American Association of Avian Pathologists (AAAP)
AAAP will be the premier organization that advances science-based knowledge, expertise, and education on poultry health, welfare, and food safety to provide member value and stakeholder trust.

Sixty-Seventh Annual Meeting
American Association of Avian Pathologists
St. Louis Union Station Hotel
July 9-11, 2024, St. Louis, MO
Thank You
MERCK Animal Health
For Sponsoring The 2024 Scientific Program Book

MERCK ANIMAL HEALTH is the proud sponsor of the SCIENTIFIC PROGRAM BOOK.

THE SCIENCE OF HEALTHIER ANIMALS.
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US/ALL/06/17/0034
Welcome to the AAAP 2024 Annual Meeting Scientific Program

The Program Advisory Committee is excited to present our first ever hybrid scientific program at this year’s AAAP Annual Meeting. The scientific program is comprised of a combination of in-person oral, in-person poster, and prerecorded oral presentations that highlight the latest poultry health and management research and field experiences from a diversity of presenters and experts. Presentations are arranged in sixteen sessions, incorporating topics on viral, bacterial and parasitic diseases, enteric health, diagnostics, epidemiology, vaccinology, case reports, and others.

Our Keynote Speaker, Dr. Marc de Beer, will kick off the scientific program on Tuesday July 9th, with his presentation entitled “Future Perspectives for the Global Poultry Industry”. As President of Aviagen North America, Dr. de Beer is well positioned to address a “bird’s-eye view” of focus areas for future growth of the poultry industry and emerging technologies that promise to transform poultry production, as well as future challenges that the industry should be prepared for.

Attendees can also look forward to other important components of the program not organized by the Program Advisory Committee, including the Symposium (“Maintaining Intestinal Health with Non-Antibiotic Compounds”), the History lecture by Dr. Holly Sellers (“The History of Avian Reovirus”), the Women’s Network Luncheon presentation (Dr. Cherie Buisson), and the Wellness Talk (Jeff Winton).

I would personally like to thank the Program Committee for their tireless efforts in designing an exciting and informative program this year. Our committee reviewed and scored a total of 294 submitted abstracts, facing the added challenges of fewer in-person oral slots (due to the shorter meeting) and three possible presentation formats. Thankfully, our three-person core committee (Tak Niino, Darrell Kapczynski, and myself) was bolstered with an additional three associate members (Yuko Sato, Travis Schaal, and Joel Cline) this Spring, facilitating the work of the committee, and ensuring that each abstract was reviewed and scored by two committee members.

This will be my final year chairing the Program Advisory Committee. I have been honored to serve the AAAP in this role since 2022, and I know that the work of the committee will continue to advance under the leadership of the incoming Program Chair, Dr. Tak Niino. I want to thank the AAAP staff, leadership and membership for all your support. Welcome to St. Louis!
### AAAP Task Force Committee Chairs

<table>
<thead>
<tr>
<th>Committee</th>
<th>Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Welfare and Management Practices</td>
<td>Nancy Reimers 2024</td>
</tr>
<tr>
<td>Bylaws Review</td>
<td>Michelle Kromm 2027</td>
</tr>
<tr>
<td>Committee Review</td>
<td>Bruce Stewart Brown</td>
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<tr>
<td>Diseases of Public Health Significance</td>
<td>Claude Hebron 2024</td>
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<tr>
<td>Diversity &amp; Inclusion</td>
<td>Eliza Ripplinger 2026</td>
</tr>
<tr>
<td>Education</td>
<td>Nisana Siman-Tov 2024</td>
</tr>
<tr>
<td>Enteric Diseases</td>
<td>Maria Terra 2025</td>
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<tr>
<td>Epidemiology</td>
<td>Mostafa Ghanem 2026</td>
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<tr>
<td>Food Safety</td>
<td>Beth Krushinskie 2025</td>
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<tr>
<td>History of Avian Medicine</td>
<td>Ton Schat 2025</td>
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<tr>
<td>Legislative Advisory</td>
<td>Suzanne Dougherty 2026</td>
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<tr>
<td><strong>Membership</strong></td>
<td>Ashley Hallowell 2024</td>
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<tr>
<td><strong>Outreach</strong></td>
<td>Yuko Sato 2025</td>
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<td><strong>Program Advisory</strong></td>
<td>Natalie Manginsay 2024</td>
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<tr>
<td><strong>Research Priorities</strong></td>
<td>Stephen Williams 2025</td>
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<td><strong>Respiratory Diseases</strong></td>
<td>Brian Jordan 2025</td>
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<tr>
<td><strong>Small Flock</strong></td>
<td>Julie Helm 2024</td>
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<tr>
<td><strong>Therapeutics, Biologics, and Bioprotection</strong></td>
<td>Randy Singer 2024</td>
</tr>
<tr>
<td><strong>Toxic, Infectious, Miscellaneous and Emerging Diseases</strong></td>
<td>Linnea Tracy 2026</td>
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<tr>
<td><strong>Tumor Virus</strong></td>
<td>Algis Martinez 2024</td>
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<tr>
<td><strong>Small Flocks</strong></td>
<td>Julie Helm 2024</td>
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<tr>
<td><strong>Women’s Network</strong></td>
<td>Ellen Lapuck-Harris 2024</td>
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### AAAP Publication Board Chairs

<table>
<thead>
<tr>
<th>Board</th>
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<tbody>
<tr>
<td>Avian Diseases Advisory Board</td>
<td>Randy Singer</td>
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<tr>
<td>Avian Histopathology Manual Board</td>
<td>Tahseen Abdul-Aziz</td>
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<tr>
<td>Avian Diseases Editorial Board</td>
<td>Randy Singer</td>
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<tr>
<td>Gross Pathology of Avian Disease</td>
<td>Tahseen Abdul-Aziz</td>
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<tr>
<td>Biosecurity Manual Board</td>
<td>Robert L. Owen</td>
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<tr>
<td>Diseases of Poultry Editorial Board</td>
<td>David E. Swayne</td>
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<tr>
<td>Isolation of Avian Pathogens Manual Board</td>
<td>Susan Williams</td>
</tr>
</tbody>
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Deirdre Johnson  
AAAP President 2024

Claudia Osorio  
AAAP President-Elect 2024

Suzanne Dougherty  
AAAP EVP 2026

Rocio Crespo  
AAAP Past President 2024

Jose Linares  
Director 2027

Ivan Alvarado  
Director 2026

Julie Helm  
Director 2024

Karen Grogan  
Director 2024

Simone Stoute  
Director 2025

Naola Ferguson-Noel  
Director 2025

Josie Gamble  
Student Director 2024

Holly Sellers  
Associate Director 2024
AAAP Foundation Leadership

AAAP Foundation Committee Chairs

Awards
John Dunn 2025

Kenneth Eskelund Preceptorship
Luke Baldwin 2026

Scholarship Committee
Kabel Robbins 2024

Development Committee
Roy Jacob 2026
Travis Schaal 2026

Avian Bioscience Travel Scholarship
Brian Ladman 2027

AAAP Representatives to Allied Organizations

Animal Agriculture Alliance (AAA)
Donald Ritter 2026

Animal Agriculture Coalition (AAC)
Jose Linares 2024

Center for Disease Control (CDC)
Bruce Stewart-Brown 2026

Council for Agriculture Science and Technology (CAST)
Mostafa Ghanem 2025

International Poultry Welfare Alliance (IPWA)
James Barton 2026

National Chicken Council (NCC)
Beth Krushinskie 2025

National Turkey Federation (NTF)
David Hermes 2024

Professional Animal Auditor Certification Organization (PAACO)
David Hermes 2025
Katherine Barger Weathers 2024

Stakeholder Forum on Antimicrobial Resistance (S-FAR)
Randy Singer 2025

United Egg Producers (UEP)
Dan Wilson 2026

United States Animal Health Association (USAHA)
Yuko Sato 2025

US Food and Drug Administration (FDA)
Randy Singer 2025

US Poultry & Egg (USP)
Denise Heard 2026

AAAP Allied Association Groups

Association of Veterinarians in Broiler Production (AVBP)
Eric Heskett, President

Association of Poultry Primary Breeder Veterinarians (APPBD)
Lisa Tenny, President

Association of Veterinarians in Turkey Production (AVTP)
Elizabeth Beilke, President

Association of Veterinarians in Egg Production (AVEP)
Eric Gingerich, President

Association of Poultry Consultants and Independent Laboratories (APCIL)
Leonard Fussell, Gordon Whitbeck, Helen Wojcinski, Beth Krushinski, and Fred Hoerr (Contact)
### AVMA AVMA Representatives

#### AVMA House of Delegates

www.aaap.info/join-the-avma

**Primary**

Katherine Barger Weathers 2024

**Alternate**

Karen Grogan 2024

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### AVMA Committees and Panels

**Animal Agriculture Liaison Committee**

**Current**

Joel Cline 2024 (Alternate)

**Upcoming**

Jake Carlson 2027

Andre Ziegler 2027 (Alternate)

**Animal Welfare Committee**

**Current**

Nancy Reimers 2025

Sara Reichelt 2025 (Alternate)

**Clinical Practitioners Advisory Committee**

**Current**

Megan Lighty 2026

**Upcoming**

Michaela Olson 2026 (Alternate)

**Committee on Antimicrobials**

**Current**

Randy Singer 2024

Hector Cervantes 2024 (Alternate)

**Upcoming**

Michelle Kromm 2027

Randy Singer 2027 (Alternate)

**Committee on Disaster and Emergency Issues**

**Current**

Michael Martin 2025

(Representing Poultry Medicine)

**Committee on Environmental Issues**

**Current**

Carrier Cremers 2026

(Representing Avian Medicine)

**Convention Education Program Committee**

**Current**

Natalie Manginsay 2024

(Representing Poultry Medicine)

**Upcoming**

Takumu Niino 2024

(Representing Poultry Medicine)

**Food Safety Advisory Committee**

**Upcoming**

Elizabeth Krushinskie 2026

Robert O'Conner 2026 (Alternate)

**Legislative Advisory Committee**

**Current**

Jose Linares 2024

Suzanne Dougherty 2024 (Alternate)

**Upcoming**

Suzanne Dougherty 2027

Carl J. Heeder III 2027 (Alternate)

**Panel on Depopulation**

**Current - Non-Voting Member**

Michelle Kromm 2026

(Representing Poultry Working Group)

**Panel on Humane Slaughter**

**Current - Chair**

Kenneth Opengart 2024

(Representing Poultry Working Group)

Committee members are nominated by the AAAP Board of Directors and approved by AVMA. These entities usually meet twice a year, in the spring and fall. AAAP is grateful to have its members working as volunteers in many AVMA committees and panels.
AAAP Event Schedule
All Events To Be Held In The St. Louis Union Station Hotel.

**Tuesday, July 9**

**Scientific Program Keynote Address**
Marc de Beer, Aviagen
*Future Perspectives for the Global Poultry Industry*
8:15 AM - 9:00 AM: Grand Ballroom DEF

**Avian Bioscience Travel Scholarship Winner**
Emily Cason, University of Georgia, PDRC
*Reevaluating the gold standard: evaluating environmental Salmonella surveillance sampling methodologies in commercial broiler live-production*
10:45 AM - 11:00 AM: Grand Ballroom DEF

**Women’s Network Committee Lunch**
Dr. Cherie Buisson, A Happy Vet, Helping Hands Pet Hospice
*If You Think You Suck, You’re Probably Wrong*
12:00 PM - 1:00 PM: Grand Ballroom AB

**Poster Session and Reception**
5:15 PM - 6:30 PM: Midway West

**AAAP Poultry Professionals Networking Event**
6:30 PM - 7:30 PM: Midway East

**Wednesday, July 10**

**AAAP Symposium**
8:00 AM - 12:00 PM: Grand Ballroom DEF

**AAAP Student Symposium**
9:00 AM - 10:30 AM: Regency Ballroom

**Thursday, July 11**

**Rimler Memorial Paper**
Roel Becerra, University of Georgia
*Evaluating the efficacy of novel inactivated and live vaccine approaches for the control of Spotty Liver Disease (SLD) caused by Campylobacter hepaticus in layer hens*
8:15 AM - 8:30 AM: Grand Ballroom DEF

**Reed Rumsey Clinical Research**
Hemlata Gautam, University of Saskatchewan
*Protection of Broiler Chickens Against Necrotic Enteritis by Intrapulmonary Delivery of a Live Clostridium Perfringens Vaccine Employing Gut-Lung-Axis Concept*
8:45 AM - 9:00 AM: Grand Ballroom DEF

**Lasher-Eckroade History Lecture**
Holly Sellers, University of Georgia
10:15 AM - 10:45 AM: Grand Ballroom DEF

**AAAP Business Meeting**
10:45 AM - 12:00 PM: Grand Ballroom DEF

**Reed Rumsey Basic Research**
Julia Blakey, USDA ARS SEPRL Endemic Unit
*Analysis of the localized immune response in the bursa of Fabricius post infectious bursal disease virus challenge*
3:15 PM - 3:30 PM: Regency Ballroom

**Awards Banquet**
5:30 PM - 8:00 PM: Grand Ballroom AB
# AAAP 2024 Annual Meeting and Committee Schedule

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<th>Beg. Time</th>
<th>End Time</th>
<th>Room</th>
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<tr>
<td><strong>AAAP Board of Directors Meetings</strong></td>
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<tr>
<td>AAAP Inc. and Foundation Board of Directors</td>
<td>Monday, July 8</td>
<td>8:00 AM</td>
<td>5:00 PM</td>
<td>Midway Suites 5</td>
</tr>
<tr>
<td>AAAP Past Presidents Luncheon</td>
<td>Thursday, July 11</td>
<td>12:00 PM</td>
<td>1:15 PM</td>
<td>Midway Suites 4</td>
</tr>
<tr>
<td><strong>Committee Meetings</strong></td>
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<tr>
<td>AAAP Foundation ABTS Committee</td>
<td>Wednesday, July 10</td>
<td>3:15 PM</td>
<td>4:15 PM</td>
<td>Midway Suites 3</td>
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<tr>
<td>LAC Committee (combined with Outreach Committee)</td>
<td>Wednesday, July 10</td>
<td>3:15 PM</td>
<td>4:15 PM</td>
<td>Grand Ballroom C</td>
</tr>
<tr>
<td>Membership Committee</td>
<td>Wednesday, July 10</td>
<td>3:15 PM</td>
<td>4:15 PM</td>
<td>Midway Suites 4</td>
</tr>
<tr>
<td>Therapeutics, Biologics and Bioprotection Committee</td>
<td>Wednesday, July 10</td>
<td>3:15 PM</td>
<td>4:15 PM</td>
<td>Midway Suites 11</td>
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<tr>
<td>Preceptorship Committee</td>
<td>Wednesday, July 10</td>
<td>3:15 PM</td>
<td>4:15 PM</td>
<td>Midway Suites 6</td>
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<tr>
<td>Avian Diseases Manual Editorial Board</td>
<td>Wednesday, July 10</td>
<td>4:15 PM</td>
<td>5:15 PM</td>
<td>Midway Suites 3</td>
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<tr>
<td>Animal Welfare Committee</td>
<td>Wednesday, July 10</td>
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<td>5:15 PM</td>
<td>Grand Ballroom C</td>
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<tr>
<td>Education Committee</td>
<td>Wednesday, July 10</td>
<td>4:15 PM</td>
<td>5:15 PM</td>
<td>Grand Ballroom A</td>
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<tr>
<td>Awards Committee</td>
<td>Wednesday, July 10</td>
<td>4:15 PM</td>
<td>5:15 PM</td>
<td>Midway Suites 4</td>
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<tr>
<td>Toxic, Infectious, Miscellaneous &amp; Emerging Diseases Committee</td>
<td>Wednesday, July 10</td>
<td>4:15 PM</td>
<td>5:15 PM</td>
<td>Midway Suites 11</td>
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<tr>
<td>AAAP Auditing Committee</td>
<td>Wednesday, July 10</td>
<td>4:15 PM</td>
<td>5:15 PM</td>
<td>Midway Suites 6</td>
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<tr>
<td>Research Priorities Committee</td>
<td>Wednesday, July 10</td>
<td>5:15 PM</td>
<td>6:15 PM</td>
<td>Midway Suites 3</td>
</tr>
<tr>
<td>Small Flocks Committee</td>
<td>Wednesday, July 10</td>
<td>5:15 PM</td>
<td>6:15 PM</td>
<td>Grand Ballroom C</td>
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<tr>
<td>Enteric Diseases Committee</td>
<td>Wednesday, July 10</td>
<td>5:15 PM</td>
<td>6:15 PM</td>
<td>Midway Suites 11</td>
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<tr>
<td>Epidemiology Committee</td>
<td>Wednesday, July 10</td>
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<td>Midway Suites 6</td>
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<tr>
<td><strong>Program Events</strong></td>
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<tr>
<td>AAAP Speaker Ready Room</td>
<td>Monday, July 8</td>
<td>12:00 PM</td>
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<td>Red Caps Room</td>
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<td>AAAP Poster Room</td>
<td>Monday, July 8</td>
<td>7:00 AM</td>
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<tr>
<td>AAAP Session Room 1</td>
<td>Monday, July 8</td>
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<tr>
<td>AAAP Session Room 2</td>
<td>Monday, July 8</td>
<td>7:00 AM</td>
<td>5:00 PM</td>
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<tr>
<td>Nursing Room</td>
<td>Monday, July 8</td>
<td>7:00 AM</td>
<td>5:00 PM</td>
<td>Midway Suites 1</td>
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<tr>
<td>Food Safety Listening Session with USDA-ARS</td>
<td>Monday, July 8</td>
<td>1:30 PM</td>
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<td>Midway Suites 10</td>
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<tr>
<td>Small Flocks Interest Group</td>
<td>Monday, July 8</td>
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<td>5:00 PM</td>
<td>Midway Suites 3 &amp; 4</td>
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<tr>
<td>Mentor/Mentee Breakfast (Invitation Only)</td>
<td>Tuesday, July 9</td>
<td>7:00 AM</td>
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<td>Midway Suites 11</td>
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<tr>
<td>AAAP Women’s Network Committee Meeting (Open to All)</td>
<td>Tuesday, July 9</td>
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<td>Grand Ballroom AB</td>
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<tr>
<td>AAAP Committee Chair/BOD Meeting</td>
<td>Wednesday, July 10</td>
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<td>1:15 PM</td>
<td>Midway Suites 11</td>
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<tr>
<td>AAAP Symposium</td>
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<td>12:00 PM</td>
<td>Grand Ballroom DEF</td>
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<tr>
<td>AAAP Student Symposium</td>
<td>Wednesday, July 10</td>
<td>9:00 AM</td>
<td>11:30 AM</td>
<td>Regency Ballroom</td>
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<tr>
<td>AAAP Opening Session</td>
<td>Tuesday, July 9</td>
<td>8:00 AM</td>
<td>8:15 AM</td>
<td>Grand Ballroom DEF</td>
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<tr>
<td>AAAP Scientific Program Keynote Address</td>
<td>Tuesday, July 9</td>
<td>8:15 AM</td>
<td>9:00 AM</td>
<td>Grand Ballroom DEF</td>
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<tr>
<td>AAAP Welcome Reception and Poster Session</td>
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<td>6:30 PM</td>
<td>Midway West</td>
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<tr>
<td>AAAP Poultry Professionals Networking Event</td>
<td>Tuesday, July 9</td>
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<tr>
<td>AAAP Lashk-Eckroade History Lecture</td>
<td>Thursday, July 11</td>
<td>10:15 AM</td>
<td>10:45 AM</td>
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<tr>
<td>AAAP Business Meeting</td>
<td>Thursday, July 11</td>
<td>10:45 AM</td>
<td>12:00 PM</td>
<td>Grand Ballroom DEF</td>
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<tr>
<td>AAAP Awards Reception before Dinner</td>
<td>Thursday, July 11</td>
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<td>6:00 PM</td>
<td>Foyer C</td>
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<tr>
<td>AAAP Awards Banquet</td>
<td>Thursday, July 11</td>
<td>6:00 PM</td>
<td>8:00 PM</td>
<td>Grand Ballroom AB</td>
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<tr>
<td><strong>ACPV</strong></td>
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<tr>
<td>ACPV Board of Governors Meeting</td>
<td>Wednesday, July 10</td>
<td>7:00 AM</td>
<td>10:00 AM</td>
<td>Midway Suites 2</td>
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<tr>
<td>ACPV Annual Meeting/Breakfast</td>
<td>Thursday, July 11</td>
<td>7:00 AM</td>
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<tr>
<td><strong>Invitation Only</strong></td>
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<tr>
<td>Association of Veterinarians in Broiler Production Meeting</td>
<td>Monday, July 8</td>
<td>8:00 AM</td>
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<td>Grand Ballroom A</td>
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<tr>
<td>Association of Veterinarians in Turkey Production</td>
<td>Monday, July 8</td>
<td>8:00 AM</td>
<td>5:00 PM</td>
<td>Grand Ballroom BC</td>
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<tr>
<td>Association of Veterinarians in Egg Production</td>
<td>Monday, July 8</td>
<td>8:00 AM</td>
<td>4:40 PM</td>
<td>New York/Illinois Central</td>
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<td>Association of Poultry Primary Breeder Veterinarians</td>
<td>Wednesday, July 10</td>
<td>11:30 AM</td>
<td>1:00 PM</td>
<td>Midway Suites 11</td>
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<tr>
<td><strong>Alumni Associations</strong></td>
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<tr>
<td>NC Veterinarians and NCsu Students and Alumni</td>
<td>Wednesday, July 10</td>
<td>7:00 AM</td>
<td>8:30 AM</td>
<td>Midway Suites 11</td>
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<tr>
<td>MAM and MAHM Alumni Coffee Hour</td>
<td>Wednesday, July 10</td>
<td>7:00 AM</td>
<td>8:00 AM</td>
<td>Midway Suites 7 &amp; 8</td>
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<td>MAM and MAHM Alumni Happy Hour (with Zoetis)</td>
<td>Wednesday, July 10</td>
<td>5:00 PM</td>
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### 2024 Virtual AAAP Committee Meeting Schedule

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<td>Monday, July 1</td>
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<td>Histopathology/Case Report Interest Group</td>
<td>Tuesday, July 2</td>
<td>1:00 PM</td>
<td>4:00 PM</td>
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<tr>
<td>History Committee</td>
<td>Wednesday, June 12</td>
<td>4:00 PM</td>
<td>5:00 PM</td>
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<tr>
<td>AAAP Foundation Scholarship Committee</td>
<td>Tuesday, June 25</td>
<td>2:00 PM</td>
<td>3:00 PM</td>
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<tr>
<td>Respiratory Diseases Committee</td>
<td>Monday, June 17</td>
<td>1:00 PM</td>
<td>2:00 PM</td>
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<tr>
<td>Diversity &amp; Inclusion Committee</td>
<td>Friday, June 28</td>
<td>1:00 PM</td>
<td>2:00 PM</td>
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<tr>
<td>Diseases of Public Health Significance</td>
<td>Wednesday, May 29</td>
<td>2:00 PM</td>
<td>3:00 PM</td>
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<tr>
<td>Food Safety Committee</td>
<td>Tuesday, June 18</td>
<td>11:00 AM</td>
<td>1:00 PM</td>
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<tr>
<td>Tumor Virus Committee</td>
<td>Friday, June 21</td>
<td>9:00 AM</td>
<td>10:00 AM</td>
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<tr>
<td>AAAP Foundation Development Committee</td>
<td>Friday, June 28</td>
<td>11:00 AM</td>
<td>12:00 PM</td>
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<td>Grand Ballroom DEF</td>
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<td><strong>8:00 AM</strong></td>
<td>Opening Session</td>
<td>Break</td>
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<td><strong>8:15 AM</strong></td>
<td>Keynote Speaker</td>
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<td></td>
<td><strong>Future Perspectives for the Global Poultry Industry</strong></td>
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<td></td>
<td>Dr. Marc de Beer, Aviagen</td>
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<tr>
<td><strong>9:00 AM</strong></td>
<td>Break</td>
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<td><strong>Room</strong></td>
<td>Grand Ballroom DEF</td>
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<tr>
<td><strong>Topic</strong></td>
<td>Epidemiology</td>
<td>Case Reports</td>
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<tr>
<td><strong>Moderator</strong></td>
<td>Kabel Robbins</td>
<td>Kayla Niel</td>
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<tr>
<td><strong>9:15 AM</strong></td>
<td>Understanding risk factors associated with broiler breeder MS cases in Georgia</td>
<td>I SPY HPAI - Gross lesions highly suggestive of HPAI</td>
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<td></td>
<td>Kathleen Sary, Georgia Poultry Laboratory Network (GPLN)</td>
<td>Yuko Sato, Iowa State University</td>
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<td><strong>9:30 AM</strong></td>
<td>Comparison and evaluation of poultry biosecurity plans through the Rapid Access Biosecurity app</td>
<td>Layers Don’t get Bacterial Chondronecrosis and Osteomyelitis, Right?</td>
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<td></td>
<td>Jason Galvis, College of Veterinary Medicine, North Carolina State University</td>
<td>Geoffrey Lossie, Purdue University/Indiana Animal Disease Diagnostic Lab</td>
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<tr>
<td><strong>9:45 AM</strong></td>
<td>Mastering Sample Size Determination: Facts, Fallacies, and Best Practices for Use in Veterinary Research and Diagnostics</td>
<td>High Pitched Layers - Case Report</td>
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<td></td>
<td>Enrique Mondaca, CEVA Animal Health</td>
<td>Gigi Lin, BC Ministry of Agriculture and Food</td>
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<tr>
<td><strong>10:00 AM</strong></td>
<td>Securely moving duck hatching eggs from a farm out of or within a Highly Pathogenic Avian Influenza (HPAI) Control Area</td>
<td>It’s Hard To Be Positive When You’re B Positive</td>
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<td>Sylvia Wanzala-Martin, University of Minnesota</td>
<td>Molly Parker, Select Genetics</td>
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<td><strong>10:15 AM</strong></td>
<td>An approach for prioritizing Salmonella serotypes for foodborne outbreak prevention: Using burden and trajectory of outbreak-related illnesses associated with meat and poultry</td>
<td>Torticollis in Turkey Poults</td>
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<td>Katherine Marshall, CDC</td>
<td>Laura Tensa, Cargill</td>
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<td><strong>10:30 AM</strong></td>
<td>Longitudinal evaluation of Salmonella in broiler breeder flocks</td>
<td>Aspergillus flavus and Penicillium spp Infection in a Five Week Old Broiler Breeder Pullet Flock</td>
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<td></td>
<td>Nikki Shariat, Poultry Diagnostic and Research Center, University of Georgia</td>
<td>Hollyn Maloney, Prairie Livestock Veterinarians</td>
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<tr>
<td><strong>10:45 AM</strong></td>
<td>Avian Bioscience Travel Scholarship</td>
<td>Where my eggs at doc?</td>
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<td>Re-evaluating the gold standard: evaluating environmental Salmonella surveillance sampling methodologies in commercial broiler live-production</td>
<td>Reginald Onyema, Aviagen North America</td>
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<td></td>
<td>Emily Cason, University of Georgia, Poultry Diagnostic and Research Center</td>
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<td>Time</td>
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<td>11:00 AM</td>
<td>SE challenge studies in live ST vaccinated broilers—comparing different vaccination strategies to protection against SE challenge at different ages&lt;br&gt;Kalen Cookson, Zoetis</td>
<td>Economic Impact, and Molecular characterization of CAstVs obtained from outbreaks of White Chicken Syndrome (WCS) in Western Canada&lt;br&gt;Victor Palomino-Tapia, Maple Leaf Foods</td>
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<tr>
<td>11:15 AM</td>
<td>The use of a nutritional approach to support the control of Salmonella in poultry.&lt;br&gt;Raquel Burin, Zinpro Corporation</td>
<td>Field Experiences with Avian Metapneumovirus in U.S. Broilers and Broiler Breeders&lt;br&gt;Andy Bishop, Amick</td>
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<th>Grand Ballroom DEF</th>
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<tr>
<td>11:30 AM</td>
<td>Wellness Talk</td>
<td>Jeff Winton</td>
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<tr>
<th>Time</th>
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<tr>
<td>11:30 AM</td>
<td>Wellness Talk</td>
<td>Jeff Winton</td>
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<tr>
<td>12:00 PM</td>
<td>Lunch Break</td>
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<thead>
<tr>
<th>Topic</th>
<th>Bacteriology</th>
<th>Virology</th>
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<tr>
<td>1:15 PM</td>
<td>Peeling Back the Many Layers of Competitive Exclusion&lt;br&gt;Margie Lee, Virginia Tech</td>
<td>Enterococcus fecalis Infection In Laying Hens&lt;br&gt;Mike Petrik, McKinley Hatchery</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Differentiation of nonpathogenic from pathogenic Enterococcus cecorum isolates, identifying unique genetic characteristics providing virulence, survival, and adaptation traits&lt;br&gt;Martha Pulido Landinez, Mississippi State University</td>
<td>A Deadly Case of Stud Tom Torticollis&lt;br&gt;Jake Carlson, Select Genetics</td>
</tr>
<tr>
<td>1:45 PM</td>
<td>Genotypic characterization of Enterococcus cecorum isolated from field cases&lt;br&gt;Marcela Arango, Mississippi State University</td>
<td>Swollen Heads with an acute elevated mortality in Commercial Turkeys.&lt;br&gt;Claude Hebron, Prestage Farms</td>
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<thead>
<tr>
<th>Topic</th>
<th>Bacteriology</th>
<th>Virology</th>
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<tr>
<td>2:00 PM</td>
<td>Clostridium colinum in quail: Battling to reduce the need for antibiotics use&lt;br&gt;Roxana Sanchez-Ingunza, RSI Poultry Veterinary Consulting LLC</td>
<td>Preliminary characterization of avian metapneumovirus subtype B in the U.S.&lt;br&gt;Darrell Kapczynski, USDA-ARS</td>
</tr>
<tr>
<td>2:15 PM</td>
<td>Exploring Focal Duodenal Necrosis: Two Challenge Experiments Investigating Disease Replication in Layers&lt;br&gt;Yuyang Tsai, University of Georgia</td>
<td>Detection and molecular characterization of avian metapneumovirus subtype B in the US turkey and chicken farms&lt;br&gt;Sumit Jangra, South Dakota State University</td>
</tr>
<tr>
<td>2:30 PM</td>
<td>Assessment of water-based interventions for the control of Campylobacter hepaticus in laying hens.&lt;br&gt;Catherine Logue, University of Georgia</td>
<td>An Epidemiological look at Infectious Bursal Disease (IBD) in Commercial Broiler Industry in Canada; Geographical Difference and Applied Vaccination programs&lt;br&gt;Babak Sanei, Zoetis Canada</td>
</tr>
<tr>
<td>2:45 PM</td>
<td>Impact of Avibacterium paragallinarum infection on the Upper Respiratory Tract Microbiome of Chickens&lt;br&gt;Mostafa Ghanem, University of Maryland</td>
<td>Molecular survey of infectious bursal disease virus in Western Europe in 2020-2023 reveals lasting predominance of A3B1 reassortant viruses&lt;br&gt;Matteo Legnardi, Department of Animal Medicine, Production and Health (MAPS), University of Padova</td>
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<tr>
<th>Time</th>
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<tr>
<td>3:00 PM</td>
<td>Break</td>
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<tr>
<td>Time</td>
<td>Moderator</td>
<td>Topic</td>
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<tr>
<td>3:15 PM</td>
<td>Jaime Ruiz</td>
<td>The plasmid-encoded serine protease autotransporters Tsh and Sha contribute to avian pathogenic Escherichia coli colonization of the lungs in turkey</td>
</tr>
<tr>
<td>3:30 PM</td>
<td>Milos Markis</td>
<td>Mycoplasma gallisepticum Live attenuated Vaccine Reversion to Virulence - What Changed</td>
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<tr>
<td>3:45 PM</td>
<td></td>
<td>Practical Guide to Successful Coccidiosis Vaccination in Broilers</td>
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<tr>
<td>4:00 PM</td>
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<td>Practical ways to assess coccidiosis vaccination in commercial broilers.</td>
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<tr>
<td>4:15 PM</td>
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<td>Utilizing Oocyst Per Gram (OPG) surveillance to monitor coccidiosis management in commercial cage-free, floor-raised leghorn pullets</td>
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<tr>
<td>4:30 PM</td>
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<td>Rotating Chemical Coccidiostats Following Prolonged Use in Broilers</td>
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<td>4:45 PM</td>
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<td>Evaluation of Performance and Level of Coccidiosis Immunity of Coccidia Vaccinated Broiler Chickens Fed Various Feed Additives in a Coccidiosis Pen Challenge</td>
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<tr>
<td>5:00 PM</td>
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<td>Break</td>
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<td>5:15 PM</td>
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<td>Midway West</td>
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<td>5:15 PM</td>
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<td>Poster Session with Hors d'Oeuvres and Drinks</td>
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<tr>
<td>6:30 PM</td>
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<td>Midway East</td>
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## 2024 AAAP Symposium
### Maintaining Intestinal Health with Non-Antibiotic Compounds
Hosted by the Enteric Diseases Committee and the Therapeutics, Biologics and Bioprotection Committee Chairs: Maria Terra-Long (Enteric Diseases) and Randy Singer (TBB)

<table>
<thead>
<tr>
<th>Room</th>
<th>Grand Ballroom DEF</th>
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<tbody>
<tr>
<td>8:00 AM</td>
<td>Introduction</td>
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</table>
| 8:10 AM    | **The Gut-Brain Connection/Physiology of the intestinal tract**  
Guillerm Tellez-Isaias, *University of Arkansas* |
| 8:30 AM    | **Impact of the Intestinal Ecosystem of Poultry on Production and Sustainability**  
Michael Kogut, *USDA* |
| 8:50 AM    | Break             |
| 9:00 AM    | **Use of Prebiotics and Postbiotics to Modulate Enteric Microbiome and Gut Health in Poultry**  
Peter Ferket, *North Carolina State University* |
| 9:15 AM    | **Probiotics**    
Tim Johnson, *University of Minnesota* |
| 9:30 AM    | **Mechanisms of Action of Botanicals for Enhancing Gut Health and Performance in Poultry**  
Diego Martinez, *University of Arkansas* |
| 9:45 AM    | **Role of Micro-Minerals and Fatty Acids in Intestinal Health**  
Todd Applegate, *University of Georgia, Athens* |
| 10:00 AM   | Break             |
| 10:10 AM   | **A review of methods that are used in research and diagnostics to assess gut health**  
Cristiano Bortoluzzi, *DSM* |
| 10:25 AM   | **Experimental Modeling and Research Result Interpretation of Intestinal Health Products in Broiler Chickens**  
Matthew Jones, *Southern Poultry Research Group* |
| 10:40 AM   | **FDA: Current and possible future regulatory framework**  
Bill Flynn, *FDA-CVM* |
| 11:00 AM   | Break             |
| 11:10 AM   | **Panel on Field Experiences with Non-Antibiotic Feed Additives**  
Sara Throne, *Simmons Foods*  
Dave Hermes, *Perdue Farms*  
Dan Wilson, *Wilson Vet Co.*  
Mike Blair, *Devenish* |
| 12:00 PM   | Lunch Break       |

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### Thank You to the 2024 AAAP Symposium Sponsors!

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- Zoetis

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- Poultry Business Solutions
- Poultry Research Partners
- Veterinary Diagnostic Pathology, LLC

**Bronze ($250-$499)**
- Mindwalk Consulting Group
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<tr>
<th>Time</th>
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<tr>
<td>9:00 AM</td>
<td><strong>Poultry Industry Overview:</strong></td>
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<tr>
<td></td>
<td>Karen Grogan</td>
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<tr>
<td>9:15 AM</td>
<td><strong>AAAP Student Opportunities:</strong></td>
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<tr>
<td></td>
<td>Josie Gamble</td>
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<td>Nikolas Faust</td>
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<td>Kabel Robbins</td>
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<td>Yuko Sato</td>
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<td>9:30 AM</td>
<td><strong>Panel: Industry Veterinarians:</strong></td>
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<td></td>
<td>Ashley Hallowell</td>
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<td>Dan Wilson</td>
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<td>Susan Williams</td>
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<td>Carrie Cremers</td>
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<td>10:00 AM</td>
<td><strong>Networking:</strong></td>
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<td></td>
<td>Eliza Ripplinger</td>
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<td>10:30 AM</td>
<td><strong>Adjourn</strong></td>
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# Wednesday, July 10, 2024

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<tbody>
<tr>
<td>1:15 PM</td>
<td>ATP Meter for Evaluating Water Line Sanitation</td>
<td>Kabel Robbins, <em>Butterball, LLC</em></td>
<td>Characterization of the predicted metagenome function of &quot;normal&quot; microbiota in chicken intestines</td>
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<td>Maggie Thompson</td>
<td>Ruediger Hauck, <em>Auburn University</em></td>
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<td>1:30 PM</td>
<td>Hatchery investigations: proposing a protocol to maximize insight and efficiency.</td>
<td>Isabella Hannay, <em>Mississippi State University</em></td>
<td>Transcriptome analysis of the jejunal mucosa of broiler chickens with subclinical necrotic enteritis fed diets containing varying calcium concentrations and limestone particle sizes</td>
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<td>Rana Waqar Tabish, <em>Auburn University</em></td>
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<tr>
<td>1:45 PM</td>
<td>A 12-Year Retrospective on Hatchery Applied Vaccines in the Layer Industry</td>
<td>Ian Rubinoff, <em>Hy-Line North America</em></td>
<td>Identifying chicken <em>Lactobacillus</em> strains possessing immunomodulatory and anti-<em>Clostridium perfringens</em> properties</td>
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<td>Ravi Kulkarni, <em>NC state University</em></td>
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<tr>
<td>2:00 PM</td>
<td>Development and Implementation of a Framework and Assessment Tool to Evaluate an Organization’s Antimicrobial Stewardship Policies and Practices</td>
<td>Ken Opengart, <em>3 Birds Consulting</em></td>
<td>Influence of coccidiosis and enteritis challenges on diet productive energy and economics in broilers</td>
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<td>Diego Martinez, <em>University of Arkansas</em></td>
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<td>2:15 PM</td>
<td>Overview of the AVMA Guidelines for the Depopulation of Animals and the revision process</td>
<td>Cia Johnson, <em>AVMA</em></td>
<td>Effect of a blend of organic acids (short-chain fatty acids) and oregano oil on gut morphology growth performance and lymphoid organs of broiler chicken</td>
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<td>Frank Ayala-Limaylla, <em>Laboratorios Drogavet SAC</em></td>
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<td>2:30 PM</td>
<td>CRISPR: An easy button for disease mitigation?</td>
<td>Michelle Kromm, <em>Food Forward LLC</em></td>
<td>Effect of <em>Campylobacter jejuni</em> and <em>Campylobacter coli</em> co-colonization on the cecal environment in turkeys</td>
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<td>Silke Rautenschlein, *Clinic for Poultry, University of Veterinary Medicine Hannover</td>
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<td>Jaime Ruiz, <em>Elanco Animal Health</em></td>
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<td>3:00 PM</td>
<td>Break</td>
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<td>3:15 PM</td>
<td>Committee Meetings (See Page 7)</td>
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<td><strong>Thursday, July 11, 2024</strong></td>
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| **8:00 AM** | Control of Fowl Cholera in Commercial Layer type birds with Siderophore Receptor and Porin Protein Vaccine  
Ivan Alvarado, *Merck Animal Health* |
| **8:15 AM** | **Rimler Memorial Paper:** Evaluating the efficacy of novel inactivated and live vaccine approaches for the control of Spotty Liver Disease (SLD) caused by Campylobacter hepaticus in layer hens  
Roel Becerra, *University of Georgia* | Anthelmintic Support with Natural Products  
Philip Stayer, *Dr Phil Stayer Poultry Consulting, LLC* |
| **8:30 AM** | The Impacts of a Spotty Liver Disease (Campylobacter hepaticus) Autogenous Vaccine on Pasture Raised Production Systems  
Mark Mouw, *Wilson Veterinary Co.* | Effects of stress factors on histomoniasis in broiler breeder pullets  
Catherine Fudge, *University of Georgia* |
| **8:45 AM** | **Reed Rumsey Clinical Research Award Winner:**  
Protection of Broiler Chickens Against Necrotic Enteritis by Intrapulmonary Delivery of a Live Clostridium Perfringens Vaccine Employing Gut-Lung-Axis Concept  
Hemlata Gautam, *University of Saskatchewan* | Economic Impact of Bed Bug Infestation in Breeder Operations  
Aaliyah Gore, *North Carolina State University* |
| **9:00 AM** | Field evaluation of the efficacy of live E. coli and live Salmonella Typhimurium vaccination by parenteral administration in commercial layers  
Fernando Ruiz-Jimenez, *Zoetis* | Performance of Broiler Chickens Vaccinated with an In Ovo Coccidiosis Vaccine Compared to Broiler Chickens Treated with Anticoccidial Drugs in-Feed  
Joan Molist, *Laboratorios HIPRA S.A.* |
| **9:15 AM** | Optimising in ovo Herpesvirus of turkey (HVT) - vectored vaccines: Defining the role of the HVT vNr-13 protein in vitro in chicken embryo fibroblasts and in ovo in late stage embryonic tissues  
John Maurer, *Virginia Tech* |
| **9:30 AM** | Efficacy of a reverse-genetics derived vaccine against highly pathogenic avian influenza viruses from clade 2.3.4.4  
Leticia Frizzo da Silva, *Zoetis Veterinary Medicine Research and Development* | Phenotypic characterization of Castellaniella spp. associated with mortality events in commercial broiler breeders  
Tiffani Allen, *Poultry Diagnostic and Research Center, University of Georgia* |
| **9:45 AM** | Vaccination of Pullets with an Inactivated Chicken Astrovirus Isolated from a Clinical Case of White Chick Syndrome  
Jason Sousa, *University of Georgia - PDRC* | Efficacy of a Silane Quaternary Ammonia Compound (SiQAC) applied to feed trailers for inactivating low pathogenic avian influenza 15 days post-application  
JeJuan Bryant, *NCSU-CVM Veterinary Student* |
<p>| <strong>10:00 AM</strong> | <strong>Break</strong> | |</p>
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<td>10:15 AM</td>
<td>History Lecture: The History of Avian Reovirus</td>
<td>Grand Ballroom DEF</td>
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<td>History Lecture: The History of Avian Reovirus</td>
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<td>10:45 AM</td>
<td>Business Meeting</td>
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<td>12:00 PM</td>
<td>Lunch Break</td>
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<tr>
<td><strong>Topic</strong></td>
<td><strong>Reovirus</strong></td>
<td><strong>Diagnostics</strong></td>
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<tr>
<td><strong>Moderator</strong></td>
<td>Ben Wileman</td>
<td>Silke Rautenschlein</td>
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<tr>
<td>1:15 PM</td>
<td>Evaluation of Pathogenicity and Antigenicity of Turkey Reovirus Isolates</td>
<td>A molecular beacon with RT-LAMP can detect AOAV-1 and differentiate low virulence from virulent virus strains</td>
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<td>Milos Markis, AviServe LLC</td>
<td>Megan Mears, USDA</td>
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<tr>
<td>1:30 PM</td>
<td>Forgotten turkey avian reovirus isolates decipher naturally occurring co-infections of CRV and TRV in commercial turkeys.</td>
<td>Improved Efficiency by multiplexing Infectious Bronchitis Virus (IBV) Singleplex Assays</td>
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<td>Sonsiray Alvarez Narvaez, Southeast Poultry Research Laboratories</td>
<td>Ramhari Thapa, Ceva Animal Health</td>
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<tr>
<td>1:45 PM</td>
<td>Development of turkey reovirus specific ELISA</td>
<td>Development and Validation of New Differential qPCR Assays for Improved Diagnosis of Avibacterium paragallinarum in the Field</td>
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<tr>
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<td>Khaled Abosria, Department of Veterinary and Biomedical sciences, South Dakota State University</td>
<td>Mostafa Shelkamy, Iowa State University</td>
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<thead>
<tr>
<th>Topic</th>
<th>Avian Influenza</th>
<th>Diagnostics</th>
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<tbody>
<tr>
<td>2:00 PM</td>
<td>Investigating the Prevalence of Highly Pathogenic Avian Influenza (HPAI) Virus Among Migratory Wild Shorebirds in Iowa</td>
<td>Development of an Enzyme-Linked Immunosorbent Assay (ELISA) for detection and differentiation of Avibacterium paragallinarum infections</td>
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<td>Valerie Kim, Iowa State University</td>
<td>Mariela Srednik, Iowa State University</td>
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<td>2:15 PM</td>
<td>Viral Shedding and Environmental Dispersion of Clade 2.3.4.4B H5 High Pathogenicity Avian Influenza Virus in Ducks: Implications for Environmental Sampling in HPAI Surveillance</td>
<td>Development and Validation of New TaqMan Real-Time PCR assays for enhancing diagnosis of Spotty Liver Disease</td>
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<td>Jean-Luc Guerin, University of Toulouse</td>
<td>Eman Gadu, Iowa State University</td>
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<td>2:30 PM</td>
<td>Enhanced process to select avian influenza vaccines for protection against diverging field viruses</td>
<td>Field outbreak Investigation of Spotty Liver with Artificial Intelligence (AI) assisted Histology</td>
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<td>David Swayne, Birdflu Veterinarian, Watkinsville, Georgia, USA</td>
<td>Chaitanya Gottapu, University of Florida</td>
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<tr>
<td>2:45 PM</td>
<td>The effect of inactivated vaccines on highly pathogenic avian influenza virus shedding</td>
<td>Development of a Deep-Learning Artificial Intelligence Diagnostic Support Tool for Chicken Renal Histopathology</td>
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<td>Erica Spackman, US National Poultry Research Center, USDA-ARS</td>
<td>Adrea Mueller Slay, Charles River Laboratories; University of Georgia</td>
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<td>3:00 PM</td>
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<td>Time</td>
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<td>Avian Influenza</td>
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<td>3:15 PM</td>
<td>3:15 PM</td>
<td>Cross-Protection Study of Inactivated H5N1 2.3.2.1c Vaccine against Novel H5N1 2.3.4.4b Virus Circulating in Indonesia&lt;br&gt;Elly Setiawaty, PT Medion Farma Jaya</td>
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<td>3:30 PM</td>
<td>3:30 PM</td>
<td>Application of enzyme linked lectin assay (ELLA) for differentiation of infected from vaccinated animals (DIVA) in poultry for avian influenza&lt;br&gt;Sherif Ibrahim, South-East Poultry Research Laboratory (SEPRL), ARS-USDA</td>
</tr>
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<td>3:45 PM</td>
<td>3:45 PM</td>
<td>An update on the assessment of the risk of moving washed and sanitized eggs off a highly pathogenic avian influenza (HPAI) positive premises&lt;br&gt;Mickey Leonard, University of Minnesota</td>
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<td>4:00 PM</td>
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<td>Walks like MSD, talks like MSD, think...?&lt;br&gt;Kayla Niel, Penn State University Animal Diagnostic Laboratory</td>
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<td>4:15 PM</td>
<td>4:15 PM</td>
<td>Trials to evaluate safety and immunogenicity of HPAI vaccines for California condors&lt;br&gt;David Suarez, Agricultural Research Service</td>
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<td>4:30 PM</td>
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<td>Improvement of Oxford Nanopore Influenza A Whole Genome Sequencing Protocol&lt;br&gt;Iryna Goraichuk, USDA-ARS-USNPRC</td>
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<td>4:45 PM</td>
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<td>Development of optimized CRISPR/Cas13 transgenes for the control of avian influenza virus in chicken cells&lt;br&gt;Karel Schat, Cornell University</td>
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<td>5:00 PM</td>
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<td>Adjourn</td>
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AAAP Online Program

Available July 1 – July 25 to all registrants. CE granted for viewing up to 10 hours. To access go to https://aaap.mclms.net/en/

Avian Influenza

911 Poultry Call: we have a HPAI positive
Eric Orozco, Butterball, LLC

How the Ducks Stole Thanksgiving: A Natural HPAI Infection in Raised for Release Mallard Ducks
Emily Pittman, Georgia Poultry Laboratory Network

Bacteriology

Circulation of non-pathogenic Avibacterium paragallinarum in the USA confounds the current diagnostics
Mohamed El Gazzar, Iowa State University

The Use of a Bacterial Litter Amendment to Delay Gangrenous Dermatitis and Reduce Barn Ammonia Levels
Meagan Abraham, Jennie-O Turkey Store

Nanopore MinION sequencing of emerging Castellaniella spp. associated with mortality in broiler breeders
Yi Chen Luo, Department of Infectious Disease, College of Veterinary Medicine, The University of Georgia

Case Report

An Unusual Case of Diphtheritic Pox in a Small Commercial Layer Flock
Jarra Jagne, Cornell University

Know your neighbors - Mycoplasma gallisepticum and Mycoplasma synoviae dual infection in broiler breeders
Karen Grogan, UGA PDRC

Atypical Presentation of Streptococcus Infection in Commercial Turkey Poults
Elise Gerken, Butterball, LLC
Neurologic Signs in Broilers Associated with Myopathy Lesions
Sabrina Hurst-Proctor, Gaydos Technical Services

Increased Incidence of Rickets in Broilers and Thin Eggshells in Broiler Breeders
Thomas Gaydos, Gaydos Technical Services

Case Report: _R_ emerella _anatipestifer_ Outbreak in Breeder Ducklings
Alexander Strauch, Four Star Veterinary Service

Daniel Wilson, Wilson Vet Co.

Cloacitis in a commercial layer facility attributed to metabolic alkalosis: identification and resolution
Montana Oubre, dsm-firmenich

Diagnostics

Use of Next Generation Sequencing for the diagnosis of poultry tumor viral diseases
Isabel Gimeno, North Carolina State University

Cytopathologic diagnosis of inclusion body hepatitis in chickens via Romanowsky staining of liver impression smears
Kathryn McCullough, Department of Pathology, College of Veterinary Medicine, University of Georgia

Non-invasive sampling for early detection and surveillance of avian reovirus infection in turkey flocks
Mohamed Selim, South Dakota state university

Use of feather pulp in the diagnosis of Marek's disease: viral replication and immunopathological characterization
Federico Bonorino, Universidad de León

Parasitology/Coccidiosis

The Effect of High Dose Level of Amprolium Following Prolonged Use of Low Dose Level
Leslie Johnson, Huvepharma, Inc.

Intestinal Integrity Overview in Latin America from 2021 to 2023
Bauer Alvarenga, Elanco Animal Health

A Live Look at the HTSi Database and I2 Index
Francene Van Sambeek, Elanco Animal Health

Sources of Viable _Eimeria_ Oocysts to Young Chicks in Commercial Broiler Houses
Mark Jenkins, Agricultural Research Service, USDA
Histomoniasis and Coccidiosis Reduction with Herbal Extract Blend
Greg Mathis, Southern Poultry Research, Inc.

Field Trial Utilizing Fecal Egg Count Reduction Test to Assess Anthelmintic Resistance in a Commercial Tom Turkey Flock
Trent Eckle, Farbest Farms Inc.

Polyphenol and Saponin Combination in Coccidia Control
Katie Stumvoll, SilvaTeam US

Vaccinology

Serological Monitoring of a trivalent vector HVT-IBD-ILT vaccine in Layer Pullets under Field Conditions in Canada
Kevin Amini, Boehringer Ingelheim Animal Health Canada Inc.

A Novel Application Procedure for Applying Vaccines Via Gel Droplets on the Farm at Day of Age in Commercial Poultry
Kelli Jones, Ceva Animal Health

Development and characterization of HVT vector vaccines to control ND and IBD
Blanca Lupiani, Department of Veterinary Pathobiology, Texas A&M University

Field safety of in ovo and subcutaneous administration of HVT-ILT-IBD vaccine in commercial Broilers
Faris Jirjis, Merck Animal Health

Replication and early immune responses induced by various MD vaccines when administered in ovo in meat type chickens
Abdelhamid Fares, North Carolina State University, College of Veterinary Medicine

Evaluation of MDV-1 Vaccines in the Control of vv+MDV-induced Immunosuppression
Nagwa Khaled, NCSU

Assessment of Protection and Changes in the Splenic Immune Cellular Phenotypes in Meat-Type Chickens Vaccinated with HVT and Challenged with a vv+MDV Strain
Nagwa Khaled, NCSU

Wealth of Knowledge

“Staph” Problems Again: Synovitis and Broiler Breeder Livability
Maggie Thompson, AMT Poultry Health Consulting, LLC

The Life of an Extension Poultry Veterinarian: Lessons Learned from My Personal Journey
Nathaniel Tablante, University of Maryland College Park
AAAP Diversity and Inclusion (D&I) committee: Evolving to meet the changing demographics of AAAP members
Eliza Ripplinger, Best Veterinary Solutions

An overview on the AVMA Working Group on the Psychological Impacts of Humane Endings
Michelle Kromm, Food Forward LLC

AAAP Research priorities committee survey results
Stephen Williams, AAAP Research Priorities Committee

Is male grading a proper management tool to improve male uniformity and livability as well as production performance?
Jose Bruzual, Aviagen
Posters

Poster Session on Tuesday July 9 at 5:15 PM in Midway West

Antimicrobials & Antimicrobial Resistance

1. Agroforestry tree leaves as feed supplements for improving growth and as an alternative to antimicrobial drugs in poultry breed of Jammu and Kashmir, India.
   Mandi Singh Azad, Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu

2. Relationship between antimicrobial use and resistance in Salmonella, Campylobacter, E. coli and Enterococcus from an on-farm U.S. broiler production monitoring system: 2020-2023
   Randall Singer, University of Minnesota

3. Phenotypic and genotypic antimicrobial resistance profiling of Staphylococcus xylosus isolated from layer chicken barn bioaerosols in Alberta, Canada
   Awais Ghaffar, Faculty of Veterinary Medicine, University of Calgary

4. Trained immunity or innate immune memory induced by CpG-ODN to protect broiler chickens against bacterial diseases
   Iresha Subhasinghe, University of Saskatchewan

Avian Influenza

5. Evaluation of 5 and 10-day-old commercial Pekin ducklings (Anas platyrhynchos domesticus) naturally infected with H5N1 highly pathogenic avian influenza
   Veronica Nguyen, University of California, Davis

6. Safety and Antibody Response of a RNA Vaccine Against H5Nx HPAI in Commercial Ducks Reared in Field Conditions in France
   Christophe Cazaban, Ceva Animal Health

7. Environmental Sampling and Results on Multiple Turkey Farms with Highly Pathogenic Avian Influenza, from 2022 through 2023
   Carrie Cremers, Jennie-O

   Jiho Lee, SEPRL, USDA

9. Pathology and viral tissue distribution of high pathogenicity avian influenza H5N1 in wild black-headed gulls (Chroicocephalus ridibundus) in France
   Manuela Crispo, IHAP, ENVT, INRAE, University de Toulouse

10. Breeder farm biosecurity enhancements during the 2022-2023 HPAI outbreak
    Marissa Studinski, Select Genetics
11. Avian influenza virus replication in bone marrow-derived dendritic cells induce cytokine dysregulation with eventual cell death
Jongsuk Mo, USDA-ARS

12. A Focus on the Basics of the National Poultry Improvement Plan (NPIP) Avian Influenza Compartmentalization Program
Savannah Busby, USDA APHIS NPIP

13. Genetic identification of the HPAIV (H5N1) in domestic birds received at the Faculty of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Peru (2022-2024).
Rosa Gonzalez, Universidad Nacional Mayor de San Marcos

14. Active surveillance of Avian Influenza Virus from wild birds in Peru after highly pathogenic H5N1 subtype emergence (2023-2024)
Gina R. Castro-Sanguinetti, Universidad Nacional Mayor de San Marcos

15. Monitoring of commercial Layers vaccinated with a rHVT H5 vaccine in Peru
Claudia Carranza, Ceva Salud Animal Peru

16. Efficacy of an inactivated avian influenza H5N1 vaccine in layer hens
Melanie Caballero, R&D Quimtia

17. Development of an Inactivated Avian Influenza Virus Vaccine against local highly pathogenic H5N1 isolated in Peru
Melanie Caballero, R&D Quimtia

18. Update on Mexican lineage H5N2 low pathogenic avian influenza virus
David Suarez, Agricultural Research Service

Bacteriology

19. Correlation between Clostridium perfringens spore load and prevalence of netB-positive isolates in the poultry environment and necrotic enteritis on broiler chicken farms
John Maurer, Virginia Tech

20. Impact of a Postbiotic Containing Saponin, with or without Vaccination, on the Mitigation of Colibacillosis in Broilers Challenged with Avian Pathogenic Escherichia coli Serotype O78
Evan Chaney, Cargill, Inc.

21. In-vitro Bacillus-based probiotic screening against field Campylobacter hepaticus isolates
Kay Russo, Chr Hansen

22. Using an Experimental Blend of Mono- and Di-glycerides in the Starter Phase for Efficacy Against a Pathogenic Enterococcus cecorum Isolate in Broilers
Matthew Jones, Southern Poultry Research Group, Inc.

24. Characterization of emergent Avibacterium paragallinarum strains in Brazil
Priscila Diniz Lopes, Vaxxinova Brazil

25. In-Vitro Evaluation of a Blend of Three Direct-Fed Microbial Bacillus Strains to Inhibit the Growth of Multiple Enterococcus cecorum and Enterococcus faecalis Field Isolates from Several Commercial Chicken Companies
Blair Telg, Phibro Animal Health

26. Ecology of Avian Pathogenic Escherichia coli in Commercial Turkey Production Across Time, Space, Tissue, and Vaccination Status
Lauren White, University of Minnesota

27. Identification, typing and antimicrobial susceptibility of Gallibacterium anatis isolates from Colombia.
Vladimir Morales Erasto, Facultad de Medicina Veterinaria y Zootecnia - Universidad Nacional Autónoma de México

28. Identification and typing of Avibacterium paragallinarum isolates obtained from commercial laying hens in Colombia.
Vladimir Morales Erasto, Facultad de Medicina Veterinaria y Zootecnia - Universidad Nacional Autónoma de México

29. Whole Genome Sequencing and Characterization of Enterococcus faecalis isolated from Pullet Layers with Growth Depression and Amyloid Arthropathy.
Aaliyah Gore, North Carolina State University

30. Mycoplasma synoviae Genotyping and Phylogenetic Analysis: A Comprehensive Study of Vlha Gene Variation in the Middle East
Husam Bakri, Vaxxinova International

Francisco Perozo, Boehringer Ingelheim

32. The Effect of Sample Pooling on the Detection of Mycoplasma gallisepticum and Mycoplasma synoviae by Real-time PCR
Michael Davis, UGA Poultry Diagnostic Research Center
Case Reports

33. Weather or Management: A Series of Erysipelas Cases in Commercial Turkeys During an Unseasonable Midwest Winter
Ashley Poissant, Jennie-O Turkey Store

34. Case Report: Glaucoma, Corneal Edema, Cataracts, and Retinal Degeneration in Broiler Breeder Chickens
James Davis, Georgia Poultry Laboratory Network

35. Avian Coryza and Laryngotracheitis co-infection in layer chicken: A case report
Ahmed Achhal, Clinique vétérinaire Tit Mellil

36. Outbreaks of duck viral enteritis in breeding mallards for the British game sector in 2023
Christopher Poulos, Pathology Department, Animal and Plant Health Agency

37. Ocular Marek’s Disease in a Black Shouldered Peafowl
Hailey Quercia, Virginia Department of Agriculture and Consumer services

Diagnostics

38. Modified Extraction Method Reduced Variation in Feather Corticosterone Replicates In Combination With High Extraction Efficiency
Nikolas Faust, Poultry Science Department, Texas A &M University

39. Nanopore Adaptive sampling: a new tool for in silico enrichment for respiratory pathogens from clinical samples
Maria Chaves, Iowa State University

40. New Infectious Bronchitis indirect ELISA, based on well conserved recombinant protein, for improved detection of live vaccines and challenge including variant strains
Rafael Forero, Innovative Diagnostics

41. Rapid Disease Diagnostics in Broiler Chickens Using Metabolomics
Asha Ranaraja, University of Saskatchewan

42. Advantages of Genotyping Infectious laryngotracheitis virus (ILTV) from Clinical Samples Using MinION
April Skipper, University of Georgia

43. Enhancing Diagnostic Efficiency: Implementation of a Multi-Laboratory Platform for Poultry Diagnostics
Dimitri Popov, Aggio

44. Optimizing Metagenomic Approaches for Enhanced Food Safety in Poultry Production Environment.
Mostafa Ghanem, University of Maryland, College Park
45. Use of High-Resolution Melting Point RT-PCR for Confirming the Effectiveness of Two Live IB Vaccine Strains Application When Administered Simultaneously at the Hatchery and at Farm Level in Layers
Francisco Rios-Cambre, *MSD Salud Animal Mexico*

46. Looking beyond implementing Oxford Nanopore Technologies (ONT) in poultry diagnostics: Lessons Learned from Years of Working with ONT
Amro Hashish, *Iowa State University*

47. IBV molecular surveillance using Oxford Nanopore MinION sequencing
Renato Luciano, *Biological Institute, Advanced Center of Research and Development for Poultry Health*

Sara Cooper, *Georgia Poultry Laboratory Network*

49. Use of a new veterinary diagnostic tool for ELISA titer data analysis and interpretation
Reshma Ramachandran, *Professional Services Veterinarian-II*

50. HVT-NDV hatchery vaccination evaluation using a fusion protein-specific ELISA
Duane Murphy, *Farbest Farms, Inc.*

51. Developing Third Generation Sequencing Assays to Rapidly Analyze Whole Genome and Hexon Genotypes from Field Samples and Isolates of Fowl Adenovirus
Derek Moormeier, *Ceva Animal Health*

52. Incidence of airsacculitis in newly hatched broiler chicks in Brazil: possible causes and potential consequences
Jorge Chacon, *Ceva Animal Health - Veterinary Services, Brazil*

53. Developing a novel method for sequencing the whole genome of infectious bursal disease virus
Julia McElreath, *Ceva Animal Health*

Guillaume Croville, *University of Toulouse*

55. Evaluating the role of Vitamin E in Turkey Degenerative Myelopathy Syndrome
Jonathan Elissa, *Penn State University*

**Enteric Health**

56. Colonization of Probiotic Bacteria in the Intestine of Chicken Embryos Following Coarse Spray on Incubating Eggs
Mihiprabha Rathnayake, *University of Saskatchewan*

57. Effect of RfC in the relative genetic expression of mRNA for: IgG, IgM, and INF γ, and histomorphometry in the intestine of broiler chickens.
Sebastian Mena, *Dimune, Veterinary Services*
58. Crude Protein and Starch Analyses of Fecal Feed Particles obtained from 60 Day-old Broilers
Samuel Christenberry, *Alabama Veterinary Diagnostic Laboratory*

59. Ex vivo assessment of the direct and indirect antimicrobial capacities of glycerides of lauric acid using gastrointestinal fluids
Wanderley Quinteiro-Filho, *Adisseo LATAM*

60. Effect of Bacillus subtilis DSM29784 secreted metabolites on poultry resilience
Wanderley Quinteiro-Filho, *Adisseo LATAM*

61. Microbiome Changes and Horizontal Transmission of Salmonella infantis in Broilers Consuming Feed Treated With Feed Sanitizers, Organic Acid Blends, Probiotics and Combinations
Enrique Montiel, *Anitox Corporation*

62. Microbiome Shifts in Birds Fed Quillaja saponaria and Yucca schidigera Biomass that are Related to Performance Outcomes
Luis Gomez, *Phibro Animal Health Corporation*

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**Infectious Bronchitis Virus**

63. Detection of Avian Infectious Bronchitis GI-23 (Variant 2) Virus in Mexico During 2023
Juan Carlos Valladares de la Cruz, *Phibro Animal Health*

64. Epidemiological assessment of Infectious Bronchitis Virus after the detection of strains of the GI-23 lineage in Brazil
Jose Emilio Dias, *Phibro Animal Health, Instituto Federal Catarinense, Concórdia – SC, Brazil*

65. Reduction on airsacculitis condemnations in commercial broiler and griller flocks after introduction of homologous vaccine against IBV GI-23 lineage in Brazil
Josiane Griebeler, *MSc. In veterinary science in Poultry Health - UFRGS*

66. Improvement in the airsacculitis condemnation, antibiotic therapy, and mortality after introduction of a homologous vaccine against IBV - Var 2 (IS/1494/06 strain)
Andre Marca, *DVM, University of Santa Catarina State (UDESC) - Brazil*

67. Evaluation of Two Bronchitis Vaccines under field conditions
Lucas Colvero, *MSD Saúde Animal*

68. Efficacy of TAbic® IBVAR206 vaccine against challenge with Infectious Bronchitis Virus BR-1 field strain in broiler chickens
Dana Goldenberg, *Phibro Animal Health*

69. Effect of spraying supplemental passive IBV antibodies in the protection against early IBV exposure in chicks
Rachel Jude, *Department of Population Health & Reproduction, University of California, Davis*
70. Identification and Geographic Location of Variant Strains of Infectious Bronchitis Virus in Broiler and Layer Farms in Peru 2023
Cesar Reyes, MSD Salud Animal - Peru

71. Cross-protection studies using GA08 and Mass type IBV vaccines against four different antigenic variant viruses currently circulating in poultry in the USA and Canada.
Mark Jackwood, Ceva Animal Health

72. Polymorphisms of S1 Sequence following Single or Dual Infectious Bronchitis Virus Strains Passage in Embryonated Chicken Eggs
Ming-Kun Hsieh, Graduate Institute of Microbiology and Public Health, National Chung Hsing University, Taiwan

Infectious Bursal Disease

73. Disease Awareness Program: Field survey of Infectious Bursal Disease Virus from broiler and layer farms in Peru during 2020 and 2022
Claudia Carranza, Ceva Salud Animal - Peru

74. Infection by Genogroup 4 strains of Infectious Bursal Disease Virus negatively affects mortality and feed conversion in commercial broiler flocks in Brazil
Jose Emilio Dias, Phibro Animal Health, Instituto Federal Catarinense, Concórdia – SC, Brazil

75. Generation of avian paramyxovirus type 1 TS09 strain-based recombinants expressing the VP2 protein of infectious bursal disease virus and a chicken cytokine as dual vaccines for in ovo vaccination
Qingzhong Yu, USDA/ARS, US National Poultry Research Center

76. Genetic and epidemiological characteristics of Infectious Bursal Disease Virus circulating in broiler flocks in Brazil
Jorge Chacon, Veterinary Services - Ceva Animal Health, Brazil

77. Datamining an infectious bursal disease field trial database comparing bursal atrophy effect on performance data, serology and biochemistry profile. Putting it all together Part 2
Daniel Venne, Ceva animal health

78. Molecular detection and characterization of emerging novel variant IBDV (genotype A2dB1b) in the Middle East prompts concern of spread of subclinical disease forms
Matteo Legnardi, Department of Animal Medicine, Production and Health (MAPS), University of Padova

79. Title Comparing recombinant infectious bursal disease virus vaccines: field observations, bursal size, DIVA serology, qPCR and sequencing. Putting it all together. Part 1
Brenna Tuer, Cargill Canada

80. Reassortant strains of infectious bursal disease virus (IBDV) belonging to genogroup A3B1 predominate in British broiler flocks
Vishwanatha Reddy Avalakuppa Papi Reddy, The Pirbright Institute or Keele University
81. Immunoprotection of broiler chickens against variant infectious bursa disease virus (varIBDV SK09) and associated B cell, T cell subsets and macrophage profile in the bursa of Fabricius
Ayumi Matsuyama, University of Saskatchewan

Parasitology/Coccidiosis

82. Effects of a proprietary essential oil product on body weight, feed conversion, and mortality of Ross 708 broilers that are either vaccinated or unvaccinated against coccidiosis at placement
Sharon Heins Miller, Devenish Nutrition LLC

83. Comparison of live attenuated and live-non attenuated vaccines on the safety of the administration of an overdose using the model of the European Monograph in SPF chickens
Joan Molist, Laboratorios HIPRA S.A.

84. Comparative analysis of broiler chicken productivity following vaccination with different coccidiosis vaccines and using different administration methods
Joan Molist, Laboratorios HIPRA S.A.

85. Use of an attenuated Eimeria vaccine in broilers with in-ovo application for on-farm hatching
Joan Molist, Laboratorios HIPRA S.A.

86. Single fecal collection for oocyst shedding does not predict infection for all Eimeria species
Robert Beckstead, Ceva Animal Health, LLC

87. Prevalance of Gastro-Intestinal Parasites in Backyard Chicken at Bharatpur-11, Nepal
Naresh Sah, Nepal polytechnic Institute, College of Veterinary Science

88. Leucocytozoonosis: Diagnosis and PCR analysis in avian species in Canada
Emily Martin, Animal Health Laboratory, University of Guelph

Reovirus

89. Understanding the variability of avian reovirus through adaptation attempts of the virus by serial passages in cell culture and embryonated chicken eggs
Abdul Rehman Bilal, Department of Population Health and Reproduction, School of Veterinary Medicine, UC Davis

90. Determination of Purity of an Avian Reovirus Isolate following Plaque Purification
Zubair Khalid, Auburn University

91. Amino Acid Sequence Confirmation and Peptide Analysis of Avian Reovirus Proteins by Mass Spectrometry
Steven Conrad, USDA
92. Construction of recombinant Marek’s disease virus vaccine expressing sigma C proteins of avian reoviruses
Taejoong Kim, Southeast Poultry Research Laboratory, US National Poultry Research Center, USDA-ARS

93. Identification of the Role of Avian Reovirus Infection in Various Poultry Diseases in India
Namdeo Bulbule, Assistant General Manager

94. First Seroprevalence Survey of Avian Reovirus in Broiler Breeders Chicken Flocks in Morocco
Ahmed Achhal, Clinique vétérinaire Tit Mellil

95. Correlation Study Exploring the Relationship Between Maternal Titer and Maternal Antibody Levels in Turkeys for Reovirus
Evan VanBeusekom, Hendrix Genetics - Hybrid Turkeys LLC

96. Genotypic and pathological characterization of emerging avian reoviruses isolated from clinical cases in Georgia, USA
Sujit Mohanty, USDA-ARS

97. Proteomics of Avian Reovirus
Telvin Harrell, United States Department of Agriculture

Salmonella

98. Cross-protection conferred by a live-attenuated Salmonella Enteritidis vaccine against Salmonella Heidelberg and Salmonella Infantis challenge
Luiz Sesti, Ceva Animal Health

99. Evaluating Salmonella Serotype Bias in Various Enrichment Protocols
Katie Murray, Georgia Poultry Laboratory Network

100. A Novel Approach to the Salmonella ISR Genotyping of Field Isolates Using Nanopore Sequencing Technology
Scott Callison, Ceva Animal Health

101. Evaluation of different inactivated vaccines to control Salmonella on the performance and productivity of laying birds up to 37 weeks of age
Eva Hunka, Phibro Animal Health Corporation

102. Correlation between titers obtained in ELISA and Widal test for serological analysis of Salmonella groups B, C1 and D.
Eva Hunka, Phibro Animal Health Corporation

103. Live Salmonella Vaccine Compatibility with Competitive Exclusion Solution
Elizabeth Krushinskie, Food Safety Risk Management Consulting LLC
Vaccinology

104. HVT-ILT-IBD: A Double Recombinant HVT-Based Vaccine for Protection Against IBDV and ILTV Plus Marek’s Disease Virus
Paula Dyas, *Merck Animal Health*

105. Induction of protective mucosal immunity against avian coronavirus via nanoparticle-synchronized antigen and adjuvant delivery to the chicken Harderian gland
Hui-Wen Chen, *National Taiwan University*

106. Differences on Broilers Productive Performance Parameters Between Different Vaccination Protocols Against IBD and ND as Measured by a Statistical Analysis Model in Colombia
Camilo Andres Medina Santos

107. Comparison of two vaccination programs against fowl adenovirus serotype 8b (FAdV-8b) in broiler breeders in Peru
Bruno Garcia, *Ceva Animal Health Peru*

108. Efficacy of different inactivated vaccines against infection with the B serovar variant of Avibacterium paragallinarum from Argentina in laying hens
Joan Molist, *Laboratorios HIPRA S.A.*

109. Correlation between the spray dye levels on the body of broilers and the corresponding viral load in the trachea 6 days after vaccination against Infectious Bronchitis Virus
Jose Emilio Dias, *Phibro Animal Health, Instituto Federal Catarinense, Concórdia – SC, Brazil*

110. Evaluation of vaccine take in commercial broilers flocks vaccinated with a homologous vaccine against Infectious Bronchitis Virus GI-23 lineage in Brazil
Jose Emilio Dias, *Phibro Animal Health, Instituto Federal Catarinense, Concórdia – SC, Brazil*

111. Monitoring of a rHVT vaccine against Marek’s disease and Avian Influenza H5 in Broiler Breeders
Bruno García, *Ceva Animal Health Peru*

112. Effects of homologous vaccination against IBV GI-23 lineage on tracheal lesion, serology, antibiotic therapy, mortality, and airsacculitis condemnation in commercial broiler flocks in Brazil
Daiane Horn, *Universidade Federal do Paraná, Palotina - PR, Brazil*

113. Investigation of procedures and water quality impacting vaccine effectiveness in egg layers in Alberta
Muhammad Farooq, *University of Calgary*

114. Preliminary Evaluation of InvG as a Novel Salmonella Vaccine Candidate: Immunogenicity and Efficacy in Layer Chickens
Roshen Neelawala, *University of Florida*

115. Control of a Respiratory Complex in a Highly Challenged Region in Layers in Mexico
Francisco Rios-Cambre, *MSD Salud Animal Mexico*
116. Before and after comparison from using Nobilis® SG9R on a commercial layer, using the Friedman test for repeated measurements, ANOVA non parametric equivalent of repeated measurements
Camilo Andres Medina Santos

117. Evidence of booster response of rFP-gB (ILT) in high ILT prevalence areas in Peru
Claudia Carranza, Ceva Salud Animal - Peru

118. Mucosal and Serum Antibody Responses Elicited by Single Vaccination with Recombinant LaSota Virus Expressing IBV Spike in Chickens with NDV Maternal Antibodies
Camila Cuadrado, Department of Pathobiology, College of Veterinary Medicine, Auburn University

Virology

119. Respiratory and gastrointestinal microbiome analysis of chicken infected with infectious bronchitis virus (DMV/1639)
Heshanthi Herath, Faculty of Veterinary Medicine, University of Calgary

120. Inclusion Body Hepatitis (IBH) vaccines in Peru: an immunogenicity check
Claudia Carranza, Ceva Salud Animal - Peru

121. Vaccine Takes Evaluation of Turkey Herpesvirus vector - Newcastle Disease Recombinant Vaccine (HVT- ND) by Using on-site iiPCR Analyzer
Keat Fu, Aviagen Inc

122. US-UK Collab: Influence of vaccines, host genetics, and mutation rates on the evolution of infectious diseases
John Dunn, USDA-ARS, US National Poultry Research Center

123. Comparative Transcriptome Analysis of Chicken Embryos after Infection with Low Pathogenic Newcastle Disease Virus (LoNDV) from Wild Birds
Deepa Chaudhary, Auburn University

María Eliana Icochea D'Arrigo, Universidad Nacional Mayor de San Marcos

125. Detection of Infections Laryngotracheitis Virus (ILTV) circulating in broilers with and without clinical signs
Jose Linares, Ceva Animal Health

126. Identification and Functional Characterization of a Virokine Homologous to Chicken Interleukin-4 in Infectious Laryngotracheitis Virus
Stephen Spatz, US National Poultry Research Center, ARS-USDA

127. Sequence and phylogenetic analyses of chicken astroviruses (CAstVs) detected at Mississippi State University between 2016 to 2023 and associated with digestive and hatchability issues.
Alejandro Banda, Poultry Research and Diagnostic Lab Mississippi State University
128. Molecular characterization of emerging variants of turkey coronavirus associated with outbreaks in turkeys in 2023
Muhammad Luqman, South Dakota State University

Wealth of Knowledge

Elena Behnke, USDA APHIS VS NPIP

130. The Importance of Contact Time in Using Ultraviolet Light as a Disinfectant
Katherine Schaefbauer, Jennie-O Turkey Store

131. Multi-causal respiratory disease and co-infection profiles in Latin America (2nd semester 2023): Brazil, Colombia and Peru as examples
Adam Jbenyeni, Ceva Animal Health, France

132. Management of vaccination program against Infectious Bronchitis Virus as a tool to reduce antibiotic therapy in broilers in Brazil
Josiane Schuvank Maculan Salvo, Universidade Estadual do Centro Oeste (UNICENTRO) - Brazil

133. Developing Sterile Insect Technique (SIT) using Wolbachia for potential biocontrol of Litter beetles (Alphitobius diaperinus)
Teresa Dormitorio, Auburn University, Poultry Science Department

134. Significance of Biosecurity Audits in Addressing High Pathogenic Avian Influenza (HPAI) Challenges
Mostafa Ghanem, University of Maryland, College Park

135. The Great, the Good, the Untestable Serum
Jaime Hamrick, Georgia Poultry Laboratory Network

136. Safety in Necropsy: Human Protection for Poultry Dissection
Adriana Guzman, Georgia Poultry Laboratory Network

137. Part 2: NPIP Salmonella Program Overview Specific to Pullorum-Typhoid
Katy Burden, USDA NPIP
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