE APP & PROCEEDINGS

## MOBILE APP

Keep track of when and where you need to be with the free AASV mobile conference app! Use it to create your personal schedule and “to do” list. It contains the most up-to-date schedule, speaker and exhibitor details, maps of the meeting rooms, and links to proceedings papers. The app is available for download to iOS and Android devices by using the code provided in your registration packet.

## PROCEEDINGS

AASV members and conference attendees may download all proceedings papers (including seminar papers) from the AASV website prior to and during the meeting.

For more information:  
[aasv.org/annmtg](http://aasv.org/annmtg)



## CONTINUING EDUCATION

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 (includes Research Topics session OR Sunday pre-conference seminar). Four (4) additional credit hours are available for attendance at a Saturday pre-conference seminar.

# PROGRAM COMMITTEE

## Angela Baysinger, Program Chair

Andreia Arruda	Locke Karriker
Melissa Billing	Claire LeFevre
McKenna Brinning-Henningson	Emily Mahan-Riggs
Kimberly Crawford	Carissa Odland
Marie Culhane	Brian Payne
Attila Farkas	Brent Pepin
Heather Fowler	Chris Rademacher
Phil Gauger	Michael Senn
Jordan Gebhardt	Brent Sexton
Alexander Hintz	Michelle Sprague
Bill Hollis	Amber Stricker
Micah Jansen	Matthew Turner

## AASV OFFICERS

### President

Dr. Bill Hollis

### Vice President

Dr. Locke Karriker

### President Elect

Dr. Angela Baysinger

### Past President

Dr. Mike Senn

## DISTRICT DIRECTORS

### District 1 (Northeast US)

Dr. Melissa Billing

### District 7 (Western US)

Dr. Maryn Ptaschinski

### District 2 (Southeast US)

Dr. Sara Hough

### District 8 (NE, SD)

Dr. Christine Mainquist-Whigham

### District 3 (AR, KY, MO)

Dr. Stephen Patterson

### District 9 (MN, ND)

Dr. Alyssa Betlach

### District 4 (IN, MI)

Dr. Megan Inskeep

### District 10 (Mexico)

Dr. Enrique Corona

### District 5 (IL, WI)

Dr. Attila Farkas

### District 11 (Canada)

Dr. Susan Detmer

### District 6 (IA)

Dr. Chris Rademacher

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### Student Delegate

Alexis Berte,  
*Iowa State University*

### Alternate Student Delegate

Mallory Wilhelm,  
*Iowa State University*

# COMMITTEE MEETINGS

**Date:** Saturday, February 24

**Location:** Presidential Mezzanine (Level M)

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](http://aasv.org/aasv/committee.php).

7:00 – 9:30 AM	Meeting room
Diversity, Equity, and Inclusion	Lincoln C
Early Career	Lincoln D
Influenza	Lincoln B
Pork Safety	Lincoln E
Transboundary/Emerging Diseases	Lincoln A
Welfare	Jackson A

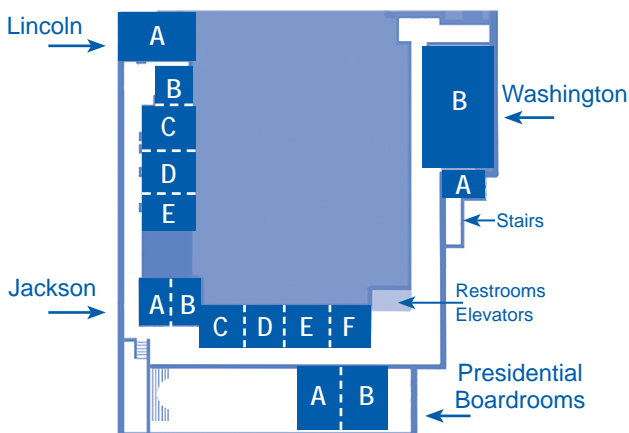
  

7:00 AM – 12:00 PM	Meeting room
Pharmaceutical Issues	Jackson B

10:00 AM – 12:00 PM	Meeting room
Boar Stud	Jackson A
Communications	Lincoln D
Human Health, Safety, and Well-being	Lincoln C
Nutrition	Lincoln E
PRRS	Lincoln A
Student Engagement	Lincoln B

## LEVEL M Presidential Mezzanine



# SATURDAY SEMINAR 1

## Practice Tips

### Max Rodibaugh Memorial Practice Tips Seminar

**Date:** Saturday, February 24

**Time:** 1:00 – 5:00 PM

**Location:** Ryman Ballroom A (Level 0)

**Fee:** \$110

**Seminar chair:** Melissa Billing

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Are you looking for ideas that you can take home and implement today? Don't miss this TED-talk-like session where AASV members offer their valuable insights and best advice that can be used immediately! These talks will feature innovative solutions to everyday problems from speakers at the top of their game.

- 1:00** Welcome and introductions  
**Melissa Billing**
  - 1:10** Two zebras and a handy tool  
**David Baumert**
  - 1:30** Catching the flu: Best practices for successful sampling  
**Susan Detmer**
  - 1:50** Managing in the middle  
**Daniel Boykin**
  - 2:10** Let adventure be your guide  
**Jana Morgan**
  - 2:30** Loving the unlovable: The Krantz approach  
**Seth Krantz**
  - 2:50** REFRESHMENT BREAK
  - 3:15** Triaging emergencies: Be the calm after the storm  
**Will Fombelle**
  - 3:35** Did I vaccinate that?  
**Lauren Nagel**
  - 3:55** Sampling the lesser-known turbinates  
**Brian Payne**
-

# SATURDAY SEMINAR 1

## Practice Tips

- 4:15** Round up the pigs  
**Rachel Stika Jensen**
- 4:55** You want ME to speak?  
**Stephen Patterson**
- 4:55** Conclusion  
**Melissa Billing**
- 5:00** Seminar concludes

# SATURDAY SEMINAR 2

## Big Diagnostic Data

### Maximizing the Value of Big Diagnostic Data

**Date:** Saturday, February 24

**Time:** 1:00 – 5:00 PM

**Location:** Ryman Ballroom C (Level 0)

**Fee:** \$110

**Seminar co-chairs:** Daniel Linhares and Giovani Trevisan

**Co-sponsored by USDA NIFA**

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There are rapidly growing datasets on diagnostics, including those from veterinary diagnostic laboratories, producers, regional disease management programs, and epidemiological studies. This seminar will provide an overview of such ever-expanding datasets and bring practical uses to maximize their value to the practicing veterinarian.

- 1:00** Welcome and introduction  
**Daniel Linhares**
- 1:10** Macro-epidemiological lessons from aggregated veterinary diagnostic laboratory datasets  
**Giovani Trevisan and Paul Yeske**
- 1:35** Integrating producers' big diagnostic data to support health decisions in a regional program  
**Gustavo Silva and Aaron Lower**
- 2:00** Extracting maximum value from a breeding herd's diagnostic and production data  
**Ana Paula Poeta Silva and Amy Maschhoff**
- 2:25** Extracting maximum value from farm-specific whole genome sequencing data: Lessons learned working with several cases  
**Amanda Sponheim**
- 2:40** Roundtable questions and answers  
**Trevisan, Yeske, Silva, Lower, Poeta Silva, Maschhoff, Sponheim**
- 2:55** REFRESHMENT BREAK



# SATURDAY SEMINAR 2

## Big Diagnostic Data

- 3:15** Tips, tricks, and wishes from a diagnostician's perspective  
**Marcelo Almeida**
- 3:35** Lessons from a consolidated producer's diagnostic, health, and productivity data  
**Edison Magalhães and David Rosero**
- 4:00** New developments in ongoing monitoring of pathogen activity in farms and regions  
**Swaminathan Jayaraman and Tyler Bauman**
- 4:25** The future: Vision and perspectives on using diagnostic data to improve swine health and productivity  
**Darin Madson**
- 4:40** Roundtable questions and answers  
**Almeida, Magalhães, Rosero, Jayaraman, Bauman, Madson**
- 5:00** Seminar concludes

# SATURDAY SEMINAR 3

## Disease Preparedness

### Disease Preparedness: Lessons and Updates

**Date:** Saturday, February 24

**Time:** 1:00 – 5:00 PM

**Location:** Ryman Ballroom D (Level 0)

**Fee:** \$110

**Seminar co-chairs:** Andreia Arruda and Marie Culhane

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The goal of this preconference seminar is to discuss updates and experiences in disease preparedness through a collaborative session involving academics, veterinarians, and regulatory colleagues. In the first half of the seminar, we will cover updates on African swine fever vaccines and surrogate viruses, National Bio and Agro-Defense Facility (NBAF) efforts, and an overview of ongoing industry prevention efforts, followed in the second half by updates on depopulation/disposal and lessons from high-pathogenic avian influenza outbreaks.

- 1:00** Welcome and introduction  
**Andreia Arruda**
- 1:15** African swine fever vaccines: Research, development, and advances  
**Elizabeth Ramirez-Medina**
- 1:30** National Bio and Agro-Defense Facility updates  
**Robin Holland**
- 1:45** New insights: Application of an African swine fever virus surrogate  
**Declan Schroeder**
- 2:00** The alphabet soup of foreign animal disease preparedness: What do I really need to know?  
**Patrick Webb**
- 2:20** Roundtable questions and answers  
**Ramirez-Medina, Holland, Schroeder, Webb**
- 2:45** REFRESHMENT BREAK

# SATURDAY SEMINAR 3

## Disease Preparedness

- 3:15** American Veterinary Medical Association depopulation guidelines update  
**Alex Ramirez**
- 3:30** Depopulation methods: Adding more tools to the toolbox  
**Andrew Bowman and Marie Culhane**
- 4:00** Foreign animal disease mortality management  
**Marguerite Tan**
- 4:15** Using high pathogenic avian influenza (HPAI) lessons for African swine fever planning in Minnesota  
**Lucia Hunt**
- 4:35** Roundtable questions and answers  
**Ramirez, Bowman, Culhane, Tan, Hunt**
- 5:00** Seminar concludes

# SATURDAY SEMINAR 4

## Swine Business

### Swine Savvy: Mastering the Art of Swine Business

**Date:** Saturday, February 24

**Time:** 1:00 – 5:00 PM

**Location:** Ryman Ballroom B/E (Level 0)

**Fee:** \$110

**Seminar chair:** Amber Stricker

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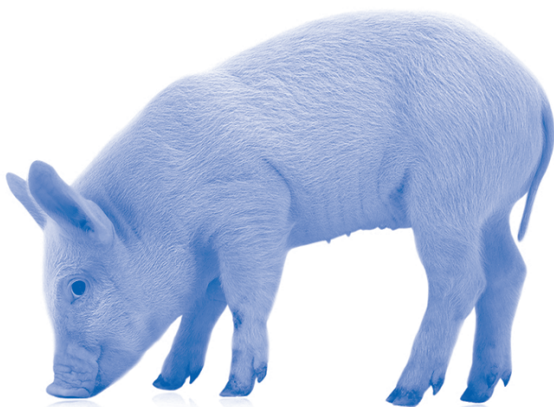
You may have mastered the art of swine veterinary medicine, but what about swine business? As trusted advisors to farmers, swine veterinarians are expected to know more than just medicine. In this session you will hear about a variety of topics, including risk management, employee retention, leading teams, making business-savvy health recommendations, using technology to drive efficiency, and supporting clients through adversity. Don't miss this opportunity to bring home valuable information that will make you more equipped to serve your clients.

- 1:00**     Leading the next generation of employees  
**Larry Firkins**
- 1:30**     Providing veterinary services during times of adversity  
**Jason Kelly**
- 1:50**     Tips for helping producers through adversity:  
A producer's perspective  
**Rob Brenneman**
- 2:10**     Connecting across distances: Strategies for remote team management  
**Mitch Christensen**
- 2:30**     Risk management in times of adversity  
**Jon Greteman**
- 2:50**     REFRESHMENT BREAK
- 3:20**     Managing your Trade NAFTA (TN) visa workers for improved retention  
**Arturo Oropeza Munoz**
-

# SATURDAY SEMINAR 4

## Swine Business

- 3:40** Optimizing cost efficiency: Best practices in farrow-to-wean farms  
**Doug Groth**
- 4:00** Swine vet retention survey: What are our colleagues telling us about what's important to them as a swine veterinarian?  
**Chris Rademacher**
- 4:20** Dollars and sense: Wean-to-finish cost reduction approaches  
**Ethan Spronk**
- 4:40** Using technology to enhance the quality, efficiency, and standard of practice in swine medicine  
**Rodger Main**
- 5:00** Seminar concludes



# SATURDAY SEMINAR 5

## Pig Livability

### Pig Livability: What Works, What Doesn't

**Date:** Saturday, February 24

**Time:** 1:00 – 5:00 PM

**Location:** Ryman Ballroom F (Level 0)

**Fee:** \$110

**Seminar chair:** Jordan Gebhardt

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Pig livability has been a topic of significant interest in recent years and remains an area of opportunity within the swine industry. Research from multiple institutions has focused on this topic with research funded by the National Pork Board and the Foundation for Food and Agriculture Research (FFAR). This seminar is aimed at sharing the latest findings related to pig livability, including sows, preweaning, and postweaning, with focus directed towards practical strategies that have been investigated. What has worked to improve livability? What has been tried and has not been effective?

- 1:00** Introduction  
**Jordan Gebhardt**
- 1:05** Early life gut development, feeding, management practices to maximize livability  
**Mike Tokach**
- 1:25** Water line biology and considerations for pig livability  
**Gabi Doughan**
- 1:45** Recent research findings focused on wean-finish survivability  
**Omarh Mendoza**
- 2:05** Identification of drivers of mortality, identifying action items, and economic outcomes  
**Edison Magalhães**
- 2:30** Roundtable questions and answers  
**Tokach, Doughan, Mendoza, Magalhães**
- 2:45** REFRESHMENT BREAK
-

# SATURDAY SEMINAR 5

## Pig Livability

- 3:15** Improving sow livability with individual sow care and husbandry  
**Nick Benge**
- 3:35** A focus on sow care to maximize systemic livability  
**Brandi Burton**
- 3:55** First-hand experiences and lessons learned with preweaning mortality  
**Cara Haden**
- 4:15** Addressing pig mortality through understanding of transportation losses  
**Guilherme Rosa**
- 4:35** Key findings of the Improving Pig Survivability project  
**Jordan Gebhardt**
- 4:50** Roundtable questions and answers  
**Benge, Burton, Haden, Rosa, Gebhardt**
- 5:00** Seminar concludes

# SUNDAY SEMINAR 6

## Biosecurity

### Biosecurity

**Date:** Sunday, February 25

**Time:** 8:00 AM – 12:00 noon

**Location:** Ryman Ballroom A (Level 0)

**Fee:** \$110

**Seminar chair:** Derald Holtkamp

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This seminar offers speakers from several industries, countries, and professions to bring new perspectives on how to help producers improve biosecurity in the pork industry.

The last four decades have witnessed a revolution in the way pigs are produced that has increased the consequences of outbreaks and created extraordinary challenges for preventing the introduction of pathogens into herds. With African swine fever virus knocking on our door, the importance of improving biosecurity has never been higher. Despite a large investment in time and money in biosecurity, the pork industry still struggles to reduce the frequency of outbreaks in sow herds and the lateral introduction of endemic pathogens into groups of growing pigs.

The aim of this seminar is to introduce alternative perspectives and novel approaches for veterinarians to help producers improve biosecurity and make sustainable progress.

- 8:00** A standardized outbreak investigation: A new approach for identifying and prioritizing biosecurity hazards  
**Derald Holtkamp**
- 8:35** Outbreak investigation of a gilt developer unit  
**Matt Ackerman**
- 8:50** Biosecurity ideas from the egg industry  
**Craig Rowles**
- 9:15** Building design and processes for new builds and remodels  
**Katie Coleman**
- 9:30** Roundtable questions and answers  
**Holtkamp, Ackerman, Rowles, Coleman**
-



# SUNDAY SEMINAR 6

## Biosecurity

- 9:45** REFRESHMENT BREAK
- 10:05** State of the art swine facility designs for biosecurity  
**Anna Romagosa**
- 10:35** Expectations of “baking” livestock trailers  
**Mark Oberreuter**
- 10:50** Biosecurity for supply entry  
**Bethany Heitkamp**
- 11:15** Conducting effective outbreak investigations using the new web-based outbreak investigation instrument  
**Kate Dion**
- 11:45** Roundtable questions and answers  
**Romagosa, Oberreuter, Heitkamp, Dion**
- 12:00** Seminar concludes

# SUNDAY SEMINAR 7

## Influenza

### Much Ado about Flu

**Date:** Sunday, February 25

**Time:** 8:00 AM - 12:00 noon

**Location:** Ryman Ballroom C (Level 0)

**Fee:** \$110

**Seminar chair:** Micah Jansen

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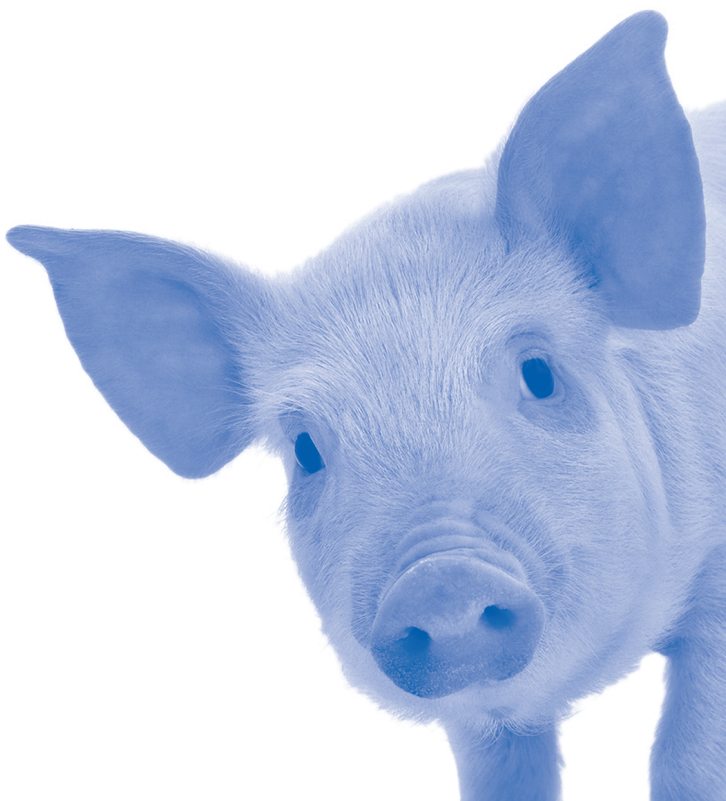
Let's make influenza fun again! Oh, wait – you never thought that was possible?! While trying to wrap your brain around flu can sometimes feel overwhelming, it's important to remember that there are still things we can do to improve. The focus of this session is to get back to the basics and put a practical spin on everything we know about influenza A virus in swine (IAV-S) today. As a practitioner, you will be able to walk away from this seminar with specific ideas on how you can change the way you approach flu, based on examples from veterinarians who have had success with influenza control and stabilization.

- 8:00** Influenza A virus: An overview of the virus, disease, and diagnostics  
**Phil Gauger**
- 8:30** IAV surveillance patterns with the United States, 2023-2024  
**Michael Zeller**
- 8:50** Influenza diagnostics and surveillance in breeding herds: New approaches and appropriate use of different sample types  
**Daniel Moraes**
- 9:15** Bioinformatic tools to help manage your influenza A virus genetic data: A guide for practitioners  
**Tavis Anderson**
- 9:45** REFRESHMENT BREAK
- 10:15** Mitigating the spread of influenza between pigs and workers  
**Montse Torremorell**
-

# SUNDAY SEMINAR 7

## Influenza

- 10:45** Practitioner perspectives on influenza management  
**Emily McDowell**
- 11:15** Practitioner perspectives on influenza management  
**Attila Farkas**
- 11:45** Roundtable questions and answers  
**Torremorell, McDowell, Farkas**
- 12:00** Seminar concludes



# SUNDAY SEMINAR 8

## Field Trials

### Case Reports, Case Studies, and Field Trials – Oh, My!

**Date:** Sunday, February 25

**Time:** 8:00 AM - 12:00 noon

**Location:** Ryman Ballroom D (Level 0)

**Fee:** \$110

**Seminar chair:** Michelle Sprague

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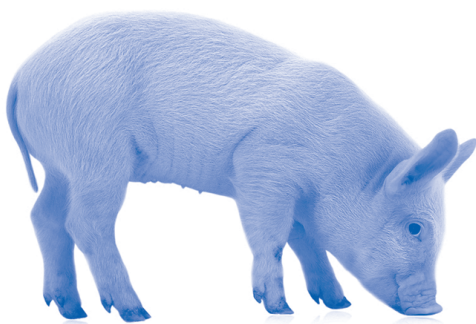
This seminar starts with a review of the various scientific approaches and the requirements to publish research and resulting data in the *Journal of Swine Health and Production (JSHAP)*. The rest of the seminar will be a series of veterinarians sharing their field-based data, covering a wide variety of health management tools and production practices. The goal is to share techniques supported by data and best practices for obtaining reliable data. Attendees will go home with new approaches to implement right away.

- 8:00** From farm observations to publication: Practical considerations on how to prepare and publish case reports, case studies, and field research  
**Terri O’Sullivan**
- 8:30** Porcine astrovirus 4 and respiratory disease  
**Michael Rahe**
- 8:50** Leptospirosis diagnosis and management on a commercial sow herd  
**Jessica Davenport**
- 9:10** Porcine sapovirus: Understanding its role in enteric disease challenges  
**Tom Petznick**
- 9:30** An occurrence of severe, high-incidence teat necrosis in group-housed pregnant sows  
**Paul Thomas**
- 9:50** REFRESHMENT BREAK

# SUNDAY SEMINAR 8

## Field Trials

- 10:20** Ivermectin and PRRSV: Does it actually work?  
**Kim Crawford**
- 10:40** Accidental pesticide exposures in pigs  
**Scott Radke**
- 11:00** Using serology to assess vaccine compliance and troubleshoot vaccine failure events  
**Kim Baker**
- 11:20** PRRSV cross-sectional surveillance method to guide disease management decisions  
**Christine Mainquist-Whigham**
- 11:40** Implications and effects of cross-fostering  
**Christine Mainquist-Whigham**
- 12:00** Seminar concludes



# SUNDAY SEMINAR 9

## Swine Health through Nutrition

### Swine Health through Nutrition: Modulating the Microbiome and Enhancing Productivity and Performance through the Feed

**Date:** Sunday, February 25

**Time:** 8:00 AM - 12:00 noon

**Location:** Ryman Ballroom B/E

**Fee:** \$110

**Seminar chair:** Alex Hintz

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The pig's microbiome is a complex system that works differently in health-challenged versus healthy animals. Learn more about this intricate system and how you can modulate the microbiome to enhance health and productivity. You will also learn strategies for enhancing performance and health of your herd through nutritional intervention and how to best work with your nutritionists to maximize cooperation during health challenges and in healthy animals. You will take home tools to use in the feed and tips to strengthen your holistic animal health program.

- 8:00** Introduction to the microbiome: Impacts, benefits, and challenges in healthy and diseased animals  
**Kyle Leistikow**
- 9:00** Modulating the microbiome with feed interventions: Strategies and challenges in swine and livestock production  
**Noelle Noyes**
- 9:45** REFRESHMENT BREAK
- 10:15** Nutritional interventions and technologies for productivity in healthy and challenged animals  
**David Rosero**
- 11:00** Swine health through nutrition: Cooperative strategies to maximize productivity and potential  
**Elise Toohill and Casey Neill**
- 11:45** Roundtable questions and answers  
**Leistikow, Noyes, Rosero, Toohill, Neill**
- 12:00** Seminar concludes
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# SUNDAY SEMINAR 10

## Swine Medicine for Students

### Swine Medicine for Students

**Date:** Sunday, February 25

**Time:** 8:00 AM - 12:00 noon

**Location:** Ryman Ballroom F (Level 0)

**Fee:** \$110

No charge for 2022 and 2023 DVM/VMD graduates

**Seminar co-chairs:** Angie Supple and Jeremy Pittman

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This session is designed to supplement veterinary students' education on practical applications of swine medicine topics. This year's focus will be on diagnostics. A practitioner will explain sample collection, including proper sample selection and how to take, store, and submit samples. We will further go into building the students' skill set in test selection, costs, and interpretation of results. Following this review, students will participate in several interactive cases where they will apply their new knowledge to make diagnostic decisions for real-world cases.

**8:00** The dos and don'ts of diagnostics: Don't leave it all up to the diagnostician!

**Darin Madson**

**9:30** Questions and answers; distribute case studies

**Madson, Supple, Pittman**

**9:45** REFRESHMENT BREAK

**10:15** Case studies: Time to put your knowledge to the test

**Angie Supple and Jeremy Pittman**

**12:00** Seminar concludes

# SUNDAY MORNING

## Research Topics

### Research Topics

**Date:** Sunday, February 25

**Time:** 8:00 AM – 12:00 noon

**Location:** Presidential A (Level 2)

**Session chair:** Chris Rademacher

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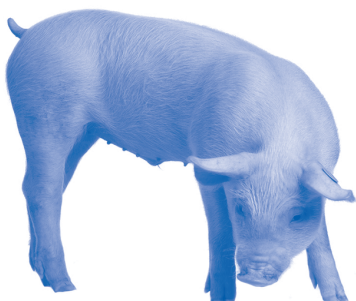
- 8:00** FFN titers in sows and piglets following homologous inactivated PRRSV administration to sows  
**Lindsey Britton**
- 8:15** Field experiences with a novel PRRS live virus vaccine based on the naturally nonpathogenic G16X strain from 2021 to 2023 in Mexico  
**Jesus Horacio Lara Puente**
- 8:30** What is behind tongue tips sampling and other welfare-friendly postmortem samples for accurately detecting PRRSV?  
**Mariana Kikuti**
- 8:45** Evaluation of PRRSV vertical transmission using stillborn tongue tip fluids sampling  
**Isadora Machado**
- 9:00** Have we seen this PRRSV before? Where? When? SDRS PRRSV BLAST: An informative tool to support swine veterinarians and producers  
**Srijita Chandra**
- 9:15** Early detect PRRSV outbreaks in breeding herds by monitoring operational data using univariate and multivariate statistical process control charts  
**Mafalda Pedro Mil-Homens**
- 9:30** Ear-vein blood swabs, oral swabs, and nasal swabs can be used with precision for PRRSV surveillance in weaning-age pigs  
**Onyekachukwu Henry Osemeke**
- 9:45** REFRESHMENT BREAK



# SUNDAY MORNING

## Research Topics

- 10:15** Environmental viability of *Mycoplasma hyopneumoniae*  
**Cassidy Cordon**
- 10:30** Confirming Day 0 in a *Mycoplasma hyopneumoniae* herd closure  
**Amanda Sponheim**
- 10:45** Probability of influenza A virus RNA detection at different pooling levels for commonly used sample types in breeding herds  
**Daniel Moraes**
- 11:00** Comparison of fecal diagnostic tests for the detection of monophasic *Salmonella* I 4,[5],12:i:- and their association with clinical signs  
**Fernando Leite**
- 11:15** Characterization of hemolytic *E coli* cases and antimicrobial susceptibility from ISU VDL cases from 2010 to 2022  
**Rodrigo Paiva**
- 11:30** Paper sampling for passive environmental surveillance for swine pathogens  
**Betsy Armenta-Leyva**
- 11:45** Evaluation of oral meloxicam to reduce signs of OCD-associated lameness in developing boars  
**Megan Hood**
- 12:00** Session concludes



# SUNDAY SESSION #1

## Student Seminar

### Student Seminar

**Date:** Sunday, February 25

**Time:** 1:00 – 5:15 PM

**Location:** Presidential A (Level 2)

**Session co-chairs:** Andrew Bowman and Justin Brown

**Funded by the ZOETIS FOUNDATION**

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- 1:00** Repeat offenders: PRRSV clinical re-breaks from a whole genome perspective  
**Julia Baker, University of Minnesota**
- 1:15** Evaluation of the indirect transmission of *Mycoplasma hyopneumoniae*  
**Cassidy Cordon, University of Minnesota**
- 1:30** Comparison of 200 mg injectable iron dextran vs. 400 mg in either a single timepoint or split-dosed into two timepoints on growth and hemoglobin in pigs from birth to end of finishing  
**Francisco Gomez Cruz, University of Saskatchewan**
- 1:45** Evaluation of sample types for the characterization of *Lawsonia intracellularis* shedding status  
**Amber Vegter, Iowa State University**
- 2:00** Comparison of different sample types and assays for detecting *Cystoisospora suis* at the litter level  
**Matilyn Wheeler, Iowa State University**
- 2:15** Characterizing enterotoxigenic *E coli* isolates contributing to postweaning diarrhea in pigs: A case-control study  
**Yuan Lin, University of Guelph**
- 2:30** Comparison of meloxicam dosing protocols in periparturient sows and the effect on fever reduction and performance  
**Erin Larsen, Lincoln Memorial University**

# SUNDAY SESSION #1

## Student Seminar

- 2:45** Evaluation of non-steroidal anti-inflammatory water medications on PRRSV 1-4-4 L1C variant  
**Morgan Almeida, Iowa State University**
- 3:00** REFRESHMENT BREAK  
Co-sponsored by **ZOETIS**
- 3:30** A comparison of ceftiofur crystalline free acid at birth to enrofloxacin at processing and the effects on umbilical defects and average daily gain  
**Sarah Lutz, Auburn University**
- 3:45** Evaluation of feed mill biosecurity using fluorescent powder detection  
**Mallory Wilhelm, Iowa State University**
- 4:00** Interstate swine transportation network as a predictor of pathogen spread across the US  
**Megan Neveau Thomas, Iowa State University**
- 4:15** Agreement between the detection of PCV2 via tongue tip samples, processing fluids, placental umbilical cord blood serum samples, and colostrum by PCR  
**Alexis Berte, Iowa State University**
- 4:30** A pilot study evaluating the pharmacokinetics of tulathromycin and ketoprofen in the form of Draxxin KP® in swine  
**Claire Vincent, Mississippi State University**
- 4:45** Vitamin A as a biomarker for livability in the nursery stage of swine production  
**Brianna McAleese, North Carolina State University**
- 5:00** Practitioner perspectives on the use of MCREBEL practices on sow farms  
**Hope Dohlman, Iowa State University**
- 5:15** Session concludes

# SUNDAY SESSION #2

## Industrial Partners

### Industrial Partners

**Date:** Sunday, February 25

**Time:** 1:00 – 5:30 PM

**Location:** Presidential B (Level 2)

**Session co-chairs:** McKenna Brinning-Henningson and Kim Crawford

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- 1:00** Patterns of feed disappearance under different health challenge scenarios utilizing Feed Allocation System (FAS) data  
**Mafalda Mil-Homens, PrairiE Systems**
- 1:15** Phytogetic Patch Plus enhances nursery pig performance and health  
**Mike Rincker, DPI Global**
- 1:30** Evaluating the transition from a previously used modified-live PRRSV vaccine to PRRSGard®, a modified-live, lineage 1 PRRSV vaccine, on a commercial sow farm  
**Brian Schantz, Pharmgate Animal Health**
- 1:45** Evaluation of Aivlosin® and tilmicosin to manage a natural porcine respiratory disease complex challenge in a commercial finishing setting  
**Jamie Madigan, Pharmgate Animal Health**
- 2:00** Routine pen-side monitoring for PRRSV is possible using a simple hand-held device  
**Abe Oommen, MatMaCorp**
- 2:15** Assessing the changes in antimicrobial use in grow finish pigs after the introduction of PRRSV in a naïve farrow-to-finish system  
**Isadora Machado, PIC**
- 2:30** Nutritional approach to mitigation of clinical *Streptococcus suis* in the nursery: Learnings and considerations for application  
**Brooke Smith, Cargill Animal Nutrition**
- 2:45** 5°C storage of boar semen  
**John Quackenbush, Minitube USA**
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# SUNDAY SESSION #2

## Industrial Partners

- 3:00** REFRESHMENT BREAK  
Co-sponsored by **ZOETIS**
- 3:30** Identification and differentiation of porcine rotavirus species A, B, and C with a new RT-qPCR workflow  
**Robert Tebbs, Thermo Fisher Scientific**
- 3:45** Evaluation of the efficacy of Enterisol® Ileitis administered orally by gel and drinking water in a wean-to-finish *Lawsonia intracellularis* challenge model  
**Joel Nerem, Boehringer Ingelheim Animal Health USA**
- 4:00** Field experience with the oral administration of Enterisol® Ileitis by gel  
**Emily McDowell, Boehringer Ingelheim Animal Health USA**
- 4:15** Assessing detection and interaction of *Lawsonia intracellularis* and porcine circovirus type 2 between low- and high-performance wean-to-finish groups for a swine producer  
**Guilherme Cezar, Boehringer Ingelheim Animal Health USA**
- 4:30** Sequivity® IAV-S NA: A newly licensed commercial vaccine for the protection against influenza in pigs  
**Pravina Kitikoon, Merck Animal Health**
- 4:45** Use of a hemagglutinin (HA) and neuraminidase (NA) vaccine program to stabilize a sow farm for influenza  
**Evan Koep, Merck Animal Health**
- 5:00** Vaccine compliance monitoring program for growing pigs vaccinated with Circumvent CML  
**Kurt Kuecker, Merck Animal Health**
- 5:15** From farm to bottle: Checkpoints in the selection and production of protein-based prescription vaccines to meet the needs of evolving disease pressures  
**Alan Young, Medgene**
- 5:30** Session concludes

# SUNDAY SESSION #3

## Industrial Partners

### Industrial Partners

**Date:** Sunday, February 25

**Time:** 1:00 – 5:45 PM

**Location:** Presidential C (Level 2)

**Session co-chairs:** Heather Fowler and Mike Senn

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- 1:00** The effects of fungal and bacterial infections and their toxin metabolites on pig health and performance and the impacts of a *Bacillus*-based mitigant in the presence of complex disease syndromes  
**Adrienne Woodward, United Animal Health**
- 1:15** The utilization of an integrated technology platform in a commercial research setting captures individual pig data for improved management strategies  
**Greg Krahn, United Animal Health**
- 1:30** Evaluation of Endovac-Porci on diarrhea of purebred boars  
**Darwin Reicks, Endovac Animal Health**
- 1:45** The use of a qualified, approved porcine cell line for the manufacture of an African swine fever emergency vaccine stockpile  
**Heather Bessoff, Aptimmune Biologics**
- 2:00** Evaluation of a multi-strain probiotic on postweaning mortality and weight gain in pigs with natural enteric challenges  
**Amanda Reeve, Kemin Animal Nutrition & Health**
- 2:15** Evaluation of protective efficacy of six commercial PRRSV-2 MLV vaccines against the emergent PRRSV L1C 1-4-4 variant in weaned pigs under experimental conditions  
**Jianqiang Zhang, Elanco Animal Health**
- 2:30** Lab and real-world variation in an inflammatory biomarker: Using and interpreting the results  
**Sarah Weiland, Elanco Animal Health**
- 2:45** Transforming influenza sequencing: Improving vaccine selection  
**Melissa Hensch, Phibro Animal Health**
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# SUNDAY SESSION #3

## Industrial Partners

- 3:00** REFRESHMENT BREAK  
Co-sponsored by **ZOETIS**
- 3:30** Dollars in the bucket (stock): What's getting into the pig?  
**Brian Payne, Veterinary Pharmaceutical Solutions**
- 3:45** A *Streptococcus suis* targeted microbial solution in gestation and lactation diets affected the microbiome and *S. suis* populations in sow herds and their piglets  
**Samantha Hernandez, Arm & Hammer**
- 4:00** How to choose a disinfectant  
**Gisele Ravagnani, LANXESS**
- 4:15** Effect of monoglyceride and organic acid supplements on growth performance in enterotoxigenic *E coli*-infected nursery pigs  
**Mark Whitney, Eastman**
- 4:30** Results from a diagnostic survey of biological measurements in healthy, sick, and lame growing pigs across the US swine industry for consideration in determining bone mineralization  
**Bo Williams, dsm-firmenich**
- 4:45** Recent research to support optimum levels of dietary vitamins, including 25(OH)D3 from HyD<sup>®</sup>, for improved performance of nursery pigs  
**Jon Bergstrom, dsm-firmenich**
- 5:00** AgriSafe Total Farmer Health: Engaging the One Health and Total Worker Health models in addressing the wellness of producers and those who are devoted to the health of their livestock  
**Linda Emanuel, AgriSafe Network**
- 5:15** A veterinarian's influence on worker safety  
**Bryn Jenson, National Pork Board**
- 5:30** Flies play a role in the spread of antimicrobial resistance (AMR): Literature review  
**Gene Spellman, Central Life Sciences**
- 5:45** Session concludes

# SUNDAY SESSION #4

## Industrial Partners

### Industrial Partners

**Date:** Sunday, February 25

**Time:** 1:00 – 5:30 PM

**Location:** Presidential E (Level 2)

**Session co-chairs:** Attila Farkas and Matthew Turner

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- 1:00** A discussion of piglet production losses associated with *Mycoplasma hyopneumoniae* (Mhp) elimination programs in low versus profitable market environments  
**David Baumert, Zoetis**
- 1:15** A diagnostic comparison of breeding herd mass vaccination versus rolling herd vaccination for PCV2  
**Attila Farkas, Zoetis**
- 1:30** Use of PrimeStore® MTM for stabilizing oral fluid samples and getting higher yields of nucleic acids, especially for PRRSV surveys  
**Tilman Kuehn, Longhorn Vaccines and Diagnostics**
- 1:45** Effect of feeding EnduraSow™ on performance and nasal microbiome of gestation and lactation sows and nursery pigs infected with PRRSV  
**Huyen Tran, PMI Additives**
- 2:00** X-bar R charts for interpretation of IDEXX *Mycoplasma hyopneumoniae* ELISA results in a sow herd  
**David Baum, IDEXX**
- 2:15** Scoring of swine lung lesion images: A comparison between an artificial intelligence algorithm and human expert evaluators  
**Robert Valeris-Chacin, HIPRA**
- 2:30** Revolutionizing disease prevention through plant-produced, orally delivered vaccines  
**Tracy Raines, Mazen Animal Health**
- 2:45** Increasing survival in the wean-to-finish pig  
**Brady McNeil, DNA Genetics**
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# SUNDAY SESSION #4

## Industrial Partners

- 3:00** REFRESHMENT BREAK  
Co-sponsored by **ZOETIS**
- 3:30** Current trends in the economy and the financial markets  
**Andrew Kleis, Insight Wealth Group**
- 3:45** Effect of a unique essential oil blend on mortality of nursery pigs during a known F18 *E coli* challenge  
**Nicolas Rippel, Ralco**
- 4:00** Soybean meal functional bio-active molecules: Impact on swine respiratory disease  
**Paul Yeske, US Soy**
- 4:15** Impact of Termin-8® to reduce the risk of transmission of PEDV, PRRSV, and SVA through contaminated feed  
**Scott Dee, Anitox**
- 4:30** Evaluation of anticoccidial therapeutic strategies in nursery piglets  
**Mitch Nisley, Huvepharma**
- 4:45** PK/PD relationships of Tilmovet® (tilmicosin) oral administration for the treatment of bacterial respiratory diseases in pigs  
**Ulrich Klein, Huvepharma**
- 5:00** Optimizing shipping and receiving of pigs with AI-powered tools for enhanced labor efficiency and animal welfare  
**Jacquelin Labrecque, Ro-Main**
- 5:15** Effect of body condition during late gestation on susceptibility to vaginal/uterine prolapse  
**Maryn Ptaschinski, Topigs Norsvin USA**
- 5:30** Session concludes

# SUNDAY - MONDAY

## Veterinary Student Posters

### Veterinary Student Posters (#1 - #16)

#### Funded by the ZOETIS FOUNDATION

The Zoetis Foundation provides  
a \$500 award to each presenter.

**Location:** Presidential Lobby (Level 2)

**Sunday, February 25** 12:00 – 5:00 PM

**Monday, February 26** 8:00 AM – 5:00 PM

Authors  
present  
Sunday  
12:00 – 1:00

Posters #1-15 (\*) will be judged in the **POSTER COMPETITION** sponsored by **UNITED ANIMAL HEALTH**

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- \*1. Effects of oral meloxicam in gel and oral gavage on pain scores in piglets during processing  
**Carly Bates, Iowa State University**
- \*2. A comparison of *Mycoplasma hyopneumoniae* infectivity rates of replacement gilts using different fogging techniques  
**Molly Jones, North Carolina State University**
- \*3. Minimizing sample cross-contamination for the detection of *Mycoplasma hyopneumoniae*  
**Casondra Snow, University of Minnesota**
- \*4. The impact of early life stress on neural plasticity in growing swine  
**Madeline Hall, Kansas State University**
- \*5. Evaluation of clinical and immunization sequences of sapovirus and rotavirus in related pig flows using next generation sequencing  
**Erin Russell, Lincoln Memorial University**
- \*6. Exploring the use of ultrasonography to identify palpable landmarks to measure and track sow body composition  
**Lauren Harper, Cornell University**
- \*7. Investigation of oral fluid IgA antibody levels to *Lawsonia intracellularis* and *Salmonella enterica* following vaccination under field conditions  
**Callie Ezell, Louisiana State University**

# SUNDAY - MONDAY

## Veterinary Student Posters

- \*8. Assessing the impact of a negative air ionization system on particulate matter and gaseous pollutants in swine farm environment  
**Yi-Fan Shen, The Ohio State University**
  
- \*9. Descriptive study of wild rodent populations as reservoirs for swine dysentery  
**Kristen Cleaver, Iowa State University**
  
- \*10. A comparative analysis of rectal thermometers and thermal imaging cameras for early detection of disease in pigs  
**Samantha Nixon, University of Saskatchewan**
  
- \*11. The effect of water enriched with a nutrient dense liquid on weaned pigs to mitigate the effects of post-weaning *E coli*  
**Taylor Clark, Iowa State University**
  
- \*12. Gross lesions in lame versus non-lame finisher pigs  
**David Buckwalter, University of Pennsylvania**
  
- \*13. In vitro feasibility of bovine and canine blood products as a source of xenotransfusion in swine  
**Victoria Diaz, University of Tennessee**
  
- \*14. Comparison of sample collection techniques to target salmonellosis on sow farms  
**Ellen Gibbs, University of Missouri**
  
- \*15. Effect of gonadotropin releasing factor analog (Improvest®) timing regimens on immunocastrated barrows behavior in late finishing  
**Sarah Roach, North Carolina State University**
  
- 16. Iron kinetics and tissue storage in piglets  
**Jaylin Fennell, North Carolina State University**

# SUNDAY - MONDAY

## Research Topics Posters

### Research Topics Posters (#17 - #41)

**Location:** Presidential Lobby (Level 2)

**Sunday, February 25** 12:00 – 5:00 PM

**Monday, February 26** 8:00 AM – 5:00 PM

Authors  
present  
Sunday  
12:00 – 1:00

- 
17. What is “normalization” and why should we normalize PCR results?  
**Betsy Armenta-Leyva**
  18. Comparative field evaluation of a new *Cystoisospora suis* PCR in an endemic sow herd  
**Erin Kettelkamp**
  19. Characterizing the persistence of inactivated *Mycoplasma hyopneumoniae* DNA detection in the respiratory tract of pigs  
**Albert Canturri**
  20. The use of a portable real-time PCR system for point-of-care diagnosis of porcine reproductive and respiratory syndrome virus  
**Everett Dalesio**
  21. A mixed-method study of beliefs, behaviors, and practices of farm biosecurity in the US swine industry  
**Maurine Chepkwony**
  22. Comparison of PRRSV vaccination strategies on wean-to-finish groups facing a lateral outbreak under field conditions  
**Swaminathan Jayaraman**
  23. Integration of PCV2 processing fluids Ct values and serological profiles of sows for assessing grower-finisher performance  
**Molly Kroeger**
  24. USDA swine hemorrhagic fevers integrated surveillance plan evaluation, 2020-2023  
**Catherine Lorenz**
  25. Drivers of preweaning mortality in a midwestern US producer during 2020-2021  
**Edison Magalhães**

# SUNDAY - MONDAY

## Research Topics Posters

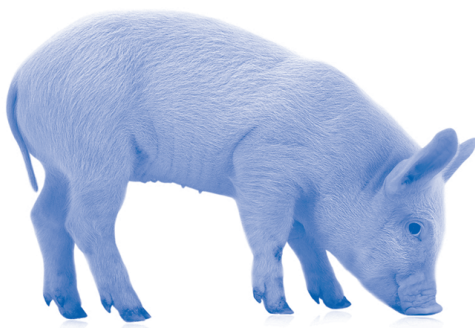
26. Survey of management, biosecurity, and marketing practices of alternative pig farms in Minnesota  
**Miranda Medrano**
27. Evaluation of the infectious level of three wild-type PRRSV variants  
**Marcello Melini**
28. Genotypic and phenotypic antimicrobial resistance of *Streptococcus suis* strains isolated from clinical samples in North American pigs  
**Robert Mugabi**
29. Optimizing PRRSV RNA detection in oral fluids: Cheap and easy?  
**Berenice Munguia-Ramirez**
30. Comparison of the pathology and clinical effects of an F18 enterotoxigenic *Escherichia coli* containing a *tia* adhesin gene against a contemporary F18 *Escherichia coli* strain  
**Rodrigo Paiva**
31. Weathering the storm: Extreme weather events and their association with PED and PRRS occurrence  
**Igor Paploski**
32. Investigation of *Lawsonia intracellularis* prevalence in suckling piglets  
**Victor Rodriguez-Vega**
33. Detection of *Mycoplasma hyosynoviae* antibodies in pigs from clinically affected and non-affected herds  
**Haley Schwecke**
34. Effects of bioactive feed ingredients on improvement of clinical response to postweaning F18 *Escherichia coli* infection  
**Brooke Smith**
35. A novel method for evaluating environmental and pig-derived targets in pen-based oral fluids  
**Grzegorz Tarasiuk**

*Continued on next page*

# SUNDAY - MONDAY

## Research Topics Posters

- 36.** Evaluation of a targeted pelvic organ prolapse mitigation protocol in late-gestation sows  
**Greg Wideman**
- 37.** Development and implementation of an early warning tool for disease occurrence in the US swine breeding herd population  
**Xiaomei Yue**
- 38.** Factors influencing the PEDV time-to-stability and time-in-positive in US breeding herds: A retrospective analysis based on one decade of monitoring data  
**Xiaomei Yue**
- 39.** Risk factors for lameness in finisher pigs  
**Meghann Pierdon**
- 40.** A broadly protective vaccine against swine influenza A virus based on the matrix protein 2 (M2)  
**Federico Zuckermann**
- 41.** A novel PRRS live virus vaccine with unprecedented safety and efficacy based on the naturally nonpathogenic strain G16X  
**Federico Zuckermann**



# SUNDAY - MONDAY

## Industrial Partners Posters

### Industrial Partners Posters (#42 - #58)

**Location:** Presidential Lobby (Level 2)

**Sunday, February 25** 12:00 – 5:00 PM

**Monday, February 26** 8:00 AM – 5:00 PM

Authors  
present  
Sunday  
12:00 – 1:00

- 
- 42.** Health benefits to the progeny of sows fed Celmanax extend into the nursery phase of production and result in similar overall nursery growth performance as pharmacological levels of zinc oxide  
**Samantha Hernandez, Arm & Hammer**
  - 43.** Relationships between in-process leading and lagging indicators of pig health and performance  
**Dale Polson,  
Boehringer Ingelheim Animal Health USA**
  - 44.** ClariFly reduces flies in both pull-plug and deep-pit systems  
**Gene Spellman, Central Life Sciences**
  - 45.** An update on the benefits of VVC (a unique combination of benzoic acid and nature-identical flavorings) for feed biosecurity and performance improvement  
**Sara Hough, dsm-firmenich**
  - 46.** An overview of Microtracers<sup>®</sup> in Skycis<sup>®</sup>  
**Roger Arentson, Elanco Animal Health**
  - 47.** Improved piglet performance after sows' vaccination against *Clostridium difficile* in Italy  
**Isaac Ballara Rodriguez, HIPRA**
  - 48.** Performance of a newly designed RT-qPCR for multiplex identification of PRRSV-1 and PRRSV-2 RNA: Field study evaluation  
**Alvaro Hidalgo, IDEXX**
  - 49.** Benefits, differentiation, and results of a chlorine dioxide water sanitation method (PRO-OXINE<sup>®</sup> AH) in two swine facilities  
**Keith Bretey, Kemin Animal Nutrition & Health**

*Continued on next page*

# SUNDAY - MONDAY

## Industrial Partners Posters

50. Senecavirus A testing of slaughter swine: A model for foreign animal disease surveillance  
**Randy Anderson, Longhorn Vaccines and Diagnostics**
51. Uses of an on-farm progesterone strip test to improve gilt management on farms  
**Jamie Lehman, Merck Animal Health**
52. Machine learning accurately predicts infection in swine farms  
**Rebecca Robbins, PIC**
53. Effect of feeding EnduraPig on PRRS and *Streptococcus suis* co-infection in nursery pigs  
**Huyen Tran, PMI Additives**
54. A classical swine fever vaccine based on E2 recombinant glycoprotein and adjuvanted with oil-in-water emulsion induces a full protection in a pig field trial  
**Marie-Eve Koziol, SEPPIC**
55. A multi-year quantitative surveillance of nursery pigs reveals increasing carriage of F18+ *Escherichia coli*  
**Kaley Pederson, United Animal Health**
56. Helping people or pigs? Meloxicam versus aspirin on subsequent antibiotic and production impacts at weaning, post-vaccination and during a PRRS challenge  
**Brian Payne, Veterinary Pharmaceutical Solutions**
57. Effects of dietary zinc supplementation strategy on immune response, bacterial clearance and disease severity in growing gilts infected with *Mycoplasma hyopneumoniae*  
**Corey Carpenter, Zinpro**
58. Metabolomic profile of sows affected by postpartum dysgalactia syndrome  
**Jamie Studer, Zoetis**



# MONDAY SPECIAL SESSION

## Beagles and Bagels

### Beagles and Bagels

**Date:** Monday, February 26

**Time:** 6:30 – 7:45 AM

**Location:** Presidential Chamber B (Level 2)

**Session chair:** Harry Snelson

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Come for the beagle and stay for the bagel. Join us for this informal session on current topics. This year's presentations will include a discussion of Customs and Border Protection's role in preventing foreign animal disease introduction and a Beagle Brigade demonstration, the threat of Japanese encephalitis virus, and the importance of animal traceability to the US swine industry.

**6:30** Preventing foreign animal disease introduction at the border - with Beagle Brigade demonstration  
**US Customs and Border Protection**

**7:00** Japanese encephalitis virus update  
**Megan Niederwerder**

**7:20** The need for traceability in the US swine industry  
**Anna Forseth**

**7:45** Session concludes



# MONDAY GENERAL SESSION

## Leading AASV into the Future

### Leading AASV into the Future

**Date:** Monday, February 26

**Time:** 8:00 AM – 12:30 PM

**Location:** Presidential D (Level 2)

**Program and Session chair:** Angela Baysinger

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- 8:00**     **Howard Dunne Memorial Lecture**  
Swine veterinarians: Who are we and where are we going?  
**Joel Nerem**
- 9:00**     **Alex Hogg Memorial Lecture**  
Past, present, and future challenges for the swine veterinary profession  
**Chris Rademacher**
- 10:00**    REFRESHMENT BREAK  
Co-sponsored by: **VAXXINOVA**
- 10:30**    Successful disease eradication in the United States: What worked and why?  
**Jeff Zimmerman**
- 11:00**    Mycoplasma elimination from regional to national level (why aren't we there yet?)  
**Paul Yeske**
- 11:30**    PRRS: The never-ending story  
**Amy Maschoff**
- 12:00**    The zombie apocalypse approach to biosecurity, biocontainment, and disease control and elimination  
**Luc Dufresne**
- 12:30**    Session concludes

## AASV LUNCHEON



*Co-sponsored by:*

**AASV & AASV Foundation**

Monday, February 26

12:30 – 2:00 PM

Ryman Exhibit Hall  
B1-2 (Level 0)

# MONDAY SESSION #1

## Disease Elimination

### Disease Elimination: Theory to Move us Forward

**Date:** Monday, February 26

**Time:** 2:00 – 5:30 PM

**Location:** Presidential D (Level 2)

**Session chair:** Claire LeFevre

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- 2:00**     *Mycoplasma* elimination success versus PRRSV elimination failure  
**Michael Rahe**
- 2:30**     Pseudorabies virus elimination versus porcine epidemic diarrhea virus elimination: We did it before, why not do it again?  
**Lisa Tokach and Megan Potter**
- 3:00**     Current trends in *Mycoplasma hyopneumoniae* elimination  
**Amanda Sponheim**
- 3:30**     REFRESHMENT BREAK  
Co-sponsored by:  
**VETERINARY PHARMACEUTICAL SOLUTIONS**
- 4:00**     Practical experiences during PRRS eradication in Hungary 2012-2022  
**István Szabó**
- 4:30**     Experiences with influenza elimination in sow farms  
**Jorge Garrido Mantilla**
- 5:00**     Approaches to disease elimination: A cross-species comparison with poultry  
**Jessica Higgins**
- 5:30**     Session concludes



# MONDAY SESSION #2

## Sustaining the Farm

### Sustaining the Farm in the Face of Evolution

**Date:** Monday, February 26

**Time:** 2:00 – 5:30 PM

**Location:** Presidential C (Level 2)

**Session chair:** Brian Payne

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- 2:00** Introduction  
**Brian Payne**
- 2:05** Implications of Proposition 12 compliance  
**Cara Haden**
- 2:30** Our Proposition 12 journey: Production considerations and lessons we are learning  
**Carlos Roudergue**
- 2:55** Passing or needing corrections: Proposition 12  
**Jason McAlister**
- 3:20** Roundtable questions and answers  
**Haden, Roudergue, McAlister**
- 3:30** REFRESHMENT BREAK  
Co-sponsored by:  
**VETERINARY PHARMACEUTICAL SOLUTIONS**
- 4:00** Transition to second half of session  
**Brian Payne**
- 4:05** The future of farrowing  
**Tom Parsons**
- 4:30** Staying alive: Protein market sustainability  
**Dan Thomson**
- 4:55** The veterinarian's role in drug regulation: The views of the National Pork Board and the National Pork Producers Council  
**Heather Fowler and Ashley Johnson**
- 5:20** Roundtable questions and answers  
**Parsons, Thomson, Fowler, Johnson**
- 5:30** Session concludes
-

# MONDAY SESSION #3

## Immunology Toolbox

### Immunology Toolbox: Today and Tomorrow

**Date:** Monday, February 26

**Time:** 2:00 – 5:30 PM

**Location:** Ryman Ballroom (Level 0)

**Session co-chairs:** Brent Pepin and Phil Gauger

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- 2:00** Vaccine platforms: What's currently available?  
**Amy Gill**
- 2:20** Commercial vaccine development and considerations of vaccine use under field conditions  
**Mike Roof**
- 3:00** Vaccines and maternal antibody  
**Pablo Pineyro**
- 3:30** REFRESHMENT BREAK  
Co-sponsored by:  
**VETERINARY PHARMACEUTICAL SOLUTIONS**
- 4:00** Vaccine immunology and expectations  
**Mike Rahe**
- 4:30** Futuristic vaccines: mRNA  
**David Verhoeven**
- 4:45** Futuristic vaccines: DNA vaccines  
**Hiep Vu**
- 5:15** Next generation nanovaccine platforms for animal health  
**Balaji Narasimhan**
- 5:30** Session concludes

## AASV AWARDS RECEPTION

**Monday,  
February 26**



*Co-sponsored by:* **AASV &  
MERCK ANIMAL HEALTH**

**6:30 PM** Pre-reception Social

**7:00 - 9:00 PM**

**Buffet Meal & Awards**

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**Presidential C/D/E (Level 2)**

# TUESDAY GENERAL SESSION

## Driving Demand

### Driving Demand and Protecting the Product

**Date:** Tuesday, February 27

**Time:** 8:00 AM – 12:00 PM

**Location:** Presidential D (Level 2)

**Session co-chairs:** Bill Hollis

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- 8:00** Driving demand worldwide: What are the economics? What can a veterinarian do?  
**Erin Borrer**
- 9:00** Driving demand: What the Pork Checkoff is doing with your money. What you need to do.  
**Bill Even**
- 10:00** REFRESHMENT BREAK
- 10:30** Protecting the product: Are your clients participating in price protection?  
**Dustin Baker**
- 11:00** Protecting the product: How I work with my packer  
**Deb Murray**
- 11:30** Protecting the product: A swine vet's job isn't done when the pig is loaded on the truck  
**Grace Houston**
- 12:00** Session and meeting conclude

## AASV BUSINESS BREAKFAST



**Tuesday, February 27**  
7:00 - 8:00 AM

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Presidential C (Level 2)

# MEMBER SERVICES

## WELL-BEING CENTER

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



Take this opportunity to learn how to help a colleague, client, friend, and yourself!

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## FREE HEARING TESTING

**Monday, February 26**

**8:00 AM – 5:00 PM**

**Presidential Chamber A**

Eh? What did you say? Free, basic hearing tests will be performed by the Vanderbilt Audiology Community Outreach Team. No appointment needed; first-come, first-served. Brought to you by the AASV Human Health, Safety, and Well-being Committee.

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## Annual Meeting Attendee SCAVENGER HUNT

**“Find Someone Who ...”**

Grab the bingo card in your registration packet and go on the hunt! Get to know your fellow AASV attendees and you may win a prize!

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## MOTHER'S ROOM



**Need a quiet, private  
place to nurse or pump?**  
AASV has set aside a room  
for nursing mothers.

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

# SOCIAL ACTIVITIES

Saturday, February 24

## STUDENT TRIVIA EVENT

Sponsored by:

**Merck Animal Health**

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**Time:** 6:00 – 8:00 PM

**Location:** Delta Ballroom B (Level 2)

Veterinary students, join us at 6:00 PM Saturday evening for appetizers and drinks followed by a fun-filled, interactive evening of competitive swine veterinary medicine trivia!

## BROADWAY STREET SHUTTLE

Sponsored by:

**Swinetech**

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**Time:** 8:00 PM – 2:00 AM

**Departs from:** Presidential Portico

Enjoy the Nashville nightlife – hitch a ride to Broadway Street on the free shuttle offered by SwineTech. The bus will make round trips between the Gaylord and Broadway Street from from 8:00 PM Saturday night until 2:00 AM Sunday morning.



# SOCIAL ACTIVITIES

Sunday, February 25

## AASV YOGA CLASS

Hosted by

**dsm-firmenich**

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**Time:** 6:00 – 7:00 AM

**Location:** Jackson D (Level M)

**Coach:** Ben Pratte

Join us for an hour of fun and interaction in this yoga class offering mind, body, and spirit workout based on YogaFit. All levels are welcome to attend, from a first-time beginner to the advanced yoga enthusiast, as options for all will be provided. Plan to leave class feeling physically invigorated and rewarded with mental clarity and emotional calmness for the AASV sessions and interactions of the day. Ben Pratte has taught yoga since 2002 as a certified YogaFit instructor. He studies and coaches for greater longevity and higher quality of life as his part-time work/hobby in addition to his full-time employment with dsm-firmenich.

## AASV PRAISE BREAKFAST

Co-sponsored by

**Stuart Products and the  
AASV Foundation**

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**Time:** 7:00 – 8:00 AM

**Location:** Lincoln C/D/E (Level M)

Join your AASV friends for breakfast, music, and fellowship at the AASV Praise Breakfast on Sunday morning! We will sing praises to the Lord, read some scripture, and listen to a panel of colleagues share their daily faith journey of God, family, and work.

**AASV Praise Team:** Justin Brown, Mitch Christensen, Marie Culhane, Monte Fuhrman, Kelly Greiner, Tyler Holck, Jeff Okones, Sarah Probst Miller, Rexanne Struve

**Panel co-hosts:** Tyler Holck and Sarah Probst Miller

**Panelists:** Mitch Christensen, Lori Feldmann, AJ Smit and Kelli Werling.

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

# SOCIAL ACTIVITIES

Sunday, February 25

## STUDENT RECEPTION

Sponsored by

**Merck Animal Health**

**Time:** 8:30 – 11:00 PM

**Location:** Presidential A/B/C/E (Level 2)

Whether you are a veterinarian or veterinary student, you are invited to attend the Student Reception at the AASV Annual Meeting, courtesy of Merck Animal Health! This evening of magical entertainment, desserts, and liquid refreshment provides the perfect opportunity for current and future swine veterinarians to interact and discuss employment and externship possibilities. The drawing for prizes in the veterinary student “Vet Hunt” also happens here.



**Follow AASV on  
Facebook, X,  
and Instagram**

**#AASV2024**



@AASwineVets



@AASwineVets



@AASwineVets

# SOCIAL ACTIVITIES

Monday, February 26

## AASV AND AASV FOUNDATION LUNCHEON

Co-sponsored by

**AASV and the AASV Foundation**

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**Time:** 12:30 – 2:00 PM

**Location:** Ryman Exhibit Hall B1-2 (Level 0)

Enjoy a delicious pork meal while you learn about the impact the AASV Foundation is having on the swine veterinary profession! The AASV Foundation will recognize Heritage and Legacy donors, announce the recipients of the veterinary student scholarships, and present research grants, debt-relief scholarships, the prestigious Hogg Scholarship, and more. Your nametag is your luncheon ticket (sorry, additional tickets are not available).



## AASV AWARDS RECEPTION

Co-sponsored by

**Merck Animal Health and AASV**

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**Time:** 6:30 – 9:00 PM

**Location:** Presidential C/D/E (Level 2)

Join your colleagues at 6:30 PM for the pre-reception social in the Presidential Lobby before the ballroom doors open to an inviting buffet. Watch the AASV slide presentation while you dine. The highlight of the evening is the presentation of the prestigious AASV awards, followed by the exciting AASV Foundation Live Auction. Reception tickets are provided to all meeting registrants in their nametag holder. Additional tickets are \$35.00 for adults; free for children under twelve.



**Bring your tickets - you'll need them to obtain beverages.**

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# AASV FOUNDATION PROGRAMS

## **AASV Memorial Lectures**

Speaker stipends for the annual Howard Dunne and Alex Hogg Memorial Lectures.

## **Research Grants**

\$100,000 per year funds research with direct application to the profession.

## **Hogg Scholarship**

This \$10,000 scholarship assists swine practitioners who return to school to pursue a graduate degree.

## **Student Debt Relief**

**Expanded!** Twelve \$7,500 debt-relief grants for recent AASV-member veterinary graduates.

## **ABVP Scholarship**

**New!** AASV members seeking ABVP certification in Swine Health Management can apply for three years' reimbursement of expenses (up to \$10,000), with a \$10,000 incentive payment upon timely completion of certification.

## **ACAW Scholarship**

An expense-reimbursement scholarship for AASV members seeking board certification in the American College of Animal Welfare (ACAW).

## **Veterinary Student Scholarships**

More than forty scholarships are awarded annually to veterinary students who participate in the AASV Annual Meeting and to those who demonstrate interest in pursuing a career in swine medicine.

## **Martha Acosta Foundation Stipends**

**New!** Two high-achieving international AASV student members selected by the Acosta Foundation received stipends to facilitate their attendance at the 2024 AASV Annual Meeting.

## **Swine Externship Grants**

Up to \$500 expense reimbursement for veterinary students who complete a 2-week or longer swine externship.

## **Student Travel Stipends**

Veterinary students who attend the AASV Annual Meeting receive \$300 stipends to assist with expenses.

## **Heritage Videos**

The history of AASV, its members, and the AASV Foundation is preserved in "member recollection" videos on the AASV website. Four new videos added in 2023!

**See [aasv.org/foundation](https://aasv.org/foundation) for details.**

# AASV FOUNDATION AUCTION



The auction proceeds are a major source of support for the foundation programs described on the facing page.

## SILENT AUCTION

Use Click Bid to bid from your phone - anytime, anywhere! Donors will ship items to the winning bidders after the auction.

**Bid now at  
[aasvf.cbo.io](https://aasvf.cbo.io)**

It will be “all-in, all-done” for the Silent Auction at 7:00 PM CST Monday, February 26

## LIVE AUCTION

**Monday, February 26**

**Location:** Presidential C/D/E (Level 2)

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



**Thank you for supporting  
the AASV Foundation!**

[aasv.org/foundation](https://aasv.org/foundation)

# TECHNICAL TABLES EXHIBIT

## TECHNICAL TABLES EXHIBIT

**Monday, February 26**

9:00 AM – 5:00 PM

**Tuesday, February 27**

8:00 AM – 12:00 PM

**LOCATION:** Presidential A/B (Level 2)

Refreshment breaks on Monday and Tuesday take place in and around the exhibit tables.



Spend some time visiting with our exhibitors, several of whom are new this year! Learn about the products and services they offer and be sure to thank them for supporting the AASV Annual Meeting!

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### EXHIBITORS

ABVP

AcuFast

Addison Biological Laboratory

Adisseo

AgriSafe

Alltech

Animal Health International

Animal Science Products

Anitox

Anpario

Aptimmune Biologics

ARKO Laboratories

Arm & Hammer

Aurora Pharmaceutical

Automated Production

Bimeda

BIOSEC

Bock Industries

Boehringer Ingelheim Animal Health

# TECHNICAL TABLES EXHIBITORS

Cambridge Technologies  
Cargill Animal Nutrition  
Central Life Sciences  
Ceva Animal Health  
Chr Hansen  
CID Lines an Ecolab Company  
Clipper Distributing  
Crystal Spring Hog Equipment  
DNA Genetics  
DPI Global  
dsm-firmenich  
Eastman  
Elanco  
Endovac Animal Health  
Farm Health Guardian  
Feedstuffs/National Hog Farmer  
Feedworks USA  
Genesis Instruments  
GlobalVetLink  
Henke-Sass, Wolf  
HIPRA  
Huvepharma  
Hypor  
IDEXX  
IHT Group  
IMV Technologies  
Insight Wealth Group  
ISU Office of Innovation Commercialization  
IPVS & ESPHM 2024, Germany  
Kemin Animal Nutrition & Health  
LANXESS Corporation  
LifeStock International  
Longhorn Vaccines and Diagnostics  
MatMaCorp  
Mazen Animal Health  
Medgene  
Merck Animal Health  
Merck Animal Health Allflex/LeeO

*Continued on next page*

# TECHNICAL TABLES EXHIBITORS

Metafarms  
Minitube USA  
MSP[RS] Resistant Starch  
MWI Animal Health  
National Pork Board  
National Pork Producers Council  
Neogen  
Norbrook  
Pharmacosmos  
Pharmgate Animal Health  
Phibro Animal Health Corporation  
PIC  
PigCHAMP  
PigKnows  
PigTek, Chore-Time  
PMI Additives  
Prairie Systems  
Precision Health Technologies  
PrideVMC  
ProtonDx  
Ralco  
Reproduction Provisions  
RO-MAIN  
SEPPIC  
Stuart Products  
Swine Health Information Center  
SwineTech  
TechMix  
Tetracore  
Thermo Fisher Scientific  
Topics Norsvin USA  
United Animal Health  
USDA APHIS VS  
US Soy  
Vaxxinova  
Veterinary Pharmaceutical Solutions  
Wilson's Prairie View Farm  
Zinpro  
Zoetis



# INDUSTRIAL SUPPORT COUNCIL

## JSHAP & AASV e-Letter Sponsors

The following companies provide substantial financial support to AASV throughout the year via their commitment to advertise in the *Journal of Swine Health & Production* and/or the AASV e-Letter. Be sure to thank them for their support – you’ll find their exhibit tables front-and-center in the Tech Tables exhibit hall.

**Boehringer Ingelheim**

(both JSHAP and e-Letter)

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**Cambridge Technologies**

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**dsm-firmenich**

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**Elanco**

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**Endovac Animal Health**

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**Huvepharma**

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**Merck Animal Health**

(both JSHAP and e-Letter)

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**Pharmacosmos**

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**Pharmgate Animal Health**

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**United Animal Health**

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**United Soybean Board**

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**Virox**

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**Zoetis**

(both JSHAP and e-Letter)

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For more information about these and other AASV sponsorship opportunities, see [aasv.org/aasv/sponsorship](https://aasv.org/aasv/sponsorship).

**Plan now to attend!**

**56<sup>th</sup> AASV  
Annual Meeting**

**March 1-4, 2025**

**San Francisco Marriott  
San Francisco, California**



**Future AASV Meetings:**

2026	Las Vegas	Feb 28-Mar 3
2027	Orlando	Feb 27-Mar 2
2028	Denver	Feb 19-22
2029	Dallas	Feb 17-20

Please thank the following  
companies and organizations  
for their generous support:

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**AASV FOUNDATION**

Monday Luncheon  
Praise Breakfast

**DSM-FIRMENICH**

Yoga Class

**ELANCO ANIMAL HEALTH**

AASV Foundation Veterinary Student Scholarships

**HUVEPHARMA**

Student Podcaster Award

**MERCK ANIMAL HEALTH**

AASV Awards Reception  
AASV Foundation Veterinary Student Scholarships  
Student Reception  
Veterinary Student Trivia Event

**STUART PRODUCTS**

Praise Breakfast

**SWINETECH**

Downtown Nashville Shuttle

**UNITED ANIMAL HEALTH**

Veterinary Student Poster Awards

**VAXXINOVA**

Veterinary Student Travel Stipends  
Refreshment Break Co-sponsor

**VETERINARY PHARMACEUTICAL  
SOLUTIONS**

Refreshment Break Co-sponsor

**ZOETIS**

Refreshment Break Co-sponsor


**ZOETIS FOUNDATION**

AASV Student Seminar  
AASV Student Poster Session  
AASV Foundation Veterinary Student Scholarship

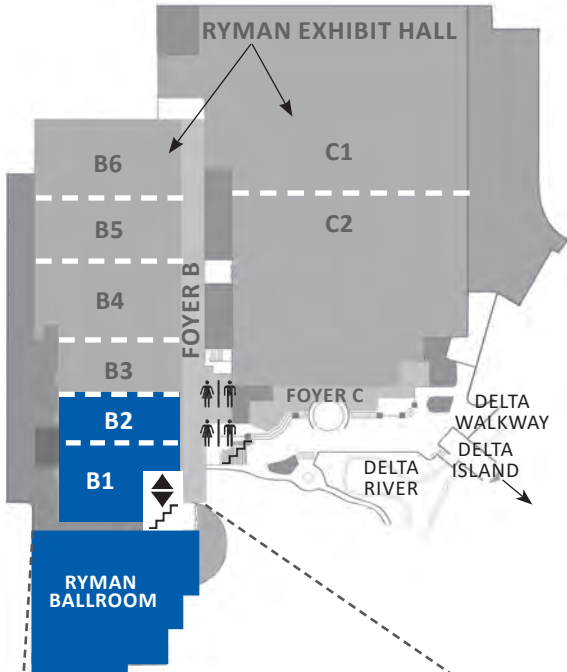


# Gaylord Convention Center

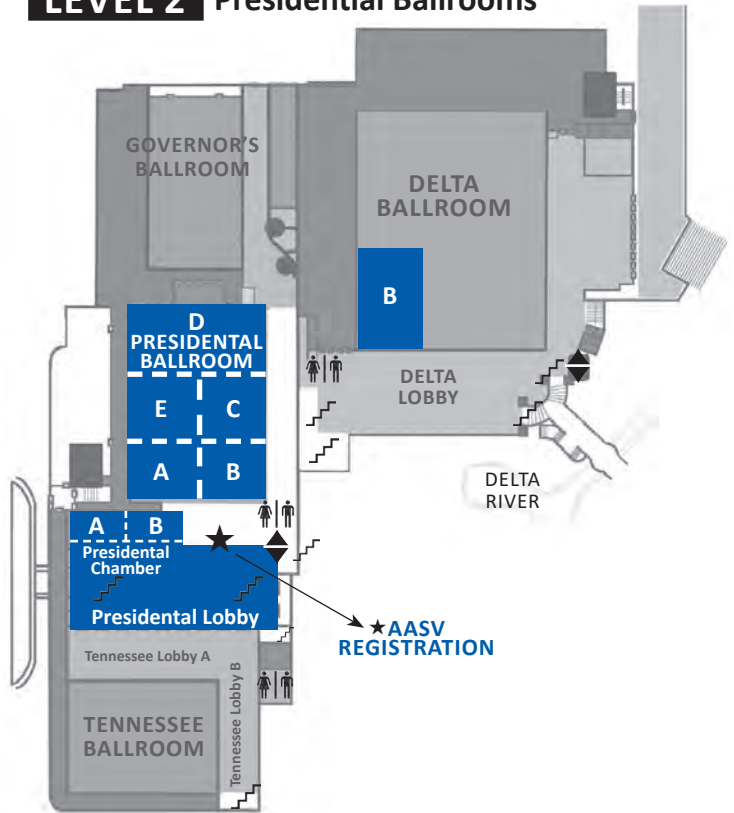
 = Stairs/Escalators    
  = Elevators

 = Restrooms    
 Blue: AASV session rooms    
 Gray: For reference only

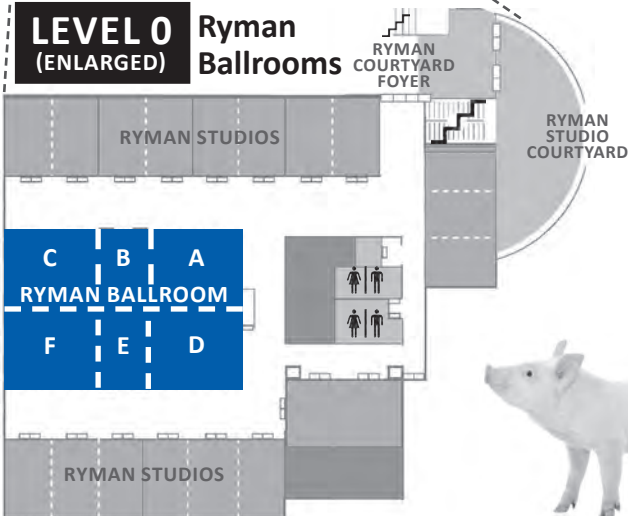
## LEVEL 0 Ryman Exhibit Hall



## LEVEL 2 Presidential Ballrooms



## LEVEL 0 (ENLARGED) Ryman Ballrooms



## LEVEL M Presidential Mezzanine

