

2025 Pacific Rim Scientific Conference

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Symposium Sponsors

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President's Welcome



On behalf of the Poultry Science Association and its Board of Directors, it is my honor to welcome you to the first ever Poultry Science Association Pacific Rim Scientific Conference, being held in Macau, China. The Asia-Pacific region has become more and more important to the Poultry Science Association and its journals, and we look forward to four days of high-quality scientific presentations, the strengthening of existing relationships, and the development of new collaborations. Expect to hear engaging research presentations from leading scientists and students in the Asia-Pacific region and around the world. In addition, there is an outstanding lineup of symposia covering cutting edge knowledge in poultry nutrition, health, meat quality, welfare, genetics and physiology.

I would like to acknowledge the excellent work of our program co-chairs, Dr. Ning Yang (China Agricultural University, China) & Dr. Tom Porter (University of Maryland, United States of America). They and their international program committee, representing 7 countries and 3 continents, have done an outstanding job in bringing this meeting to fruition. I want to also acknowledge the excellent support of the Poultry Science Association staff: Andy Vance, Executive Director; Jon Cole, Director of Business Operations; Lyndsey Johnson, Director of Communications; David Busboom, Senior Managing Editor; Rebecca Smith, Senior Manager of Meetings & Events; Sydney Carr, Director of Operations; Isabella Woolsey, Member and Admin Services Manager, and Maggie Kraft, Conference Program Coordinator. This outstanding team has worked diligently behind the scenes to set up the Conference for success.

Finally, many thanks to our program sponsors – without their generous support, this meeting would not be possible. Please take a moment to look through the list of sponsors in the program book.

I look forward to meeting old friends and making new ones at the first Poultry Science Association Pacific Rim Scientific Conference!

Doug Korver

President 2025-2026

Poultry Science Association

Program Chair's Welcome



Dear Colleagues,

It is our pleasure to welcome you to Macau, China, for the inaugural Poultry Science Association Pacific Rim Scientific Conference. We are honored to co-chair the Organizing Committee for this event, which is composed of representatives from seven countries.

We anticipate this will be an outstanding meeting, with seven symposia on topics of relevance and interest to the poultry science community as well as over 200 scientific abstracts for oral and poster presentations.

The Pacific Rim Scientific Conference will provide an opportunity to discuss relevant topics and innovative research. It is our vision to create an interactive opportunity through this event to allow students and younger researchers to share their research with recognized scientists from around the world. We have included three social events that will allow for networking among attendees. The Opening Reception will be on Monday evening, the Poster Reception will be on Tuesday evening, and the Conference Celebration Banquet will take place on Wednesday evening.

We would like to offer our special thanks to the Organizing Committee, symposia chairs, section chairs, abstract reviewers, moderators, and judges, who have been greatly contributing to the scientific importance of this meeting.

We would like to sincerely thank the sponsors supporting this event. Without your support, this opportunity for scientific exchange across the vast Pacific Ocean would not be possible.

Thank you to the PSA staff for their tremendous help in making this event possible.

Finally, we would like to thank the Board of Directors of the Poultry Science Association. Without their bold initiative and support, this event would not be possible.

Welcome to Macau, China. We hope you have an exciting meeting!

Tom Porter & Ning Yang
Organizing Committee Co-Chairs

2025 Scientific Program Committee

Thank you to Tom Porter and Ning Yang as well as the Organizing Committee, section chairs, and abstract reviewers for their efforts to plan, organize, and finalize the many details of this program. Please take a minute to express your appreciation for their contributions when you see them at the conference.

Organizing Committee

Ning Yang, Co-Chair, China Agricultural University, China

Tom Porter, Co-Chair, University of Maryland, USA

In Ho Kim, Dankook University, South Korea

Sonia Liu, University of Sydney, Australia

Chuang Ma, President of the Asia-Pacific Federation of WPSA, China

Amonrat Molee, Suranaree University of Technology, Thailand

Takeshi Ohkubo, Ibaraki University, Japan

Guang-hai Qi, Chinese Academy of Agricultural Sciences, China

Karen Schwean-Lardner, University of Saskatchewan, Canada

Section Chairs

Animal Health: Ruediger Hauck, Auburn University, USA & Gregory S. Fraley, Purdue University, USA

Genetics & Genomics: Amonrat Molee, Suranaree University of Technology, Thailand & Huaijun Zhou, University of California Davis, USA

Immunology: Khaled Abdelaziz, Clemson University, USA & Alexander Yitbarek, University of Delaware, USA

Metabolism and Nutrition: Amino Acids, Vitamins and Minerals: Sonia Liu, University of Sydney, Australia & Olayiwola Adeola, Purdue University, USA

Metabolism and Nutrition: Enzymes and Feed Additives: In Ho Kim, Dankook University, South Korea & Rajesh Jha, University of Hawai'i at Manoa, USA

Metabolism and Nutrition: General Nutrition: Guang-hai Qi, Chinese Academy of Agricultural Sciences, China & Elijah G. Kiarie, University of Guelph, Canada

Microbiology and Physiology: Takeshi Ohkubo, Ibaraki University, Japan & Woo Kyun Kim, University of Georgia, USA

Poultry Management, Waste, and Well-Being: Karen Schwean-Lardner, University of Saskatchewan, Canada & Lilong Chai, University of Georgia, USA

Processing, Products, Meat and Egg Quality: Jiangxia (Katie) Zheng, Secretary of WPSA China Branch, China & Mary Anne Amalaradjou, University of Connecticut, USA

PSA Board of Directors

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2025 Scientific Program Leadoff Speakers

Section	Leadoff Speaker
WPSA Lecture: Poultry Diversity: From Genetics to Products	Ning Yang
General Nutrition: Advances in the use of prebiotics in poultry to modulate gut health	Rajesh Jha
Microbiology and Physiology: Adventures in poultry physiology: neuropeptides, hormones and other signaling molecules in the responses to stress, pathogens and in gastro-intestinal functioning	Colin Scanes
Amino Acids, Vitamins, and Minerals: Ca & P nutrition as influenced by vitamin D	Doug Korver
Processing, Products, Meat & Egg Quality: Combination of Hot Water Spray (HWS) and Subzero Saline Chilling (SSC) improved chilling efficiency, bacterial decontamination, and meat tenderness of broiler carcasses	Ike Kang
Animal Health and Immunology: Impacts of Eimeria vaccination on microbiome composition and function	Lisa Bielke
Enzymes and Feed Additives: Feed additives: Their role in poultry productivity, welfare, and environmental sustainability	Sunday (Tayo) Adedokun
Immunology, Microbiology and Physiology: Poultry immune responses to enteric challenges	Rami Dalloul
Animal Health: Exploring multiomics approaches for One Health-Driven poultry health	Anup Kollanoor Johny
General Nutrition: Developments and challenges in poultry nutrition	Edgar Oviedo-Rondon
Genetics and Genomics: Decoding the chicken genome's regulatory landscape for sustainable poultry production	Huaijun Zhou
Management, Waste, and Well-being: Visual laser enrichment for the broiler: What are the birds telling us?	Elizabeth Bobeck

PSA Pacific Rim Scientific Conference Room Assignments

Monday, October 13

Opening Ceremony Mayfair Ballroom - ABEF

Symposium: WPSA Lecture: Poultry Diversity:

From Genetics to Products Mayfair Ballroom - ABEF

Symposium: Myopathies in fast growing broilers:

Challenges to growers and the meat industry Mayfair Ballroom - ABEF

Student Competition: Metabolism and Nutrition: General Nutrition.....Ealing 6006, 6007, 6106, 6107

Student Competition: Microbiology and Physiology Mayfair I

Student Competition: Poultry Management, Waste and Well-Being Mayfair M

Poultry Management, Waste and Well-Being I..... Mayfair M

Metabolism and Nutrition: General Nutrition I.....Ealing 6006, 6007, 6106, 6107

Opening Reception & Poster PresentationsEaling Hall

Tuesday, October 14

Symposium: Mycoplasma, antibiotics in lay and

Anti-Microbial Resistance Mayfair Ballroom - EFG

Student Competition: Processing Products, Meat and Egg QualityMayfair M

Student Competition: Metabolism and Nutrition

Amino Acids, Vitamins and MineralsEaling 6006, 6106, 6007, 6107

Student Competition: Genetics and GenomicsMayfair I

Processing, Products, Meat and Egg QualityMayfair M

Metabolism and Nutrition:

Amino Acids, Vitamins and Minerals IEaling 6006, 6106, 6007, 6107

Symposium: Managing raw material quality, variability and digestibility for

optimum broiler performance and gut health..... Mayfair Ballroom - EFG

Student Competition: Animal Health and ImmunologyMayfair I

Student Competition: Enzymes and Feed Additives IMayfair M

Metabolism and Nutrition: Enzymes and Feed AdditivesMayfair M

Poster Reception & Presentations Ealing Hall

Wednesday, October 15

Symposium: Steering nitrogen emission from poultry production

through precision nutrition Mayfair Ballroom - AB

Metabolism and Nutrition: Amino Acids, Vitamins and Minerals II...Ealing 6006, 6106, 6007, 6107

Animal HealthMayfair M

Immunology, Microbiology & PhysiologyMayfair I

**Symposium: Animal Welfare around the world -
different perspectives on a shared goal.** Mayfair Ballroom - AB

**Symposium: The current and future perspective of ChickenGTEx
Project and its applications in precision breeding** . . . Mayfair Ballroom - EFG

Metabolism and Nutrition: Enzymes and Feed Additives II . . . Ealing 6006, 6106, 6007, 6107

Awards Celebration Brixton Hall

Thursday, October 16

**Symposium: Hormonal regulation of growth and body
composition in poultry.** Mayfair Ballroom - AB

Metabolism and Nutrition: General Nutrition II Ealing 6006, 6106, 6007, 6107

Poultry Management, Waste, and Well-Being II Mayfair M

Genetics and Genomics. Mayfair I

Closing Ceremony Mayfair Ballroom - EFG

Meeting Details

Registration
Mayfair Grand Ballroom Pre-Function

Monday, October 13 8:00 AM - 6:00 PM

Tuesday, October 14..... 7:30 AM - 6:00 PM

Wednesday, October 15..... 7:30 AM - 6:00 PM

Thursday, October 16 7:30 AM - 1:30 PM

Presentation Upload & Preview Room
Soho 15

Monday, October 13 8:00 AM - 6:00 PM

Tuesday, October 14..... 7:00 AM - 6:00 PM

Wednesday, October 15..... 7:00 AM - 6:00 PM

Thursday, October 16 7:00 AM - 12:00 PM

Conference Information

Oral Abstract Presentations

Presentations shall not exceed 12 minutes, followed by 3 minutes of discussion for questions and answers. All presentation slides must be in English. No language translation will be provided during abstract presentations.

Student Competition Presentations

Students participating in the Student Award of Excellence Competition will be presenting their abstracts on Monday and Tuesday. Presentations shall not exceed 12 minutes, followed by 3 minutes of discussion for questions and answers. The presentation must be in English and the slides must be in English. Questions may be answered in the language of the student's choice. Students presenting in a language other than English will not be eligible for the competition.

Presentation Uploads

All presenters are encouraged to upload their presentations online. If you do not upload it online, you must upload your presentation in the Soho 15 before the relevant onsite upload deadline (shown below). Presentations can be uploaded from USB sticks or drives. The deadline for uploading each presentation is based on the day and time of the session it will be presented in. You are encouraged to upload your presentation as early as possible. No presentations will be uploaded while the session is in progress, between presentations, or during breaks. Files will not be accepted via e-mail.

Presentation Upload Deadlines

Day/Time of Presentation	Upload Deadline
Monday Afternoon (PM)	12:00 PM Monday
Tuesday Morning (AM)	6:00 PM Monday
Tuesday Afternoon (PM)	12:00 PM Tuesday
Wednesday Morning (AM)	6:00 PM Tuesday
Wednesday Afternoon (PM)	12:00 PM Wednesday
Thursday Morning (AM)	6:00 PM Wednesday

Preview Room

Soho 15 is available for presenters to preview their presentations. The use of personal computers will only be allowed in the Preview Room. Their use in session rooms will not be permitted.

Language Translation

Mandarin and English will be available for the Opening and Closing Sessions and the Symposia presentations only. Abstract presentations will not be translated.

Photo Policy

Recording presentations or capturing PowerPoint images via cameras or cell phones is strictly prohibited.

Name Badges

Wear your meeting name badge! It is your admission to sessions, receptions, and meals.

Special Events

Opening Reception

A welcome reception will be held at 6:00 PM on Monday in Ealing Hall. This is an excellent opportunity to meet other professional meeting attendees.

Awards Celebration

Please join us as we share an evening of honoring the student award winners. All meeting participants are welcome to attend this event. The celebration dinner will be held on Wednesday evening beginning at 6:00 PM in Brixton.

Poster Reception

A poster reception will be held at 5:00 PM on Tuesday in Ealing Hall. This event offers a valuable opportunity to engage with fellow professional attendees and to review posters showcasing the work of accomplished scientists from around the world.

Anitox Lunch and Learn

Optimizing Poultry Health and Productivity through Feed Sanitation in the Absence of AGPs

The global restriction and removal of antibiotic growth promoters (AGPs) have heightened the need for alternative strategies to maintain poultry health, performance, and profitability. One critical yet often underutilized approach is feed sanitation. Contaminated feed is a proven vector for pathogen introduction, including *Salmonella*, *E. coli*, and *Clostridium* spp., which can compromise gut integrity, suppress performance, and increase disease risk.

This presentation explores the scientific and practical role of feed sanitation as a cornerstone of modern poultry production systems. We will review the microbiological risks associated with untreated feed, outline the mechanisms by which effective feed sanitation reduces pathogen load, and present data from controlled trials demonstrating improvements in feed conversion, weight gain, and overall flock uniformity. Special attention will be given to economic outcomes, including cost-benefit analysis and return on investment under commercial conditions.

Attendees will gain an evidence-based understanding of how feed sanitation complements biosecurity, vaccination, and nutrition programs to optimize bird health and maximize production efficiency in AGP-free environments. Practical implementation strategies and field results will highlight how this intervention supports both regulatory compliance and sustainable profitability.

Poultry Science Association Information

Membership

Membership in the Poultry Science Association (PSA) is not required to attend this meeting. However, PSA membership can be both beneficial and cost effective. PSA members receive discounted publishing charges in ***Poultry Science***[®], ***The Journal of Applied Poultry Research*** and ***European Poultry Science***, and the opportunity to attend the PSA meetings at discounted registration rates.

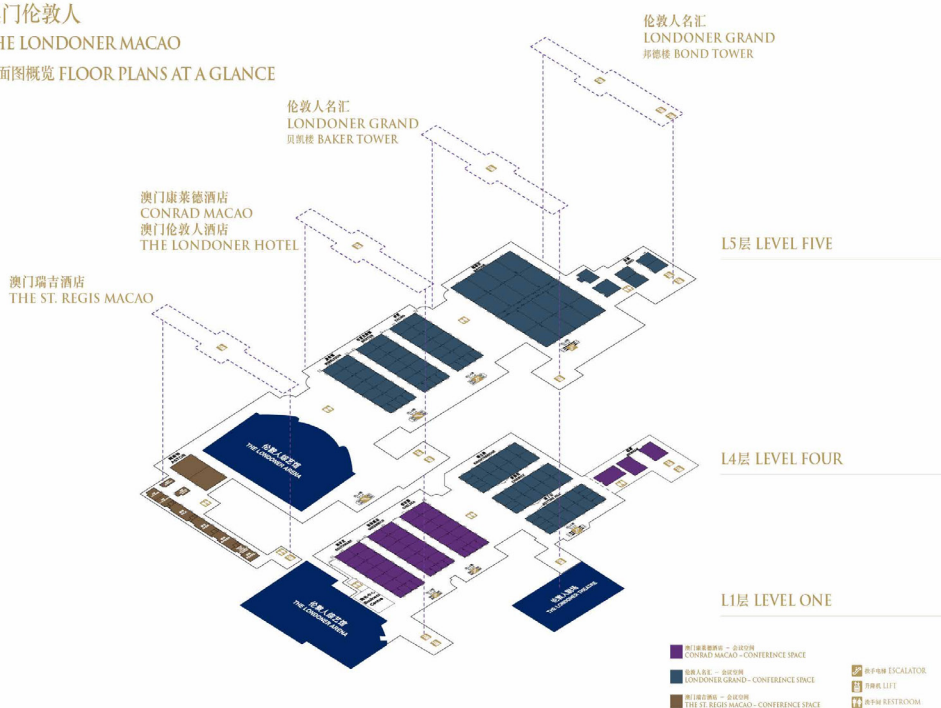
Please email membership@poultryscience.org for more information.

Londoner Macao Floor Plan

澳门伦敦人

THE LONDONER MACAO

平面图概览 FLOOR PLANS AT A GLANCE



伦敦人名汇 - 宴会厅及会议厅

LS層 LEVEL FIVE



項目名稱 Project Name	序號 No.	合約編號 Contract No.		合約日期 Contract Date		可容納人數 Capacity				
		主場 Home	客場 Away	主場 Home	客場 Away	樓上 Upper	樓下 Lower	總數 Total	備註 Remarks	
維多利亞體育館 VICTORIA GRAND BALLROOM										
香港賽馬會 Jockey Club	1	4,811	-	-	-	-	-	-	-	
1 樓 101-102 室 1st Floor Grand	2	5,732	481,131	5,450	2,500	5,265	2,075	4,390	2,500	
1 樓 103-104 室 1st Floor Grand	3	5,732	481,131	5,450	2,500	5,450	2,099	3,350	4,015	
1 樓 105-106 室 1st Floor Grand	4	5,732	481,131	5,450	2,500	2,693	1,257	1,436	2,200	
1 樓 107-108 室 1st Floor Grand	5	5,732	481,131	5,450	2,500	1,619	951	1,440	1,000	
1 樓 109-110 室 1st Floor Grand	6	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 111-112 室 1st Floor Grand	7	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 113-114 室 1st Floor Grand	8	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 115-116 室 1st Floor Grand	9	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 117-118 室 1st Floor Grand	10	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 119-120 室 1st Floor Grand	11	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 121-122 室 1st Floor Grand	12	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 123-124 室 1st Floor Grand	13	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 125-126 室 1st Floor Grand	14	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 127-128 室 1st Floor Grand	15	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 129-130 室 1st Floor Grand	16	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 131-132 室 1st Floor Grand	17	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 133-134 室 1st Floor Grand	18	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 135-136 室 1st Floor Grand	19	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 137-138 室 1st Floor Grand	20	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 139-140 室 1st Floor Grand	21	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 141-142 室 1st Floor Grand	22	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 143-144 室 1st Floor Grand	23	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 145-146 室 1st Floor Grand	24	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 147-148 室 1st Floor Grand	25	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 149-150 室 1st Floor Grand	26	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 151-152 室 1st Floor Grand	27	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 153-154 室 1st Floor Grand	28	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 155-156 室 1st Floor Grand	29	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 157-158 室 1st Floor Grand	30	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 159-160 室 1st Floor Grand	31	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 161-162 室 1st Floor Grand	32	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 163-164 室 1st Floor Grand	33	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 165-166 室 1st Floor Grand	34	5,732	481,131	5,450	2,500	1,257	475	966	1,742	
1 樓 167-168 室 1st Floor Grand										

Monday, October 12, 2025

Opening Ceremony

Mayfair A-B-E-F

11:00 AM

Chairs: Tom E. Porter, University of Maryland

Ning Yang, China Agricultural University

WPSA Lecture:

Poultry Diversity: From Genetics to Products

Mayfair A-B-E-F

Chair: Chuang Ma, President, Asian Pacific Federation of WPSA

12:00 PM 223S **WPSA Lecture: Poultry Diversity: From Genetics to Products**
Ning Yang*¹¹ *China Agricultural University, Beijing, China*

Symposium: Myopathies in fast growing broilers: Challenges to growers and the meat industry

Mayfair A-B-E-F

Chair: Shai Barbut, University of Guelph

2:00 PM 224S **Multi-Omic Insights: Comprehensive views of biological processes associated with growth-related myopathies**
Yuwares Malila*¹², Yanee Srimarut² ¹*CPF Food Research and Development Center, Phra Nakorn Si Ayutthaya, Thailand;*
²*National Center for Genetic Engineering and Biotechnology, Pathum Thani, Thailand*

2:40 PM 225S **Meat quality: A primary breeder's approach.**
Richard A. Bailey*¹¹ *Aviagen Ltd, Edinburgh, United Kingdom*

3:20 PM 226S **Addressing myopathies in a broiler breeding program**
William Herring*¹, Jesus Arango¹, Marcos Yamaki¹, Vivian Breen¹¹ *Cobb-Vantress, Siloam Springs, Arkansas, United States*

4:00 PM **Break**

4:30 PM 227S **Nutritional aspects of myopathies in fast growing broilers**
Doug Korver*¹² ¹*Alpine Poultry Nutrition, Inc., Edmonton, Alberta, Canada;* ²*University of Alberta, Edmonton, Alberta, Canada*

5:10 PM 228S **Global perspectives of myopathies in fast growing broilers**
Shai Barbut*¹¹ *University of Guelph, Guelph, Ontario, Canada*

5:50 PM **Roundtable discussion**

Student Competition:
Metabolism and Nutrition: General Nutrition
Ealing 6006-6007-6106-6107
Moderators: Elijah Kiarie, University of Guelph
Guang-hai Qi, Chinese Academy of Agricultural Sciences

- | | | |
|---------|---|---|
| 2:00 PM | 1 | <p>Interactive effect of breed, sex, and dietary nutrient density on nutrient intake and digestibility in straight-run broiler chickens.</p> <p>Carria Xie*¹, Shemil Macelline¹, Sonia Y. Liu¹, Mehdi Toghyani¹
 ¹<i>The University of Sydney, Sydney, New South Wales, Australia</i></p> |
| 2:15 PM | 2 | <p>The effect of lard and chicken fat ratio on production performance and nutrient utilization in meat ducks</p> <p>Jiali Su*¹, Keying Zhang¹, Shiping Bai¹, Jianping Wang¹, Xuemei Ding¹, Yue Xuan¹, Qiufeng Zeng¹ ¹<i>Institute of Animal Nutrition, Key Laboratory for Animal Disease-Resistance Nutrition of China Ministry of Education, Sichuan Agricultural University, Chengdu, China</i></p> |
| 2:30 PM | 3 | <p>Study on the effects of prevotella and protein succinylation modification on liver fat metabolism</p> <p>Shuang Liu*¹, Hai Lin ¹<i>Shandong Agricultural University, Tai'an, China;</i> ²<i>Shandong Agricultural University, Tai'an, Shandong, China</i></p> |
| 2:45 PM | 4 | <p>Effect of cyclic heat stress on biochemical parameters and some biomarkers of oxidative stress in broiler chickens fed with diets containing palm kernel meal</p> <p>Ahmed Mijiyawa*²¹, Elham Ghasghayi², Nadiedjoa Yendouchamtchié²¹, Clarice M. Temhouli²¹, Maxwell A. Okai², Hai Lin², Wéré Pitala¹ ¹<i>Regional Center of Excellence for Avian Sciences, University of Lome, Lome, Togo;</i> ²<i>Shandong Agricultural University, Tai'an, Shandong, China</i></p> |
| 3:00 PM | 5 | <p>Effect of ambient temperature on dietary energy partitioning in broilers determined using computer-controlled closed-circuit respiratory calorimetry chambers</p> <p>Hansuo Liu*¹, Feng Zhao¹, Yuming Wang¹, Jingjing Xie¹ ¹<i>Institute of Animal Science of Chinese Academy of Agricultural Sciences, Beijing, China</i></p> |
| 3:15 PM | 6 | <p>Comparison of digestive physiology and starch digestive dynamics in broiler chickens fed with diverse dietary starch sources</p> <p>Xiaomeng Ye*¹, Feng Zhao¹, Changlin Guo¹, Yuming Wang¹, Jingjing Xie¹ ¹<i>Institute of Animal Science, Chinese Academy of Agricultural Sciences, Beijing, China</i></p> |
| 3:30 PM | 7 | <p>Fermented palm kernel meal modulates gut barrier and inflammatory gene expression via short-chain fatty acid production in broilers</p> <p>Dimas Fakhruddin*¹, Asih Kurniawati¹, Muhsin A. Anas¹ ¹<i>Gadjah Mada University, Sleman Regency, Yogyakarta Special Region, Indonesia</i></p> |

Student Competition: Microbiology and Physiology Mayfair I

Moderators: Woo Kyun Kim, University of Georgia
Takeshi Ohkubo, Ibaraki University

- | | | |
|---------|----|--|
| 2:00 PM | 8 | <p>Adventures in poultry physiology: neuropeptides, hormones and other signaling molecules in the responses to stress, pathogens and in gastro-intestinal functioning</p> <p>Colin Scanes*¹ <i>Scanes Technology and Research LLC, Milwaukee, Wisconsin, United States</i></p> |
| 2:30 PM | 9 | <p>Molecular epidemiology of avian influenza viruses and avian coronaviruses in environmental samples from migratory bird inhabitants in Bangladesh</p> <p>Most. N. Khatun*¹, Shadia Tasnim¹, Md. Riabbel Hossain*¹, Rokshana Parvin¹, Emdadul H. Chowdhury¹, Muhammad T. Hossain² <i>¹Bangladesh Agricultural University, Mymensingh, Bangladesh; ²Bangladesh Agricultural University, Mymensingh, Bangladesh</i></p> |
| 2:45 PM | 10 | <p>Co-adaptation of the symbiotic microbiome and host genome across altitudes in chickens</p> <p>Jiaming Jin*¹, Chaoliang Wen¹, Junying Li¹, Chunling Mai¹, Jingwei Yuan², Ping Wang¹, Da Peng³, Yiqiang Zhao¹, Congjiao Sun¹, Xueying Ma³, Jing Feng³, Ning Yang¹ <i>¹China Agricultural University, Beijing, China; ²Institute of Animal Sciences, Chinese Academy of Agricultural Sciences, Beijing, China; ³Institute of Animal Husbandry and Veterinary Medicine, Xizang Academy of Agricultural and Animal Husbandry Science, Lhasa, China</i></p> |
| 3:00 PM | 11 | <p>Genotyping of infectious bronchitis virus and evaluation of commercial live vaccine efficacy against a Japan-like strain in Taiwan</p> <p>Yu-Wei Tsai*^{1,2}, Ming-Chu Cheng^{1,2} <i>¹National Pingtung University of Science and Technology, Pingtung, Taiwan; ²National Pingtung University of Science and Technology, Pingtung, Taiwan</i></p> |
| 3:15 PM | 12 | <p>CSE/H2S regulates glucose metabolism via AMPKα S-sulphydration in skeletal muscle of broilers</p> <p>Kelin Li*¹, Hai LIN¹ <i>¹Shandong Agricultural University, Tai'an, Shandong, China</i></p> |
| 3:30 PM | 13 | <p>In ovo injection time and dose of black soldier flies maggot oil (<i>Hermetia illucens</i>) on hatching and post-hatching physiological parameters of broiler chicks</p> <p>Yendouhamtchié Nadiedjoa*^{1,2}, Xiaojuan Wang¹, Komi Attivi², Maxwell A. Okai^{3,6}, Xin Qian¹, Ahmed Mijiyawa^{4,2}, Clarice Maa Maa Temhoul^{1,2}, Jingpeng Zhao¹, Hongchao Jiao¹, Komi Agboka², Hai Lin⁵, Kokou Tona² <i>¹Shandong Agricultural</i></p> |

University, Tai'an, Shandong, China; ^{2†}Laboratory of Poultry Production, Regional Centre of in Poultry Sciences, University of Lome,, Lomé, Togo; ³Shandong Agricultural University, Tai'an, Shandong, China; ⁴College of Animal Science and Technology, Tai'an, China; ⁵Shandong Agricultural University, Tai'an, Shandong, China; ⁶Council for Scientific and Industrial Research, Animal Research Institute, Accra, Ghana

- 3:45 PM 14 **Gut microbiota-derived propionic acid mitigates age-related albumen quality deterioration by modulating magnum functions**

Jian Chen^{*1}, Hui Ma¹, Jia Feng¹, Yuna Min¹ ¹NorthWest Agriculture and Forestry University, Xian Yang, China

- 4:00 PM **Break**

- 4:30 PM 15 **Effects of in ovo polyphenols from brown seaweed (*Fucus spiralis*) and green tea (*Camellia sinensis*) on the ileal and cecal microbiome of broiler chickens**

Jing Lu^{*1}, Renee Petri², Jacob Foster¹, Stephanie Collins¹
¹Dalhousie University, Bible Hill, Nova Scotia, Canada;
²Agriculture and Agri-Food Canada, Sherbrooke, Quebec, Canada

- 4:45 PM 16 **Effects of in ovo docosahexaenoic acid supplementation on early post-hatch neural and intestinal gene expression in broiler chickens**

Pravin Mishra^{*1}, Bal Krishna Pandey¹, Suresh Burlakoti¹, Sachi Katsumata¹², Birendra Mishra¹, Rajesh Jha¹ ¹University of Hawaii at Manoa, Honolulu, Hawaii, United States; ²Okayama University, Okayama, Japan

- 5:00 PM 17 **Host genetics shape early-life cecal microbiota trajectories following embryonic probiotic exposure in chickens**

Changchun Xu^{*1}, Habtamu Ayalew¹², Mengjie Xu¹, Jinmei Liu¹, Waqar Iqbal¹, Haijun Zhang¹ ¹Chinese Academy of Agricultural Science, Haidian, Beijing, China; ²University of Gondar, Gondar, Ethiopia

Student Competition: Poultry Management, Waste, and Well-Being Mayfair M

Moderators: Lilong Chai, University of Georgia
Karen Schwean-Lardner, University of Saskatchewan

- 2:00 PM 18 **Pectoral myopathy as a contributor to broiler carcass condemnation: assessment of associated risk factors**

Yingxin Zhao^{*3}, Shahid Mahmood¹, Richard Uwiera³, Heather Bruce²³ ¹Sofina Foods Inc., Edmonton, Alberta, Canada; ²Faculty of Agriculture, Dalhousie University, Bible Hill, Nova Scotia, Canada; ³University of Alberta, Edmonton, Alberta, Canada

- 2:15 PM 19 **Effects of different types of methionine on intestinal health of broilers and related mechanisms**
 Qiqi Yang^{*1}, Liping Gan³, Ningyu Geng² ¹*Henan University of Technology, Henan, China*; ²*Henan University of Technology, Henan, China*; ³*Henan University of Technology, Zhengzhou, Henan, China*
- 2:30 PM 20 **Student on the mechanism of heat stress affecting the growth and development of intestinal organs in broilers through Hippo pathway**
 Ningyu Geng^{*1}, Liping Gan², Qiqi Yang³ ¹*Henan University of Technology, Henan, China*; ²*Henan University of Technology, Zhengzhou, Henan, China*; ³*Henan University of Technology, Henan, China*

Poultry Management, Waste, and Well-Being Mayfair M

Moderators: Lilong Chai, University of Georgia
 Karen Schween-Lardner, University of Saskatchewan

- 3:00 PM 21 **Monitoring welfare and behaviors of cage-free hens with deep learning methods**
 Lilong Chai^{*1} ¹*University of Georgia, Athens, Georgia, United States*
- 3:30 PM 22 **Lycopene ameliorates atrazine-induced duodenal damage in laying hens by restoring intestinal barrier function**
 Jia-yu Du^{*1}, Yi-fei Ren¹, Yun-Shuang Liang¹, Xue-nan Li¹
¹*Northeast Agricultural University, Harbin, None Selected, China*
- 3:45 PM 23 **Full repertoire of Pekin duck vocalizations & effects of specific vocalizations on conspecifics suggest alarm or calming calls.**
 Jenna M. Schober¹, Gregory S. Fraley^{*1} ¹*Purdue University, West Lafayette, Indiana, United States*
- 4:00 PM 24 **Effect of the cage size and stocking density on the natural behavior expression, serum biochemical indices, and productive performance of laying hen**
 Yi Wan¹, Ruiyu Ma¹, Renrong Qi¹, Junying Li¹, Wei Liu¹, Yan Li¹, Zhen Liu¹, Kai Zhan^{*1} ¹*Anhui Academy of Agricultural Sciences, Hefei, Anhui, China*

Metabolism and Nutrition: General Nutrition I Ealing 6006-6007-6106-6107

Moderators: Elijah Kiarie, University of Guelph
Guang-hai Qi, Chinese Academy of Agricultural Sciences

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| 4:30 PM | 25 | <p>Advances in the use of prebiotics in poultry to modulate gut health
Rajesh Jha*¹¹<i>University of Hawaii at Manoa, Honolulu, Hawaii, United States</i></p> |
| 5:00 PM | 26 | <p>Managing egg size in broiler breeders through nutritional manipulation
Avinash M. Dhawale*¹¹<i>VH Group, Hyderabad, Telangana, India</i></p> |
| 5:15 PM | 27 | <p>Evaluation of near-infrared calibration on nutritional composition and processing conditions in mechanical-extracted soybean meal
Jinlei (James) Wen*¹¹<i>Evonik Corporation, Marietta, Georgia, United States</i></p> |
| 5:30 PM | 28 | <p>Comparison of serum bile acid composition among different species and the effect of taurochenodeoxycholic acid on regulating abdominal fat deposition in broilers
Yanli Liu*¹, Xi Sun¹, Chaohui Wang¹, Xiaojun Yang¹¹<i>Northwest A&F University, Yangling, Shaan'xi, China</i></p> |
| 5:45 PM | 29 | <p>Comparative study of pelleted diet with corn meal vs corn grit on growth performance, gizzard and intestinal development in white-feathered broilers
Yanfa Shen*¹, Dandan Guan¹, Haiyan Li¹, Xu Zhang¹¹<i>Shandong Asia Pacific Chinwhiz Group Co. Ltd., Changle, Shandong, China</i></p> |

Opening Reception & Poster Presentations

Ealing Hall

6:00 PM

2026

ANNUAL MEETING

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Tuesday, October 14, 2025

Symposium: Mycoplasma, antibiotics in lay and Anti-Microbial Resistance (AMR)

Mayfair E-F-G

Chairs: Robin A. Achari, Bioproperties Pty Ltd.
Christopher J. Morrow, University of Melbourne

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|----------|------|---|
| 8:00 AM | 229S | Shifting away from routine antibiotic use in breeders and layers is necessary and beneficial.
Robin R. Achari* ¹ <i>Bioproperties Pty Ltd., South Morang, Victoria, Australia</i> |
| 8:20 AM | 230S | In lay antibiotic use in broiler breeders in Southeast Asia. Results of second survey.
Magali Charles* ¹ <i>Innovative Diagnostics, Bangkok, Thailand</i> |
| 8:45 AM | 231S | Understanding the critical components of effective antimicrobial stewardship in animal health
Glenn F. Browning* ¹ <i>The University of Melbourne, Parkville, Victoria, Australia</i> |
| 9:20 AM | 232S | MS control experience in yellow broiler breeders
Manshan Cai* ¹ <i>Institute of Animal Science, Guangdong Academy of Agricultural Sciences, Guangzhou, China</i> |
| 9:40 AM | 233S | AFCD's measures in addressing antimicrobial resistance in poultry in Hong Kong
Jeremy H. Ho* ¹ <i>Hong Kong SAR Government, Kowloon, Hong Kong</i> |
| 10:00 AM | | Break |
| 10:30 AM | 234S | Antimicrobial susceptibility in <i>Mycoplasma gallisepticum</i> and <i>Mycoplasma synoviae</i> in Asia
Zsuzsa Kreizinger* ¹² , Dénes Gróznér ¹⁹ , Kinga Sulyok ¹¹⁰ , Christopher J. Morrow ⁵ , Robin R. Achari ³ , Choong Jia Jie ⁴ , Tong Wei Shen ⁴ , Bo Hou ⁷ , Manshan Cai ⁶ , Miklós Gyuranecz ⁸¹¹
¹ HUN-REN Veterinary Medical Research Institute, Budapest, Hungary; ² MolliScience Kft., Batorbágy, Hungary; ³ Bioproperties Pty Ltd, South Morang, Victoria, Australia; ⁴ Elanco Malaysia Sdn Bhd, Petaling Jaya, Malaysia; ⁵ The University of Melbourne, Melbourne, Victoria, Australia; ⁶ Institute of Animal Science, Guangdong Academy of Agricultural Sciences, Guangzhou, China; ⁷ Fujian Animal Disease Control Technology Development Center, Institute of Animal Husbandry and Veterinary Medicine, Fujian Academy of Agricultural Sciences, Fujian, China; ⁸ HUN-REN Veterinary Medical Research Institute, Batorbágy, Hungary; ⁹ National Laboratory of Health Safety, Budapest, Hungary; ¹⁰ National Laboratory of Infectious Animal Diseases, |

Antimicrobial Resistance, Veterinary Public Health and Food Chain Safety, Budapest, Hungary; ¹¹University of Veterinary Medicine, Budapest, Hungary

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| 10:50 AM | 235S | The development of antimicrobial resistance in <i>Mycoplasma gallisepticum</i> and <i>Mycoplasma synoviae</i>
Miklós Gyuranecz* ¹² , Zsuzsi Kreizinger ¹² , Denes Grozner ¹ , Kinga Sulyok ¹¹
<i>¹¹HUN-REN Veterinary Medical Research Institute, Budapest, Hungary; ²National Laboratory of Infectious Animal Diseases, Budapest, Hungary</i> |
| 11:10 AM | 236S | Genetic studies of multi-resistance in MG and MS
Dieter Bulach* ¹¹
<i>University of Melbourne, Victoria, Victoria, Australia</i> |
| 11:30 AM | 237S | Solution – Vaccination, freedom, biosecurity structural changes needed in the industry to control MG and MS
Christopher J. Morrow* ¹¹
<i>The University of Melbourne, Melbourne, Victoria, Australia</i> |
| 11:50 AM | | Discussion |

Student Competition: **Processing, Products, Meat and Egg Quality** **Mayfair M**

Moderators: Mary Anne Amalaradjou, University of Connecticut
Jiangxia Zheng, Secretary, Asian Pacific Federation of WPSA

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|---------|----|--|
| 8:00 AM | 30 | Hydroxy-methionine manganese supplementation improved eggshell quality and laying performance in laying hens with translucent eggs
Haojie Gong* ¹ , Xuemei Ding ¹ , Shiping Bai ¹ , Qiufeng Zeng ¹ , Yan Liu ¹ , Keying Zhang ¹ , Jianping Wang ¹¹
<i>¹Sichuan Agricultural University, Chengdu, Sichuan, China</i> |
| 8:15 AM | 31 | Astaxanthin: King of carotenoids pigment preserve frizzle chicken meat quality under heat stress
Sadaqat Ali* ¹ , Zhang Li ²¹
<i>¹Guangdong Ocean University, Zhanjiang, Guangdong, China; ²Guangdong Ocean University, Zhanjiang, Guangdong, China</i> |

Student Competition:
Metabolism and Nutrition: Amino Acids, Vitamins and Minerals
Ealing 6006-6007-6106-6107

Moderators: Olayiwola Adeola, Purdue University
Sonia Liu, University of Sydney

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|---------|----|--|
| 8:00 AM | 32 | <p>In ovo taurine feeding: Enhancing broiler resilience to cyclic heat stress at market age
 Vaishali Gupta^{*12}, Yun-Ji Hwang¹², Yang-Ho Choi¹²³
 ¹Gyeongsang National University, Jinju-si, Korea (the Republic of); ²Gyeongsang National University, Jinju-si, Gyeongsangnam-do, Korea (the Republic of); ³Gyeongsang National University, Jinju-si, Gyeongsangnam-do, Korea (the Republic of)</p> |
| 8:15 AM | 33 | <p>Cystine fortification improved egg white quality of laying hen fed low crude protein diets
 Siman Li^{*1}, Waqar Iqbal¹, Habtamu Ayalew¹, Qiongge Liu¹², Haijun Zhang¹ ¹Institute of Feed Research, Chinese Academy of Agricultural Sciences, Beijing, China; ²Tianjin Agricultural University, Tianjin, China</p> |

Student Competition:
Genetics and Genomics
Mayfair I

Moderators: Huaijun Zhou, University of California, Davis
Amonrat Molee, Suranaree University of Technology

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|---------|----|---|
| 8:30 AM | 34 | <p>Genomic profiling reveals the role of HOXA13 in inhibiting adipocytes proliferation and differentiation of chicken
 Xi Sun^{*1}, Xiaojun Yang¹, Yanli Liu² ¹Northwest A&F University, Yangling, China; ²Northwest A&F University, Yangling, Shaan'xi, China</p> |
| 8:45 AM | 35 | <p>Elucidating the role of DMRT1 in germ cell differentiation in chickens
 Mashiro Mitsufuji^{*1}, Tenkai Watanabe¹, Ryo Ezaki¹, Mei Matsuzaki¹, Hiroyuki Horiuchi¹ ¹Hiroshima University, Higashihiroshima, Hiroshima, Japan</p> |
| 9:00 AM | 36 | <p>Effect of FABP4 gene on intramuscular fat deposition in Muscovy duck in vitro and in vivo
 Panpan Xie^{*1} ¹Guangdong Ocean University, Zhanjiang, Guangdong, China</p> |
| 9:15 AM | 37 | <p>Construction and mechanism analysis of the sex reversal model of chicken gonadal somatic cells
 Xiaoqian Lv^{*1}, Qiang Wei¹, Wei Gong¹, Yingjie Niu¹, Bichun Li¹, Qisheng Zuo¹ ¹Yangzhou University, Yang Zhou, Jiangsu, China</p> |

9:30 AM	38	Investigation of the molecular genetic mechanisms underlying feed efficiency during the extended laying period in laying hens wenxin Zhang* ¹ <i>China Agricultural University, Beijing, China</i>
9:45 AM	39	Investigation of the mechanisms underlying the blood and meat spots formation in chicken eggs by integrating multi-omics data Junfeng Wu* ¹ , Yiyuan Yan ² , Ling Lian ¹ <i>China Agricultural University, Beijing, China</i> ; ² <i>Beijing Huadu Yukou Poultry Co., Ltd., Beijing, China</i>
10:00 AM		Break
10:30 AM	40	Population genetic study for unraveling evolutionary history and morphological traits of Bangladesh native chicken Md Altafur Rahman* ¹ , Masahide Nishibori ¹² , Takahiro Yonezawa ² , Jiaqi Wu ² , Md Nazmul Haque ³ , Mohammad Aminul Islam ⁴ , Kazushi Masuda ¹ <i>Hiroshima University, Higashi Hiroshima, Hiroshima, Japan</i> ; ² <i>Hiroshima University, Higashi Hiroshima, Hiroshima, Japan</i> ; ³ <i>Sylhet Agricultural University, Sylhet, Bangladesh</i> ; ⁴ <i>Gazipur Agricultural University, Gazipur, Bangladesh</i>
10:45 AM	41	Sequence identification, physiological function and molecular mechanism of chicken leptin Yuchen Jie* ¹ , Ning Yang ¹ <i>China Agricultural University, Beijing, China</i>
11:00 AM	42	Chicken LRP1 protein mediates the in vitro infection process of Marek's disease virus Gang Zheng* ¹ , Ling Lian ¹ <i>China Agricultural University, Beijing, China</i>

Processing, Products, Meat and Egg Quality Mayfair M

Moderators: Jiangxia Zheng, Secretary, Asian Pacific Federation of WPSA

Mary Anne Amalaradjou, University of Connecticut

8:45 AM	43	Combination of Hot Water Spray (HWS) and Subzero Saline Chilling (SSC) improved chilling efficiency, bacterial decontamination, and meat tenderness of broiler carcasses Iksoon Kang* ¹ <i>California Polytechnic State University, San Luis Obispo, California, United States</i>
9:15 AM	44	The role of bacteriophages to control Salmonella in poultry meat Vincent Guyonnet* ¹ , Kitiya Vongkamjan ² <i>UniFAHS, Bangkok, Thailand</i> ; ² <i>Kasetsart University, Bangkok, Thailand</i>

- 9:30 AM 45 **Hyaluronic acid and chondroitin sulfate influence on calcium carbonate crystallization**
Yanxin Jia*¹, Yunlei Zhou¹, Hai LIN² ¹TUST(Tianjin University of Science and Technology), Tianjin, Shandong, China; ²Shandong Agricultural University, Tai'an, Shandong, China
- 9:45 AM 46 **Photoclick chemistry-enabled synthesis of silver-based bimetallic nanoparticles for multifunctional sensing applications in food quality monitoring**
Jiahang Yu*¹, Xiao Sun², Chi Wan³ ¹Chuzhou University, Chuzhou, China; ²Chuzhou University, Chuzhou, Anhui, China; ³Chuzhou Zhicheng Agricultural Co., Ltd, Anhui, China

Metabolism and Nutrition: Amino Acids, Vitamins and Minerals I **Ealing 6006-6007-6106-6107**

Moderators: Sonia Liu, University of Sydney
Olayiwola Adeola, Purdue University

- 9:00 AM 47 **Ca & P nutrition as influenced by vitamin D**
Doug Korver*¹ ¹Alpine Poultry Nutrition, Inc., Edmonton, Alberta, Canada
- 9:30 AM 48 **The effect of bio-available silicon on layer performance and egg quality**
Miriam A. Temptra*¹ ¹Vetworks, Calamba, Philippines
- 9:45 AM 49 **Cyclic heat stress increased basal ileal endogenous amino acid losses and standardized ileal amino acid digestibility in 22-day-old broiler chickens**
Sunday Adedokun*¹, Jacqueline Jacob¹, Michael Ford¹
¹University of Kentucky, Lexington, Kentucky, United States
- 10:00 AM **Break**
- 10:30 AM 50 **Mechanisms of AM/AP ratio and amino acid levels in corn substitution using different starch types on broiler growth and development**
Caiwei Luo*¹, Jianmin Yuan¹ ¹China Agricultural University, Beijing, China
- 10:45 AM 51 **High amylose to amylopectin ratio in a low-protein diet promoted growth performance and protein deposition of breast muscle in goslings**
Xucheng Zheng*¹, Zhi Yang², Xiyuan Xing¹, Xuan Li¹, Usman Nazir¹, Haiming Yang¹, Zhiyue Wang¹ ¹College of Animal Science and Technology, Yangzhou University, Yangzhou, Jiangsu, China; ²Joint International Research Laboratory of Agriculture and Agri-Product Safety of Ministry of Education of China, Yangzhou University, Yangzhou, Jiangsu, China

11:00 AM 52 **Effects of dietary low protein levels on reproductive performance and offspring muscle quality of yellow feathered broiler breeders**
 Qingjia Zeng^{*1}, Mengyu Li¹, Jianping Wang¹, Keying Zhang¹, Shiping Bai¹, Xuemei Ding¹, Qiufeng Zeng¹, Yan Liu^{1 1}*Sichuan Agricultural University, Chengdu, Sichuan Province, China*

Symposium: Managing raw material quality, variability and digestibility for optimum broiler performance and gut health
Mayfair E-F-G

Chairs: Hugo Romero, Novus International Inc.
 Anna Fe Rose Perino, Novus International Pte Ltd.

1:00 PM 238S **Symposium Problem Introduction**
 Anna Fe Rose Perino^{*1 1}*Novus International Pte. Ltd., Taguig, Metro Manila, Philippines*

1:15 PM 239S **Evaluation of raw material quality and its impact on broiler performance**
 Budi Tangendjaja^{*1 1}*US Grains Council, Jakarta, Indonesia*

2:00 PM 240S **Optimizing feed quality and nutrient utilization: Enzyme solutions to synchronize digestive dynamics**
 Sonia Y. Liu^{*1}, Shemil Macelline¹, Mehdi Toghyani¹, Peter Selle^{1 1}*University of Sydney, Brownlow Hill, New South Wales, Australia*

3:00 PM **Break**

3:30 PM 241S **Formulation techniques to maximize nutrient digestibility for broiler performance and gut health**
 Miriam A. Temptra^{*1 1}*Vetworks, Calamba, Philippines*

4:05 PM 242S **Understanding ingredient evaluation and the use of alternative ingredients in poultry**
 Hugo Romero^{*12}, Frances Yan^{1 1}*Novus International, Chesterfield, Missouri, United States; 2North Carolina State University, Raleigh, North Carolina, United States*

4:40 PM **Questions and answers**

Student Competition: Animal Health & Immunology Mayfair I

Moderators: Alexander Yitbarek, University of Delaware
Ruediger Hauck, Auburn University

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|---------|----|---|
| 1:00 PM | 53 | Impacts of Eimeria vaccination on microbiome composition and function
Lisa Bielke* ¹ <i>North Carolina State University, Raleigh, North Carolina, United States</i> |
| 1:30 PM | 54 | The relationship between blood parameters and hepatic lipid deposition in laying hens during the late laying period
Zheng Wang* ¹ , Minghui Wang ² , Hai LIN ³ <i>¹Shandong Agricultural University, Tai'an, Shandong, China; ²Shandong Agricultural University, Tai'an, China; ³Shandong Agricultural University, Tai'an, Shandong, China</i> |
| 1:45 PM | 55 | Evaluating commonly used anticoccidial drugs against Eimeria tenella field isolates in Bangladesh
Bimal C. Karmakar* ¹² , Nusrat N. Shohana ¹ , Anita R. Dey ¹ , Sharmin A. Rony ¹ , Shirin Akter ¹ , Anisuzzaman Anisuzzaman ¹ , Mohammad Zahangir Alam ¹ <i>¹Bangladesh Agricultural University, Mymensingh, Mymensingh, Bangladesh; ²Bangladesh Academy for Rural Development, Cumilla, Chittagong, Bangladesh</i> |
| 2:00 PM | 56 | Gut-metabolism-bone axis dysregulation in broiler skeletal pathogenesis
Yuyang Xue* ¹ , Cunxi Nie ² <i>¹Shihezi University, Shihezi, Xinjiang, China; ²Shihezi University, Shihezi, China</i> |
| 2:15 PM | 57 | Dynamic immune responses to avian pathogenic Escherichia coli infection in chicks
Yifei He* ² , Tailong Wang ² , Tingyu Zhang ² , Chu Meng ² , Mengru Chen ² , Haitao Zhang ¹ , Ruqian Zhao ² , Yimin Jia ² <i>¹Jiangsu Lihua Animal Husbandry Co., Ltd., Changzhou, Jiangsu, China; ²Key Laboratory of Animal Physiology & Biochemistry, College of Veterinary Medicine, Nanjing Agricultural University, Nanjing, Jiangsu, China</i> |
| 2:30 PM | 58 | Early feed restriction affects broiler immune function through gut flora and the Wnt/β-catenin signaling pathway but is reversed by late ad libitum feeding
Fang Wang* ¹ , Jiaqi Feng ¹ , Zhenxin Zhu ¹ , Shanshan Nan ¹ , Min Yao ¹ , Lijing Dou ³ , Dan Wang ³ , Xueqiang Liu ⁵ , Xiaowen Sun ⁴ , Cunxi Nie ² <i>¹Shihezi University, Shihezi, China; ²Shihezi University, Shihezi, China; ³Animal Husbandry and Fisheries Service Development Center, Shihezi, China; ⁴Center for Animal Disease Prevention and Control, Mulei Country, China; ⁵Chuang Yu Poultry Breeding Co., Shihezi, China</i> |

Student Competition:
Metabolism and Nutrition: Enzymes and Feed Additives
Mayfair M

Moderators: Rajesh Jha, University of Hawaii, Manoa
In Ho Kim, Dankook University

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|---------|----|---|
| 1:00 PM | 59 | <p>Tributyrin restored growth performance in broilers offered low protein diets based on high protein wheat</p> <p>Mengzhu Wang^{*12}, Mehdi Toghyani¹², Shemil Macelline¹², Andreas Lemme³, Andrew J. Holmes¹⁴, Peter H. Selle¹⁵, Sonia Y. Liu¹² ¹<i>The University of Sydney, Sydney, New South Wales, Australia</i>; ²<i>Poultry Research Foundation, Sydney, New South Wales, Australia</i>; ³<i>Evonik Operations GmbH, Hanau-Wolfgang, Germany</i>; ⁴<i>Charles Perkins Centre, Sydney, New South Wales, Australia</i>; ⁵<i>Sydney School of Veterinary Science, Sydney, New South Wales, Australia</i></p> |
| 1:15 PM | 60 | <p>Effects of curcumin on growth performance, antioxidant capacity and mitochondrial biosynthesis in broiler breeder hens</p> <p>Jingjing Dong^{*1}, Junyan Wang¹, Dong Ruan¹, Jingling Ye¹, Fayuan Ding¹, Yibing Wang¹, Shouqun Jiang¹ ¹<i>Guangdong Academy of Agricultural Sciences, Guangzhou, China</i></p> |
| 1:30 PM | 61 | <p>Effects of dietary gallic acid at varying levels on growth performance, gut health, and meat quality in broiler chickens challenged with Lipopolysaccharide</p> <p>Shaozhou XU^{*12}, Yibing Wang¹, Shouqun Jiang¹ ¹<i>Institute of Animal Science, Guangdong Academy of Agricultural Sciences, Guangzhou, Guangdong, China</i>; ²<i>Foshan University, Foshan, Guangdong, China</i></p> |
| 1:45 PM | 62 | <p>Effect of exogenous bile salts supplementation on the performance and hepatic lipid metabolism in aged laying hens with fatty liver syndrome</p> <p>Lijing Sun^{*1}, Hai LIN² ¹<i>Shandong Agricultural University, Tai'an, China</i>; ²<i>Shandong Agricultural University, Tai'an, Shandong, China</i></p> |

Metabolism and Nutrition: Enzymes and Feed Additives I

Mayfair M

Moderators: In Ho Kim, Dankook University
Rajesh Jha, University of Hawaii, Manoa

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|---------|----|---|
| 2:15 PM | 74 | <p>Feed additives: Their role in poultry productivity, welfare, and environmental sustainability
 Sunday Adedokun*¹ ¹<i>University of Kentucky, Lexington, Kentucky, United States</i></p> |
| 2:45 PM | 75 | <p>Supplementation effects of Nepeta cataria root powder on production performance, biochemical parameters and egg quality in older laying hens
 Clarice M. Temhoul*¹²³, Jean Paul Toukala³, Jingpeng Zhao¹, Wéré Pitala² ¹<i>Shandong Agricultural University, Tai'an, China;</i>
 ²<i>Regional Center of Excellence for Avian Sciences, Lomé, Togo;</i>
 ³<i>Garoua University (IBAI), Garoua, Cameroon</i></p> |
| 3:00 PM | | Break |
| 3:30 PM | 76 | <p>The effects of polysaccharides from Hypsizygus marmoreus on intestinal barrier function and microbial diversity in broilers
 Min Liu*¹, Xikang Cao², Hai Lin³ ¹<i>Shandong Agricultural University, Tai'an, Shandong, China;</i> ²<i>Shandong Agricultural University, Tai'an, China;</i> ³<i>Shandong Agricultural University, Tai'an, Shandong, China</i></p> |
| 3:45 PM | 77 | <p>Effects of ginger, roselle and their blends on performance, carcass and meat lipid oxidation in broiler chickens
 Adekoyejo S. Oyegunwa*¹², Mutiu A. Mosobalaje², Abiodun M. Mebude¹, Oluwole S. Banjo¹ ¹<i>Tai Solarin University of Education Nigeria, Ijagun, Ogun State, Nigeria;</i> ²<i>Oyo State College of Agriculture and Technology, Igboora, Oyo, Nigeria</i></p> |
| 4:00 PM | 78 | <p>Copper nanoparticles: Boosting broiler growth and immunity while ensuring low toxicity in a dose-dependent manner
 Maksuda Begum*¹ ¹<i>Sher-e-Bangla Agricultural University, Dhaka, Bangladesh, Bangladesh</i></p> |

Poster Reception & Poster Presentations
Ealing Hall
5:00 PM

Wednesday, October 16, 2025

Symposium: Steering nitrogen emission from poultry production through precision nutrition

Mayfair A-B

Chair: Jae Cheol Kim, CJ Bio

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| 8:00 AM | 243S | Impact of nitrogen emission from poultry production on global warming and sustainability
Behnam Saremi* ¹ ¹ CJ Europe GmbH, Frankfurt am Main, Germany |
| 8:40 AM | 244S | Impact of crude protein content in poultry diet on performance, metabolic efficiency, gut health and welfare.
Jae Cheol Kim* ^{1,2} ¹ CJ Bio, Seoul, Korea (the Republic of); ² CJ Bio APAC, Bangkok, Thailand |
| 9:20 AM | 245S | Reducing nitrogen emissions through precision nitrogen nutrition: what we know so far
Wolfgang Siegert* ¹ ¹ University of Göttingen, Göttingen, Germany |
| 10:00 AM | | Break |
| 10:30 AM | 246S | The role of reduced crude protein in AGP-free poultry diets towards enhanced sustainability
Rommel C. Sulabo* ¹ ¹ University of the Philippines Los Banos, Los Baños, Laguna, Philippines |
| 11:10 AM | 247S | Advances in analytical technology to support precision nitrogen nutrition
Sanami Tatekura* ¹ ¹ AB Vista, Singapore, Singapore |
| 11:50 AM | | Panel discussion |

Metabolism and Nutrition: Amino Acids, Vitamins and Minerals II Ealing 6006-6007-6106-6107

Moderators: Sonia Liu, University of Sydney
Olayiwola Adeola, Purdue University

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|---------|----|--|
| 8:00 AM | 63 | Effects of starch structure on the absorption of encapsulated amino acids in laying hens fed a low-protein diet
Zhengkai Yue ¹ , Minghui Wang ¹ , Min Liu ¹ , Xiaojuan Wang ¹ , Jingpeng Zhao ¹ , Hongchao Jiao ¹ , Hai Lin* ¹ ¹ Shandong Agricultural University, Tai'an, Shandong, China |
| 8:15 AM | 64 | Nutritional evaluation of wheat and wheat bran for Jingfen No. 6 laying hens and white-feather broilers
Juan Zhu* ¹ ¹ Shandong Agriculture University, Shandong, China |

8:30 AM	65	Effects of cholecalciferol and 25-hydroxycholecalciferol on reproductive performance, egg quality and plasma biochemical indices of aged duck breeders Jing Tang ^{*1} , Shuisheng Hou ¹ ¹ <i>Institute of Animal Science, Chinese Academy of Agricultural Sciences, Beijing, China</i>
8:45 AM	66	Study on the net energy and standard ileal digestibility of soybean meal and fermented soybean meal in Jingfen No. 6 laying hens Tian Yu Dou ^{*1} ¹ <i>Shandong Agricultural University, Shan Dong, China</i>
9:00 AM	67	Influence of age and dietary supplementation of phytase on apparent and standardized ileal amino acid digestibility palm kernel meal in broiler chickens Ahmed Mijiyawa ^{*12} , Zhengkai Yue ¹ , Juan Zhu ¹ , Qi Liu ¹ , Hai Lin ¹ , Wéré Pitala ² ¹ <i>Shandong Agricultural University, Tai'an, Shandong, China;</i> ² <i>Regional Center of Excellence for Avian Sciences, University of Lome, Lome, Togo</i>
9:15 AM	68	Dietary arginine supplementation increases growth performance, enhances immune function and antioxidant function, alleviates intestinal injury of broiler chickens challenged with <i>Clostridium perfringens</i> via activating CASTOR1/SLC38A9-mTOR signaling pathway. Xiaohui Wang ^{*1} ¹ <i>ShanDong Agricultural University, Tai'an, China</i>
9:30 AM	69	Effects of dietary low protein levels and amino acid patterns on production performance, egg quality and intestinal function in laying hens Hongye Zhang ^{*1} , Keying Zhang ¹ , Jianping Wang ¹ , Qiufeng Zeng ¹ , Shiping Bai ¹ , Yan Liu ¹ , Xuemei Ding ¹ ¹ <i>Sichuan Agricultural University, Sichuan, China</i>
9:45 AM	70	Effects of protease on performance and hepatic lipid metabolism in laying hens fed low-protein diet with sustained-release amino acids Kangqi Xu ^{*1} , Hongchao Jiao ¹ ¹ <i>Shandong Agricultural University, Tai'an, Shandong, China</i>
10:00 AM		Break
10:30 AM	71	Study on amino acid balance of low protein diet for Chinese domestic broilers aged 1-30 days based on Response Surface Model Sai Zhang ^{*1} , Yitong Wang ¹ , Taidi Xiong ¹ , Zhongyong Gou ¹ , Shouqun Jiang ¹ ¹ <i>Institute of Animal Science, Guangdong Academy of Agricultural Sciences, Guangzhou, China</i>

- 10:45 AM 72 **Maternal Selenium nanoparticle supplementation ameliorates intestinal health in the chicken offspring challenged with lipopolysaccharide**
Chen Yanhong*¹, Jianmin Yuan^{2,1}*Southwest Forestry University, Kunming, Yunnan, China; ²China Agricultural University, Beijing, China*
- 11:00 AM 73 **Effect of different dietary threonine supplementation levels on the growth performance, oxidative status, and gut health function of broilers fed low-protein diets**
Waqas Ahmed*¹, Sara Mubeen¹, Awais Ali², Sajid M. Tahir¹, Uzair Hassan¹, Zeshan Zulfikar^{3,1}*University of Agriculture Faisalabad Punjab Pakistan, Rawalpindi, Pakistan; ²The Graduate School of Chinese Academy of Agricultural Sciences, Haidian, Beijing, China; ³Department of Animal Nutrition and Feed Science, Henan Agricultural University China, Zhengzhou, China*

Animal Health Mayfair M

Moderators: Ruediger Hauck, Auburn University
Khaled Abdelaziz, Clemson University

- 8:00 AM 79 **Exploring multiomics approaches for One Health-Driven poultry health**
Anup Kollanoor Johny*¹*University of Minnesota, Twin Cities, Minnesota, United States*
- 8:30 AM 80 **Field observations on necrotic enteritis in broiler breeders in India**
Avinash M. Dhawale*¹*VH Group, Hyderabad, Telangana, India*
- 8:45 AM 81 **The alleviating effects and mechanism of oleic acid on intestinal leakage caused by high-fat diet in Pekin ducks**
Wenxin Zhang¹, Keying Zhang¹, Shiping Bai¹, Xuemei Ding¹, Jianping Wang¹, Yan Liu¹, Yue Xuan¹, Shanshan Li¹, Qiufeng Zeng*^{1,1}*Sichuan Agricultural University, Chengdu, Sichuan, China*
- 9:00 AM 82 **Dietary resistant starch protects against antibiotic-induced intestinal damage by restoring microbial homeostasis and alleviating intestinal inflammation in meat duck**
Simeng Qin*^{1,2}, Qiufeng Zeng², Martin B. Jensen³, Keying Zhang², Xuemei Ding², Shiping Bai², Jianping Wang², Yue Xuan²*¹Southwest University, Chongqing, China; ²Sichuan Agricultural University, Chengdu, China; ³University of Copenhagen, Copenhagen, Denmark*

9:15 AM	83	A whole-genome methylation profile reveals key genes associated with Tibial Dyschondroplasia in broiler chickens Shuo-Han Zhang^{*12}, Yi-Fan Liu¹, Yan-Ju Shan¹, Xiao-Jun Ju¹, Gai-Ge Ji¹, Yun-Jie Tu¹, Jing-Ting Shu¹ ¹<i>Jiangsu Institute of Poultry Science, Yangzhou, China;</i> ²<i>Jiangxi Agricultural University, NanChang, China</i>
9:30 AM	84	Intestinal stem cell dysfunction contributes to fatty liver hemorrhagic syndrome in laying hens via regulation of serotonin signaling Minghui Wang^{*1}, Hai Lin¹ ¹<i>Shandong Agricultural University, Tai'an, Shandong, China</i>
9:45 AM	85	The mechanism of mRNA m6A methylation modification in regulating liver fat metabolism in laying hens YiJing Liu^{*1} ¹<i>Shandong Agricultural University, Tai'an, China</i>
10:00 AM		Break
10:30 AM	86	Molecular studies of closely related vaccines against the avian coronavirus infectious bronchitis virus may reveal potential virulence determinants Jose A. Quinteros^{*1}, Daniel M. Andrews² ¹<i>The University of Sydney, Brownlow Hill, New South Wales, Australia;</i> ²<i>Bioproperties Pty. Ltd., Melbourne, Victoria, Australia</i>
10:45 AM	87	Dietary supplementation with raw potato starch enhanced tibia mass of meat ducks potentially linked to intestine-derived inflammation Huaiyong Zhang^{*12}, Jixue Yin¹, Xin Yue¹, Simeng Qin³, Yuying Huang¹, Minh Tu Nguyen⁴, Herinda Pertiwi², Yanqun Huang¹, Rui Zheng¹, Wen Chen¹ ¹<i>Henan Agricultural University, Zhengzhou, Henan, China;</i> ²<i>Ghent University, Ghent, Belgium;</i> ³<i>Southwest University, Chongqing, China;</i> ⁴<i>Hue University, Hue, Viet Nam</i>
11:00 AM	88	Shifts in the jejunal and cecal microbiota of broilers with subclinical enteric infection Ruediger Hauck^{*1}, Rana W. Tabish¹, Yang Lin¹, Samuel J. Rochell¹, Wilmer J. Pacheco¹, Matthew A. Bailey¹, William A. Dozier¹, Kelsy Robinson² ¹<i>Auburn University, Auburn, Alabama, United States;</i> ²<i>USDA-ARS Poultry Research Unit, Mississippi State, Mississippi, United States</i>
11:15 AM	89	Exploring the probiotic effects of gut microbes on broiler performance, carcass characteristics and immunity Vineesha Elupuru^{*1} ¹<i>Gadvasu, Hyderabad, Telangana, India</i>
11:30 AM	90	Evaluating the efficacy and economic impact of a Phytogenic Anticoccidial (COXIELD) alone and in combination with Diclazuril in broiler challenge trials Kyuyeol Son^{*1}, Sun-Jong You², Hyun-Keon Chung¹, Seung Eun Han¹ ¹<i>CJ Bio, Seoul, Korea (the Republic of);</i> ²<i>CJ Feed & Care Indonesia, Jakarta, Indonesia</i>

Immunology, Microbiology & Physiology Mayfair I

Moderators: Takeshi Ohkubo, Ibaraki University
Gregory S. Fraley, Purdue University

8:00 AM	91	Poultry immune responses to enteric challenges Rami Dalloul* ¹ <i>University of Georgia, Athens, Georgia, United States</i>
8:30 AM	92	Ex Vivo chicken intestinal model for studying <i>Limosilactobacillus reuteri</i> CCM 9458 effects on gut integrity in salmonellosis Viera Karaffová* ¹ , Zuzana Kiššová ¹ , Csilla Tothová ² , Róbert Herich ¹ <i>University of veterinary medicine and pharmacy, Košice, Slovakia; ²University of veterinary medicine and pharmacy, Košice, Slovakia</i>
8:45 AM	93	The Role of TLR4/NF-κB pathway in the regulation of intestinal barrier function by <i>Hypsizygus marmoreus</i> polysaccharides in broiler chickens Xikang Cao* ¹ , Hai Lin ² , Min Liu ¹ <i>Shandong Agricultural University, Tai'an, China; ²Shandong Agricultural University, Tai'an, Shandong, China</i>
9:00 AM	94	Harnessing apidaecin capability to improve intestinal health and inhibit <i>Salmonella Typhimurium</i> transmission in laying hens Hui Ma ¹ , Yuna Min* ¹ , Jia Feng ¹ <i>Northwest A&F University, Xianyang, Shaanxi, China</i>
9:15 AM	95	Yeast β-glucan ameliorates uterine Inflammation and eggshell defects in laying hens via microbial-derived UDCA and macrophage M2 polarization along the gut-reproductive tract axis Jianmin Zhou* ¹ , Yu Fu ¹ , Jing Wang ¹ , Haijun Zhang ¹ , Shugeng Wu ¹ , Guanghai Qi ¹ <i>Institute of Feed Research, Beijing, China</i>
9:30 AM	96	Novel QTAP-Nanovaccines against emerging avian influenza isolates in chickens Adel M. Talaat* ^{1,2} , Fakry Ramadan ¹ , Bubacarr Touray ¹ <i>¹University of Wisconsin-Madison, Madison, Wisconsin, United States; ²Vireo Vaccines Intl., Madison, Wisconsin, United States</i>
9:45 AM	97	The evaluation study on probiotic function and fat deposition regulation of <i>Streptococcus alactolyticus</i> in broilers Xiaoying Liu* ¹ , Xiaojun Yang ¹ , Yanli Liu ¹ <i>Northwest A&F University, Yangling, Shaan'xi, China</i>
10:00 AM		Break

- 10:30 AM 98 **Breaking the chain: Probiotic strategies to combat Salmonella in broilers from hatch to harvest**
Praveen Kosuri¹, Ragini Reddyvari¹, Eswari Kanike¹, Sulthana Humayoon Muttathukonam¹, Mary Anne Amalaradjou*¹
¹University of Connecticut, Storrs, Mansfield, Connecticut, United States
- 10:45 AM 99 **Modulation of hepatic lipid metabolism in laying hens by three different polysaccharides via intestinal microbes**
Meng Wang*¹ ¹Shandong Agricultural University, Shandong, China
- 11:00 AM 100 **Effect of dietary L-Citrulline on the thermoregulation and metabolic rate of broiler chickens under acute stress conditions**
Lan Li*¹ ¹Shandong Agricultural University, Tai'an, China
- 11:15 AM 101 **Regulation of intestinal phosphorus homeostasis in commercial laying hens throughout an extended egg production cycle**
Laura E. Ellestad*¹, Micaela Sinclair-Black¹, R. Alejandra Garcia-Mejia¹, Roselina Angel², Xabier Arbe³, David Caverio³
¹University of Georgia, Athens, Georgia, United States;
²University of Maryland, College Park, Maryland, United States;
³H & N International, Cuxhaven, Germany
- 11:30 AM 102 **Potential for vertical transmission of Enterococcus cecorum in broilers through microbiome analysis**
Muhammad Wajeeh Ul Hassan¹, Renata Gomes¹, Thaciane Amaral¹, Philip Yeboah¹, Demilade Ibiwoye¹, Lisa Bielke*¹
¹North Carolina State University, Raleigh, North Carolina, United States
- 11:45 AM 103 **Comparative effects of protected butyrate forms on immune and inflammatory responses in broilers**
Abdelrahman Abdelhady*¹, Abdelhacib Kihal¹, J. López-Paredes¹, Ahmed Radwan¹, Allan Junsay¹, Monica Puyalto¹, J.J Mallo¹ ¹Norel S.A., Madrid, Spain

Symposium: Animal Welfare around the world – Different perspectives on a shared goal

Mayfair A-B

Chairs: Inga Tiemann, University of Applied Sciences

Karen Schwean-Lardner, University of Saskatchewan

- 1:00 PM 248S **Global perspective – The International Poultry Welfare Alliance**
Katy Tarrant*¹ ¹Fresno State, Fresno, California, United States

1:30 PM	249S	Origin and content of the scientific opinions of the European Food Safety Authority: Welfare of laying hens and broiler chickens on farm Michel Virginie* ¹ <i>Anses, Angers, Yes, France</i>
2:00 PM	250S	Australian perspective – Does free-range automatically ensure high animal welfare levels? Dana L. Campbell* ¹ <i>CSIRO, Armidale, New South Wales, Australia</i>
2:30 PM	251S	Is functional structuring of the broiler barn increasing welfare? Anja B. Riber* ¹ <i>Aarhus University, Tjele, Denmark</i>
3:00 PM		Break
3:30 PM	252S	Technological perspective – How can PLF support poultry welfare? Yang Zhao* ¹ <i>University of Tennessee, Knoxville, Tennessee, United States</i>
4:00 PM	253S	Individual perspective – Flock vs. individual welfare on farm and in research Inga Tiemann* ¹ <i>Osnabrueck University of Applied Sciences, Osnabrück, Germany</i>
4:30 PM		Roundtable

Symposium: The current and future perspective of ChickenGTEx Project and its applications in precision breeding Mayfair E-F-G

Chairs: Lingzhao Fang, Aarhus University
Huaijun Zhou, University of California, Davis

1:00 PM		Welcome remarks
1:15 PM	254S	The genetic regulation of multi-tissue transcriptome in chickens Lingzhao Fang* ¹ , Dailu Guan ³ , Zhonghao Bai ¹ , Xiaoning Zhu ² , Conghao Zhong ² , Yali Hou ⁴ , Di Zhu ² , Ning Yang ² , Xiaoxiang Hu ² , Huaijun Zhou ³ ¹ <i>Aarhus University, Aarhus, Denmark;</i> ² <i>China Agricultural University, Beijing, China;</i> ³ <i>UC Davis, Davis, California, United States;</i> ⁴ <i>CAAS, Beijing, China</i>
1:50 PM	255S	Sex-biased gene regulation across 30 chicken tissues Haihan Zhang* ¹ <i>Hunan Agricultural University, Changsha, China</i>
2:25 PM	256S	Bridging the omics knowledge gap: Integrative metrics for host-microbe interaction networks driving phenotypes Congjiao Sun* ¹ <i>China Agricultural University, Beijing, China,</i>
3:00 PM		Break

- 3:30 PM 257S **Mapping the regulatory genetic landscape of complex traits using advanced intercross line**
Xiaoxiang Hu^{*1}, Yuzhe Wang¹, Xiaoning Zhu¹, Chong Li²
¹China Agricultural University, Beijing, Beijing, China; ²China Agricultural University, Beijing, China
- 4:05 PM 258S **Winding back the clock – The genome edited re-wilded chicken and how to identify functional polymorphisms relating to domestication**
William Silva¹, Lech Kaczmarek¹, Anna Berenson², Teresa Davoli², Jef Boeke², Dominic Wright^{*1} ¹Linköping University, Linköping, Sweden; ²NYU Langone, New York, New York, United States
- 4:40 PM **Panel discussion**

Metabolism and Nutrition: Enzymes and Feed Additives II

Ealing 6006-6007-6106-6107

Moderators: In Ho Kim, Dankook University
Rajesh Jha, University of Hawaii, Manoa

- 1:00 PM 104 **Effects of exogenous protease on postabsorptive energy metabolism of broiler chickens**
Xuetao Liu¹, Changlin Guo¹, Hansuo Liu¹, Feng Zhao¹, Yuming Wang¹, Jingjing Xie^{*1} ¹Institute of Animal Science of Chinese Academy of Agricultural Sciences, Beijing, China
- 1:15 PM 105 **Resveratrol supplementation mitigates age-related declines in egg production, quality, and ovarian health of laying hens**
Li Zhang^{*12} ¹Chinese Academy of Agricultural Sciences, Beijing, China; ²Sichuan Agricultural University, Chengdu, China
- 1:30 PM 106 **The effects of dietary supplementation with grape seeds and onion peel extracts on the production performance and egg yolk flavor of laying hens during late laying period**
Yan Wang¹², Jin Wang¹, Hui Yu¹, Chu Meng¹, Yi Zhang¹, Yan Hu³, Ruqian Zhao¹, Yimin Jia^{*1} ¹College of Veterinary Medicine, Nanjing Agricultural University, Nanjing, Jiang SU, China; ²Cargill Animal Nutrition, Cargill Inc., Beijing Branch, China, Beijing, China; ³Poultry Institute, Chinese Academy of Agriculture Science, Yangzhou, China
- 1:45 PM 107 **Effects of mixed polyphenols or herbal complexes on production performance and oviduct health in laying hens**
Xuan Cui^{*1}, Meng Wang¹, Xuemei Ding¹, Shiping Bai¹, Qiufeng Zeng¹, Keying Zhang¹, Yan Liu¹, Jianping Wang¹ ¹Sichuan Agricultural University, Chengdu, China

- 2:00 PM 108 **Effects of bile acids on growth performance and meat quality of broilers feeding different energy and protein levels**
Konkawat Rassmidatta^{*1}, Ananchai Philatha¹, Yuwares Ruangpanit¹, Siriporn Songmesuk¹, Seksan Ngoygudjik¹, Wacharaporn Tanumtuen¹, Aizhi Cao², Thiti Jeenyim²
¹Kasetsart University, Nakhon-Pathom, Thailand; ²Shandong Longchang Animal Health Product Co. Ltd., Shandong, China
- 2:15 PM 109 **Effects and mechanism of carnosic acid on performance and intestinal health of lipopolysaccharide-challenged broilers**
Yibing Wang^{*1}, Qin Wang¹, Shouqun Jiang¹ ¹Guangdong Academy of Agricultural Sciences, Guangzhou, China
- 2:30 PM 110 **Role of vanin-1 gene methylation in fat synthesis in goose liver: Effects of betaine and 5-azacytidine treatments**
Zhi Yang^{*1}, Xinfang Wang¹, Zhiyue Wang¹ ¹Yangzhou University, Yangzhou City, Jiangsu Province, China
- 2:45 PM 111 **Broiler chicken responses to incremental levels of dietary yeast-based nucleotides reared under high-stocking density**
Lihle Sindaku¹, Victor Mlambo², Caven Mguvane Mnisi^{*1}
¹North-West University, Mafikeng, North West, South Africa; ²University of Mpumalanga, Nelspruit, Mpumalanga, South Africa
- 3:00 PM **Break**
- 3:30 PM 112 **Combined antioxidants are more effective than single antioxidants in alleviating oxidative stress in the gut-liver-muscle axis of broilers by modulating the TLR-NF- κ B pathway**
Xuyang Gao^{*1} ¹China Agriculture University, Beijing, Beijing, China
- 3:45 PM 113 **Use of wild fern (Azolla) as poultry feed additive in hilly areas of Jammu and Kashmir, India**
Mandeep S. Azad^{*1} ¹SKUAST-JAMMU, Jammu, India
- 4:00 PM 114 **Impact of different dosages of yeast-based nucleotides on growth performance, meat quality, and physiological responses of densely-stocked Jumbo Coturnix quail**
Caven Mguvane Mnisi^{*1}, Ndyabo Skele¹, Elijah Kiarie²
¹North-West University, Mafikeng, North West, South Africa; ²University of Guelph, Guelph, Ontario, Canada

Awards Celebration Banquet
Brixton Hall
6:00 PM

Thursday, October 16, 2025

Symposium: Hormonal regulation of growth and body composition in poultry Mayfair A-B

Chairs: Laura E. Ellestad, University of Georgia
Hongmei Li, South China Agricultural University

- 8:00 AM 259S **Mechanisms regulating induction of pituitary growth hormone production during chicken embryonic development**
Tom Porter^{*1} *University of Maryland, College Park, Maryland, United States*
- 8:40 AM 260S **Studies on the mechanism of growth axis genes affecting the balance of adipogenic, myogenic, and osteoblastic differentiation in chickens**
Hongmei Li^{*1} *South China Agricultural University, Guangzhou, Guangdong, China*
- 9:20 AM 261S **Signaling and epigenetic networks of growth axis genes in chicken myogenesis and muscle development**
Ma Qing¹, He Huiting¹, Zhang Xingyu¹, Minli Yu^{*1} *Nanjing Agricultural University, Nanjing, China*
- 10:00 AM **Break**
- 10:30 AM 262S **IGF2 promotes the differentiation of chicken embryonic myoblast by regulating mitochondrial remodeling**
Chang bin Zhao^{*1} *South China Agricultural University, GuangZhou, TianHe, China*
- 11:05 AM 263S **Thyroid hormone regulation of the insulin-like growth factor system in avian skeletal muscle**
Laura E. Ellestad^{*1}, Lauren Vaccaro², Colin Barcelo¹, Jason Payne¹ *University of Georgia, Athens, Georgia, United States;*
²University of Findlay, Findlay, Ohio, United States
- 11:40 AM **Roundtable discussion**

Metabolism and Nutrition: General Nutrition II Ealing 6006-6007-6106-6107

Moderators: Guang-hai Qi, Chinese Academy of Agricultural Sciences
Elijah Kiarie, University of Guelph

- 8:00 AM 115 **Developments and challenges in poultry nutrition**
Edgar Oviedo-Rondon^{*1} *North Carolina State University, Raleigh, North Carolina, United States*

8:30 AM	116	Effect of pellet quality on the growth performance and nutrient utilization of broiler chickens Waqas Ahmed^{*1}, Sara Mubeen¹, Awais Ali², Sajid M. Tahir¹, Zeshan Zulfiqar³ ¹<i>University of Agriculture Faisalabad Punjab Pakistan, Rawalpindi, Pakistan;</i> ²<i>The Graduate School of Chinese Academy of Agricultural Sciences, Haidian, Beijing, China;</i> ³<i>Department of Animal Nutrition and Feed Science, Henan Agricultural University, Zhengzhou China, Zhengzhou, China</i>
8:45 AM	117	Dietary fiber modulates gut microbiota to mitigate antibiotic resistance gene dissemination in broiler chickens Mi Zhang^{*1}, Aiwei Guo¹ ¹<i>Southwest Forestry University, Kunming, Yunnan, China</i>
9:00 AM	118	Intestinal microarchitectures relative influence to enhanced growth performance in layer chickens following in ovo injection of mannan-based oligosaccharides and <i>Limosilactobacillus reuteri</i> DSM 17938 Habtam Ayalew^{*1}, Uchechukwu Obianwuna¹, Waqar Iqbal¹, Changchun Xu¹, Jing Wang¹, Shugeng Wu¹, Haijun Zhang¹ ¹<i>Chinese Academy of Agricultural Science, Haidian, Beijing, China</i>
9:15 AM	119	Effects of metabolic energy on performance and hepatic lipid metabolism in laying hens fed low-protein diet with sustained-release amino acids Kangqi Xu^{*1}, Hongchao Jiao¹ ¹<i>Shandong Agricultural University, Tai'an, Shandong, China</i>
9:30 AM	120	Fructose enhances intestinal development and barrier function while driving hepatic lipogenesis and inflammation in broilers Liping Gan^{*1}, Ningyu Geng¹, Qiqi Yang¹ ¹<i>Henan University of Technology, Zhengzhou, Henan, China</i>
9:45 AM	121	Prediction of net energy requirement in Chinese domestic broilers by factorial method Sai Zhang^{*1}, Taidi Xiong¹, Shouqun Jiang¹ ¹<i>Institute of Animal Science, Guangdong Academy of Agricultural Sciences, Guangzhou, China</i>
10:00 AM		Break
10:30 AM	122	Effects of feed pellet diameter and length on production performance, organ development, blood biochemical indicators digestive enzyme activity, and nutrient utilization efficiency in Cherry Valley ducks Huimin Wang¹, Hongchao Jiao^{*1}, Hai Lin², Jingpeng Zhao¹, Xiaojuan Wang¹ ¹<i>Shandong Agricultural University, Tai'an, China;</i> ²<i>Shandong Agricultural University, Tai'an, Shandong, China</i>

- 10:45 AM 123 **Molecular mechanism of intestinal DNA methylation regulating the function of absorptive enterocytes in fatty liver layer chickens**
Zeshun Jian*¹, Hai Lin², Hongchao Jiao¹, Xiaojuan Wang¹, Jingpeng Zhao¹, Minghui Wang³¹*Shandong Agricultural University, Tai'an City, China;* ²*Shandong Agricultural University, Tai'an, Shandong, China;* ³*Shandong Agricultural University, Tai'an, China*
- 11:00 AM 124 **Net energy requirement of layer-type chicks reared at different temperatures**
Yihui Liu¹, Hai Lin*¹¹*Shandong Agricultural University, Tai'an, Shandong, China*
- 11:15 AM 125 **Effect of pellet feed with different ring die compression ratios on reproductive performance of breeding pigeons, growth performance, meat quality and intestinal function of squab pigeons**
Jinrong Wang¹, Kang Cheng*¹, Daizi Hu¹, Yong Zhang¹¹*Henan University of Technology, Zhengzhou, China*
- 11:30 AM 126 **Study on the correlation between nutritional indicators and feed conversion ratio as well as meat production cost of broilers**
Yanfa Shen*¹, Haiyan Li¹, Dandan Guan¹, Xu Zhang¹¹*Shandong Asia Pacific Chinwhiz Group Co. Ltd., Changle, Shandong, China*

Poultry Management, Waste, and Well-Being II

Mayfair M

Moderators: Karen Schwean-Lardner, University of Saskatchewan
Lilong Chai, University of Georgia

- 8:00 AM 127 **Visual laser enrichment for the broiler: What are the birds telling us?**
Elizabeth A. Bobeck*¹¹*Iowa State University, Ames, Iowa, United States*
- 8:30 AM 128 **Quantifying broiler activity in commercial housing**
Brenda Hernandez Tapia¹, Katy Tarrant*¹¹*Fresno State, Fresno, California, United States*
- 8:45 AM 129 **Mitochondria-associated endoplasmic reticulum membrane proteomics reveals: Vanadium induces ferroptosis in duck liver by disrupting glucose homeostasis and inhibiting the NADH/FSP1/COQ10 axis**
Xueyan Dai², Huawei Chen*¹, Zhiwei Xiong¹, Huabin Cao², Fan Yang¹¹*Jiangxi Agricultural University, Nanchang, China;* ²*Jiangxi Agricultural University, Nanchang, China*

- 9:00 AM 130 **Semi-open water sources minimally affect positive behaviors, but may influence negative behaviors in Pekin ducks depending upon the number of ducks per source**
Jenna M. Schober¹, Gregory S. Fraley^{*1,1}*Purdue University, West Lafayette, Indiana, United States*
- 9:15 AM 131 **Effects of positive versus negative pressure ventilation systems on thermal environment uniformity in yellow-feathered broiler houses In northwest China**
Shaojuan Ge¹, Yier Chen¹, Senzhong Deng¹, Weichao Zheng^{*1}
¹*China Agricultural University, Haidian District, Beijing, China*
- 9:30 AM 132 **The disorder of copper-induced interplay between endoplasmic reticulum and lysosome in the duck liver: potential therapeutic effects of LAPTM4B as a key regulator with baicalin**
Fan Yang¹, Hongyu Shang^{*1}, Jing Chen¹, Chenghong Xing¹, Huabin Cao¹, Xueyan Dai^{1,1}*Jiangxi Agricultural University, Nanchang, China*
- 9:45 AM 133 **New concept incubation: Strategies to approach 100% hatchability**
Zhendan Shi^{*12}, Mingyang Li^{32,1}*Jiangsu Academy of Agricultural Sciences, Nanjing, Jiangsu, China; ²Key Laboratory of Protected Agriculture Engineering in the Middle and Lower Researches of Yangtze River, Ministry of Agriculture and Rural Affairs, Nanjing, Jiangsu, China; ³Jiangsu Academy of Agricultural Sciences, Nanjing, Jiangsu, China*
- 10:00 AM **Break**
- 10:30 AM 134 **Impact of a non-anorexic molting program and second cycle performance, livability and economic viability of commercially available white and brown laying hen strains**
Kenneth E. Anderson^{*1}, Ishab Poudel¹, Ramon Malheiros¹
¹*North Carolina State University, Raleigh, North Carolina, United States*
- 10:45 AM 135 **Impact of different intensities of in-ovo Green-Red dichromatic light on embryonic growth and subsequent post-hatch performance in chickens**
Muhammad Faisal Riaz^{*1}, Hai Lin^{1,1}*Shandong Agricultural University, Tai'an, Shandong, China*

- 11:00 AM 136 **Improving hatchability, chick quality and post-hatch performance of broiler chickens: The role of incubation temperature and early in ovo feeding**
Maxwell A. Okai*^{1,2}, Francis Kruenti², Liu Zheng¹, Ma Yingfa¹, Yendouhamtchié Nadiedjoa^{1,3}, Ahmed Mijiyawa^{4,5}, Clarice M. Temhoul^{1,3}, Roland T. Apélété^{3,1}, Xin Qian¹, Benjamin Adjei-Mensah⁵, Jacob A. Hamidu⁶, Kokou Tona³, Hai Lin¹ ¹*Shandong Agricultural University, Tai'an, Shandong, China*; ²*Council for Scientific and Industrial Research, Animal Research Institute, Accra, Ghana*; ³*University of Lomé, Lomé, Maritime, Togo*; ⁴*College of Animal Science and Technology, Tai'an, China*; ⁵*University of Ghana, Accra, Ghana*; ⁶*Kwame Nkrumah University of Science And Technology, Kumasi, Ghana*
- 11:15 AM 137 **Research on the evaluation and optimization of thermal environment in broiler houses based on computational fluid dynamics**
An Cun Zhu*¹ ¹*Shandong Agricultural University, Shan Dong, China*

Genetics and Genomics

Mayfair I

Moderators: Amonrat Molee, Suranaree University of Technology
Huaijun Zhou, University of California, Davis

- 8:00 AM 138 **Decoding the chicken genome's regulatory landscape for sustainable poultry production**
Huaijun Zhou*¹ ¹*University of California, Davis, Davis, California, United States*
- 8:30 AM 139 **Genetic determinants for age-related decline in female reproductive performance through multi-omics analysis in chicken**
Junnan Zhang*¹, Mingyue Gao¹, Congjiao Sun¹, Ning Yang¹
¹*China Agriculture University, Beijing, Beijing, China*
- 8:45 AM 140 **Microscopic morphology and single-cell level evaluation of day-old chick ovary vitrification and orthotopic transplantation for breed restoration**
Yanyan Sun*¹, Hongfeng Du¹, Caiyue Ge¹, Yunlei Li¹, Jilan Chen¹ ¹*Institute of Animal Sciences, Chinese Academy of Agricultural Sciences, Beijing, China*

- 9:00 AM 141 **Ginger enhances breed-specific physiological, antioxidant and detoxification responses in chickens exposed to hydrocarbon fumes**
Vivian Oleforuh-Okoleh¹, Ucheckukwu Obianwuna*⁵, Olushola G. Adeoye¹, Onyinye Emeka¹, Patience Onu², Ollor Ollor³, Iyememi Kakulu⁴¹*Rivers State University, Port-Harcourt, Nigeria;* ²*Ebonyi State University, Abakiliki, Nigeria;* ³*Medical Laboratory Science, Rivers State University, Port-Harcourt, Nigeria;* ⁴*Estate Management, Faculty of Environmental Sciences, Port-Harcourt, Nigeria;* ⁵*Institute of Feed Research, Chinese Academy of Agricultural Sciences, Beijing, China*
- 9:15 AM 142 **Effects of low protein amino acid balanced diets and astragalus polysaccharides on antioxidant status, lipid metabolism, and related gene expression in heat stressed laying hens**
Wenfeng Liu*¹, Xiaoli Wan¹, Zhiyue Wang¹¹*Yangzhou University, Yangzhou, China*
- 9:30 AM 143 **Studies on evolutionarily conserved functional features of chicken NK cell subsets revealed by single-cell transcriptomics**
Yujin Han*¹, Seung Je Woo¹, Jin-Kyoo Kim², Jae Yong Han¹²
¹*Seoul National University, Seoul, Korea (the Republic of);*
²*Seoul National University, Seoul, Korea (the Republic of)*
- 9:45 AM 144 **Generating genome-edited chickens through ovarian injection in situ**
Xiqiong Wang*¹, Kexin Wu², Zheyi Jiang¹, Jianbo Li¹, Conghao Zhong¹, Junying Li¹, Congjiao Sun¹, Ning Yang¹¹*China Agricultural University, Beijing, China;* ²*China Agricultural University, Beijing, China*
- 10:00 AM **Break**
- 10:30 AM 145 **Detection of Myoglobin gene polymorphism associated with pigeons growth traits**
Zengguang Liao*¹¹*Guangdong Ocean University, Zhanjiang, China*
- 10:45 AM 146 **Abnormal liver protein acetylation directly regulates fatty acid metabolism in laying hens with fatty liver hemorrhagic syndrome**
Dan Wang*¹, Xiaojuan Wang¹, Jingpeng Zhao¹, Hongchao Jiao¹, Hai Lin²¹*Shandong Agricultural University, Tai'an, China;*
²*Shandong Agricultural University, Tai'an, Shandong, China*

- 11:00 AM 147 **Assessing the impact of cryopreservation on Lueang Hang Khao Chicken primordial germ cells for sustainable genetic management**
Sirangkun Sornsan*¹, Kanjana Thumanu², Bertrand Pain³, Amonrat Molee¹ ¹*Suranaree University of Technology, Mueng Nakhon Ratchasima, Nakhon Ratchasima, Thailand;* ²*Synchrotron Light Research Institute, Mueng Nakhon Ratchasima, Nakhon Ratchasima, Thailand;* ³*Stem Cell and Brain Research Institute, University of Lyon, Bron, France*
- 11:15 AM 148 **Culture and chimera production of chicken Primordial Germ Cells (PGCs)**
Kexin Wu*¹, Zheyi Jiang¹, Xiqiong Wang¹, Yuzhou Gu¹, Ning Yang¹ ¹*China Agricultural University, Beijing, China*
- 11:30 AM 149 **Multi-omics reveals key cell types and gene families regulating eggshell strength in chicken uteri**
Jilan Chen¹, Xiaoke Zhang*¹, Yunlei Li¹, Yanyan Sun¹, Jingwei Yuan¹ ¹*Chinese Academy of Agricultural Sciences, Beijing, Beijing, China*

Closing Ceremony

Mayfair E-F-G

12:00 PM

Chairs: Ning Yang, China Agricultural University
Tom E. Porter, University of Maryland

Posters - Ealing Hall

Animal Health

- 150P **Impact of Lactobacillus acidophilus derived postbiotics on the performance of broiler chicken under induced coccidiosis condition**
Shiva K. Kurva*¹, Jagbir Singh Tyagi¹, Gautham Kolluri¹, Matin Ansari Mohd¹, Sagar Khandagale¹, Prashant Vitthal Bhutekar¹, Martina K¹ ¹*Central Avian Research Institute, Izatnagar, Uttar Pradesh, India*
- 151P **Innovative natural compounds for effective coccidiosis control in poultry**
Ju Kyoung Oh*¹, Kyuyeol Son², Kyung-Min Lee¹, Hye-Jin Yoo², Jong Pyo Chae¹, Seung Eun Han² ¹*CJ Blossom Park, Suwon, Gyeonggi-do, Korea (the Republic of);* ²*CJ CheilJedang, Seoul, Korea (the Republic of)*
- 152P **Based on network pharmacology, the mechanism of Angelica sinensis was analyzed to alleviate respiratory diseases in chickens**
Jiaxin Yan*¹, ChunBo Wei¹ ¹*Heilongjiang Bayi Agricultural Reclamation University, Longfeng District, Daqing City, Heilongjiang Province, China*

- 153P **Lactobacillus rhamnosus P118 inhibits Salmonella pullorum infection and vertical transmission by modulating reproductive tract microbiota and host immunometabolism**
 Xiuyan Jin^{*1}, Baikui Wang², Qianzhe Cao¹, Xiamei Kang¹, Hongli An¹³, Yingying Huang¹³, Min Yue^{123 1} *Department of Veterinary Medicine, Zhejiang University College of Animal Sciences, Hangzhou, China; ²Key Laboratory of Systems Health Science of Zhejiang Province, School of Life Science, Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences, Hangzhou, China; ³Hainan Institute of Zhejiang University, Sanya, China*
- 154P **A multi-stage assessment of Lactobacillus rhamnosus P118 in embryonic and post-hatch chick models against Salmonella pullorum**
 Xiuyan Jin^{*1}, Baikui Wang², Yingying Huang¹³, Qianzhe Cao¹, Xiamei Kang¹, Hongli An¹³, Xiaolei Wu², min yue^{123 1} *Department of Veterinary Medicine, Zhejiang University College of Animal Sciences, Hangzhou, China; ²Key Laboratory of Systems Health Science of Zhejiang Province, School of Life Science, Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences, Hangzhou, China; ³Hainan Institute of Zhejiang University, Sanya, China*
- 155P **Molecular analysis of Eimeria tenella isolated from the litter of different chicken farms in Mymensingh, Bangladesh**
 Mohammad Zahangir Alam^{*1}, Anita R. Dey¹, Nusrat N. Shohana¹, Bimal C. Karmakar^{2 1} *Bangladesh Agricultural University, Mymensingh, Bangladesh; ²Bangladesh Agricultural University, Mymensingh, Mymensingh, Bangladesh*

Genetics and Genomics

- 156P **A single-cell resolution atlas of early development and somatic sex identity in the chicken embryo**
 Zhi Cao^{*23}, Yufan He¹³, Kai Jin¹³, Bichun Li^{13 1} *Yangzhou University, Yangzhou, Jiangsu, China; ²Yangzhou University, Yangzhou, Jiangsu, China; ³Yangzhou University, Yangzhou, Jiangsu, China*
- 157P **Investigation of ELOVL5's role in duck cell proliferation and adipogenesis**
 Dandan Sun^{*21}, Zhuocheng Hou^{21 1} *China Agricultural University, Beijing, China; ²National Engineering Laboratory for Animal Breeding, Beijing, China*
- 158P **Comparative study of HiS and FACS for PGCs cultivation: Transcriptomic and cellular biology dimensions**
 Jun Wu^{*1 1} *Yangzhou University, Yangzhou, Jiangsu, China*
- 159P **PGC-mediated green fluorescent protein gene integration and assessment of growth, development, and egg production in germline-transmitted offspring chickens**
 Guangzheng Liu^{*1}, Jun Wu¹, Kai Jin¹, Ying-Jie Niu², Bichun Li^{1 1} *Yangzhou University, Yangzhou, Jiangsu, China; ²Yangzhou University, Yangzhou, China*
- 160P **Construction and optimization of targeted chicken sex chromosome gene knockout and knockin systems**
 Yufan He^{*1 1} *Yang Zhou University, YangZhou, Jiang Su, China*

- 161P **Dissection of germ cell-somatic cell interaction mechanisms in sex differentiation of chicken embryo PGCs**
Fan Li*¹, Zhi Cao^{1,1}*Yangzhou University, Yangzhou, Jiangsu, China*
- 162P **Establishment and optimization of a two-step induction system for generating primordial germ cell-like cells from chicken embryonic stem cells**
Zeyu Li*¹, Xianshuai Xv¹, Hongyan Sun¹, Guohong Chen¹, Bichun Li¹
¹*Yangzhou University, Yangzhou, China*
- 163P **Mechanism of IGF1 secretion by fibroblasts regulating self-renewal of chicken embryonic stem cells**
Liqian Zhu*¹, Xiaomeng Peng¹, Xinrui Wang¹, Zeyu Li², Bichun Li¹
¹*Yangzhou University, Yangzhou, China*; ²*Yangzhou University, Yangzhou, China*
- 164P **Effects of GSK-3 β inhibitor CHIR99021 on cell proliferation, gene expression, and migratory capacity of chicken PGCs**
Mingyang Zou^{1,2}, Gaoyuan Wu^{1,2}, Guangzheng Liu^{1,2}, Jun Wu^{1,2}, Xinrui Wang^{1,2}, Gaozhan Yu^{1,2}, Ying-Jie Niu*^{2,1}*Yangzhou University, Yangzhou, China*; ²*Yangzhou University, Yangzhou, China*
- 165P **Mitochondrial DNA D-loop analysis on population genetic of native chickens in Kalimantan Indonesia**
Putri Sausan A. Alindra*¹, Masahide Nishibori¹, Takahiro Yonezawa¹, Fikri Ardhani^{1,2}, Novemia Fatmarischa^{2,1}*Hiroshima University, Higashihiroshima, Hiroshima Prefecture, Japan*; ²*Mulawarman University, Samarinda, East Kalimantan, Indonesia*
- 166P **Dynamic embryonic skeletal muscle development atlas and its foundation model at single-cell resolution across different chicken breeds**
Chong Li*¹, Yidan Yan¹, Xiarui Zhu¹, Lingzhao Fang², Hao Qu³, Xiaoxiang Hu¹, Yuzhe Wang^{1,1}*China Agricultural University, Beijing, China*; ²*Aarhus University, Aarhus, Denmark*; ³*Guangdong Academy of Agricultural Sciences, Guangzhou, China*
- 167P **Proteomic analysis of ubiquitination-mediated regulatory mechanisms in chicken primordial germ cell differentiation and proliferation**
Qiang Wei*¹, Xiaoqian Lv², Yingjie Niu¹, Bichun Li¹, Qisheng Zuo*^{1,1}*Yangzhou University, Yangzhou, Jiangsu, China*; ²*Yangzhou University, Yang Zhou, Jiangsu, China*

Immunology

- 168P **Temporal profiling of the Bursa transcriptome reveals systemic differences induced by MDV infection in inbred chicken lines with varying MD-resistance**
Apratim Mitra², John Dunn³, Huanmin Zhang⁴, Qin Chu⁵, Jiuzhou Song*¹
¹*University of Maryland, Ellicott City, Maryland, United States*; ²*NIH, Bethesda, Maryland, United States*; ³*USDA-ARS, Athens, Georgia, United States*; ⁴*USDA-ARS, Athens, Georgia, United States*; ⁵*Institute of Animal Husbandry and Veterinary Medicine, Beijing, China*

- 169P **Generation and characterization of polyclonal antibodies against Dengue, Zika, and Chikungunya Virus antigens for multiplex diagnostic applications in chicken egg yolk**
Hee Jung Choi^{*1}, Jin-Kyoo Kim², Jinmi Kim¹, Marco César Cunegundes Guimarães³, Rafaela Spessemille Valotto³, Jae Yong Han¹²¹*Seoul National University, Seoul, Korea (the Republic of);* ²*Seoul National University, Pyeongchang-gun, Korea (the Republic of);* ³*Federal University of Espírito Santo (UFES), Vitória, Brazil*
- 170P **Meta-Analysis of the effects of dietary enterococcus supplementation on production performance in laying hens: A subgroup assessment based on production phase and bacterial strain**
Jiaqi Li^{*1}, Jianguo Qi¹, Chunbo Wei¹¹*Heilongjiang Bayi Agricultural Reclamation University, Daqing, China*
- 171P **The impact of Lactobacillus on the production performance of laying hens based on meta-analysis**
ZhangHongBo Zhang^{*1}, ShuQi Chen¹, ChunBo Wei¹¹*Heilongjiang Bayi Agricultural University, Daqing, China*
- 172P **Effects of Quercetin and Rutin on meat quality and cecal microbiota in broiler chickens under high stocking density**
Yi Peng Zhao¹, Yang Liu¹, Xiaoya Tian¹, Zhiqiang Miao¹, Miaomiao Han¹, Chenxuan Huang¹, Jianhui Li¹, Yuanyang Dong^{*1}¹*Shanxi Agricultural University, Jinzhong, China*
- 173P **Effects of Quercetin and Rutin on growth performance, intestinal barrier function and cecal microbiota in broiler chickens challenged with Salmonella Enteritidis**
Yang Liu^{*1}, Yi Peng Zhao¹, Jie Guo¹, Zhiqiang Miao¹, Miaomiao Han¹, Chenxuan Huang¹, Jianhui Li¹, Yuanyang Dong¹¹*Shanxi Agricultural University, Jinzhong, China*
- 174P **Effect of dietary supplementation with Sublancin on growth performance, immune function, and intestinal health of yellow-feathered broilers**
Xiajing Lin¹, Zhongyong Gou^{*1}, Yibing Wang¹, Shouqun Jiang¹¹*Institute of Animal Science, Guangdong Academy of Agricultural Sciences, State Key Laboratory of Swine and Poultry Breeding Industry, Key Laboratory of Animal Nutrition and Feed Science in South China, Ministry of Agriculture and Rural Affairs, Guangdong Key Laboratory of Animal Breeding and Nutrition, Guangdong Public Laboratory of Animal Breeding and Nutrition, Guangzhou, China*

Meat and Egg Quality

- 175P **Maternal low-protein diets influence sex-specific growth performance, meat quality, and intestinal morphology of broiler offspring**
Yaqin Li^{*1}¹*Sichuan Agricultural University, Chengdu, China*
- 176P **Bright-field automated identification method for eggshell moist spots detection**
Jiajie Yang^{*1}, Jiangxia Zheng¹¹*China Agricultural University, Beijing, China*

- 177P **Comparative glycoproteomics reveals adaptive divergence in avian eggshell mamillary layer**
Lin Xuan^{*2}, Jiangxia Zheng¹¹China Agricultural University, Beijing, China;
²China Agricultural University, Beijing, China
- 178P **Effects of uterine microbiota and metabolites on the formation of speckled eggs in laying hens**
Xing Chen¹, Xue Cheng¹, Zhonghua Ning^{*1}¹China Agriculture University, Beijing, Beijing, China
- 179P **Green and sustainable freshness indicator: Utilizing pitaya peel anthocyanin films for monitoring meat freshness**
Yimeng Huang^{*2}, Xueli Bai¹, Xiao Sun¹, Chi Wan³¹Chuzhou University, Chuzhou, Anhui, China; ²Chuzhou University, Anhui, China; ³Chuzhou Zhicheng Agricultural Co., Ltd., Anhui, China
- 180P **Eco-friendly synthesis of Ag-Cu nanoparticles via mannitol reduction for meat freshness monitoring**
Yang Ou^{*1}, Yuanchu Li¹, Jiahang Yu¹, Chi Wan²¹Chuzhou University, Chuzhou, China; ²Chuzhou Zhicheng Agricultural Co., Ltd., Anhui, China
- 181P **Molecular characterization of soft-shelled egg formation in laying hens: Integrated genomic and transcriptomic analysis**
Xiaofan Yu^{*12}, Zhonghua Ning¹¹China Agricultural University, Beijing, China; ²Enshi Polytechnic, Enshi, Hubei, China
- 182P **Effects of dietary protein resources and additive combinations on the production performance and egg quality of laying hens**
Zhongyong Gou¹, Qiuli Fan¹, Fayuan Ding¹, Zhonggang Cheng¹, Limin Chen¹, Yibing Wang^{*1}, Xiajing Lin¹, Sai Zhang¹, Dong Ruan¹, Jinling Ye¹, Shouqun Jiang¹¹Institute of Animal Science, Guangdong Academy of Agricultural Sciences, State Key Laboratory of Swine and Poultry Breeding Industry, Key Laboratory of Animal Nutrition and Feed Science in South China, Ministry of Agriculture and Rural Affairs, Guangdong Public Laboratory of Animal Breeding and Nutrition, Guangdong Key Laboratory of Animal Breeding and Nutrition, Guangzhou, China
- 183P **Effects of dietary n-6/n-3 PUFA on production performance, egg quality, and lipid metabolism of duck breeders**
Shuang Wang^{*123}, Wei Chen¹²³, Yanan Zhang¹²³, Chuntian Zheng¹²³, Weiguang Xia¹²³¹Institute of Animal Science, Guangdong Academy of Agricultural Sciences, Gungzhou, Gungdong, China; ²State Key Laboratory of Swine and Poultry Breeding Industry, Guangzhou, China; ³Key Laboratory of Animal Nutrition and Feed Science in South China, Ministry of Agriculture and Rural Affairs, Guangdong Public Laboratory of Animal Breeding and Nutrition, Guangdong Provincial Key Laboratory of Animal Breeding and Nutrition, Guangzhou, China
- 184P **Brightening poultry: Enhancing chicken meat quality through hibiscus manihot-enriched diets**
Jungseok Choi^{*1}, JongHyuk Kim¹, GyuLim Yeom¹, Sanghun Park¹, Gyutae Park¹, Soyoung Jang¹, Beobmo Ku¹, Minjun Kim¹, Jiwoo Kang¹, Sol-Hee Lee¹
¹Chungbuk National University, Cheongju, Korea (the Republic of)

Metabolism and Nutrition: Amino Acids

- 185P **Effect of arginine supplementation on liver and pectoral muscle: tissue-specific lipid metabolism in broilers**
Awais Ali^{*1}, Bifeng Zhang¹, Ma Teng¹, Zhang Hongfu¹ ¹*The Graduate School of Chinese Academy of Agricultural Sciences, Haidian, Beijing, China*
- 186P **Alanyl-glutamine dipeptide mitigates E. coli-induced diarrhea in hy-line chicks: Mechanistic insights into microbiome modulation, antioxidant response, and intestinal integrity**
Usman Nazir^{*1}, Xucheng Zheng¹, Zhi Yang¹, Zhiyue Wang¹, Haiming Yang¹ ¹*Yangzhou University, Yangzhou, Jiangsu, China*
- 187P **Optimizing amino acid composition of glycine and serine for improved albumen quality in low crude protein laying hen diets**
Waqar Iqbal^{*1}, Siman Li¹, Habtamu Ayalew¹, Changchun Xu¹, Haijun Zhang¹ ¹*Chinese Academy of Agricultural Sciences, Haidian, Beijing, China*

Metabolism and Nutrition: Enzymes and Feed Additives

- 188P **Glycyrrhiza uralensis as a phytogenic approach on modulating early-life muscular and intestinal development via In-ovo injection in commercial broiler embryo**
Liang-en Yu^{*1}, Chuan-Ju Lin¹, Bor-Rung Ou², Jan-Ying Yeh³, Yu-Chia Chang¹, Yu-Chuan Liang¹ ¹*Academia Sinica, Taipei, Taiwan*; ²*Tunghai University, Taichung, Taiwan*; ³*Asia University, Taichung, Taiwan*
- 189P **Effects of dandelion flavonoids and chlorella powder on the growth performance, antioxidant capacity, and intestinal microbial structure of 1- to 30-day-old Huxu chicken**
Hanxu Zhang^{*1}, Jinglin Ye¹, Yibing Wang¹, Shouqun Jiang¹ ¹*Institute of Animal Science, Guangdong Academy of Agricultural Sciences, Guangzhou, Guangdong, China*
- 190P **Effect of dietary scutellaria flavone on growth performance and intestinal health of broilers under LPS stress**
Kaiyuan Niu^{*1}, Mubashar Hassan¹, Yibing Wang¹, Shouqun Jiang¹ ¹*Institute of Animal Science, Guangdong Academy of Agricultural Sciences, Guangzhou, Guangdong, China*
- 191P **Effects of daidzein supplementation on laying performance, egg quality, and lipid metabolism in aged laying hens**
Yu Fu^{*1}, Jianmin Zhou¹, Haijun Zhang¹, Shugeng Wu¹, Guanghai Qi¹, Jing Wang¹ ¹*Institute of Feed Research, Beijing, China*
- 192P **Effects of compound extracts of Chinese herbal medicines for liver and kidney protection on the production performance, liver and kidney tissues and liver gene expression of laying hens in the late laying period**
Yi Peng Zhao^{*1}, Yang Liu¹, Xiaoya Tian¹, Yuanyang Dong¹ ¹*Shanxi Agricultural University, Jinzhong, China*

- 193P **Advanced multi-step poultry in vitro evaluation platform: Assessing the characteristics and efficacy of poultry feed additives**
Ju Kyoung Oh^{*1}, Eun Seon Oh¹, Pu Rum Kim¹, Jong Pyo Chae¹, Seung Eun Han² ¹*CJ Blossom Park, Suwon, Gyeonggi-do, Korea (the Republic of)*; ²*CJ CheilJedang, Seoul, Korea (the Republic of)*
- 194P **Effects of mixed polyphenols or herbal complexes on production performance and oviduct health in laying hens**
Xuan Cui^{*1}, Meng Wang¹, Xuemei Ding¹, Shiping Bai¹, Qiufeng Zeng¹, Keying Zhang¹, Yan Liu¹, Jianping Wang¹ ¹*Sichuan Agricultural University, Chengdu, China*
- 195P **Bile acids improve the laying performance of aged hens by promoting yolk precursor synthesis and deposition in hierarchical follicles**
Chu Meng¹, Hui Yu¹, Jin Wang¹, Jiwei Zhu¹, Yi Zhang¹, Aizhi Cao², Yan Hu³, Bin He¹, Ruqian Zhao¹, Yimin Jia^{*1} ¹*College of Veterinary Medicine, Nanjing Agricultural University, Nanjing, Jiang SU, China*; ²*Industrial Research Institute of Liver Health & Homeostatic Regulation, Dezhou, China*; ³*Institute of Poultry Science of Jiangsu Province, Yangzhou, China*
- 196P **Effect of amla and chili supplementation on production performance, stress markers, and cytokine response in breeder hens**
Nitipol Chainet^{*1}, Mutyarsih Oryza¹, Wunpen Sonsamrong¹, Wichuta Khosinklang¹, Piyaadtana Homyok¹, Amonrat Molee¹, Wittawat Molee¹ ¹*Institute of Agricultural Technology, Suranaree University of Technology, Nakhon Ratchasima, Thailand*
- 197P **Targeted delivery of butyric acid: Performance and survivability outcomes in broilers fed protected butyrate**
Abdelhacib Kihal¹, Abdelrahman Abdelhady^{*1}, Ahmed Radwan¹, J. López-Paredes¹, Allan Junsay¹, Monica Puyalto¹, J.J Mallo¹ ¹*Norel S.A., Madrid, Spain*
- 198P **Impact of phased yeast-based nucleotide supplementation on growth performance, and physiological and meat quality parameters in densely-stocked broilers**
Caven Mguvane Mnisi^{*1}, Victor Mlambo², Nicole Moreane²¹ ¹*North-West University, Mafikeng, North West, South Africa*; ²*University of Mpumalanga, Nelspruit, Mpumalanga, South Africa*
- 199P **Protease highly resistant to pelleting improves amino acid digestibility in broiler chickens**
Tiezhao Li¹, Songjun Jiao¹, Xuetao Liu¹, Feng Zhao¹, Yuming Wang¹, Jingjing Xie^{*1} ¹*Institute of Animal Science, Chinese Academy of Agricultural Sciences, Beijing, China*

Metabolism and Nutrition: General Nutrition

- 200P **Dietary density and bacteriophage supplementation synergistically enhance the growth performance, microbial diversity, and reduce gas emission in broilers**
Kye J. Lee^{*12}, Vetriselvi Sampath¹², In Ho Kim¹² ¹*Dankook University, Cheonan, Korea (the Republic of)*; ²*Smart Animal Bio Institute, Dankook University, Cheonan, Choongnam, Korea (the Republic of)*

- 201P **Effect of the use of microencapsulated amino acids supplementation on the utilization advantage and intestinal barrier function of low-protein diets in laying hens during late laying period**
Junjie Wang^{*1}, Hai Lin¹, Hongchao Jiao¹, Jingpeng Zhao¹, Min Liu¹, Xiaojuan Wang¹ ¹*Shandong Agricultural University, Tai'an, Shandong, China*
- 202P **Effects of dietary energy and protein levels on semen quality of Qingyuan partridge breeder cocks**
Zhongyong Gou¹, Suyin Guo², Xuehui Luo³, Qiuli Fan¹, Xiajing Lin¹, Sai Zhang¹, Limin Chen¹, Yibing Wang¹, Dong Ruan¹, Jinling Ye^{*1}, Shouqun Jiang¹ ¹*Institute of Animal Science, Guangdong Academy of Agricultural Sciences, State Key Laboratory of Swine and Poultry Breeding Industry, Key Laboratory of Animal Nutrition and Feed Science in South China, Ministry of Agriculture and Rural Affairs, Guangdong Public Laboratory of Animal Breeding and Nutrition, Guangdong Key Laboratory of Animal Breeding and Nutrition, Guangzhou, China;* ²*Qingyuan Qingcheng District Animal Health and Epidemic Prevention Center, Qingyuan, China;* ³*Qingyuan Chicken Research Institute Qingcheng District Qingyuan City, Qingyuan, China*
- 203P **Metabolic characteristics of the uterus in the eggshell mineralization cycle of laying hens and their association with the eggshell quality during the late laying period**
Dong Dai^{*1}, Yingying Yang¹, Haijun Zhang¹, Shugeng Wu¹, Guanghai Qi¹, Jing Wang¹ ¹*Institute of Feed Research, Chinese Academy of Agricultural Sciences, Beijing, China*
- 204P **Effects of dietary protein restriction and excess on production performance, egg quality, organ indices and serum parameters in late-phase laying hens**
Hongye Zhang^{*1}, Jianping Wang¹, Keying Zhang¹, Shiping Bai¹, Qiufeng Zeng¹, Xuemei Ding¹, Yue Xuan¹, Yan Liu¹ ¹*Sichuan Agricultural University, Sichuan, China*
- 205P **Black soldier fly larvae oil ameliorates gut barrier integrity in broiler chickens fed a low-protein diet**
Muhsin A. Anas^{*1}, Muhammad A. Aprianto¹, Nur'alim Hidayaturrohmana¹, Yizrel Sapan¹, Fadella N. Almira²³, Rinanti Eka Aldis¹³ ¹*Faculty of Animal Science, Universitas Gadjah Mada, Sleman, Yogyakarta, Indonesia;* ²*Faculty of Agriculture and Food Sciences and Environmental Management, University of Debrecen, Debrecen, Hungary;* ³*University of Debrecen, Debrecen, Hungary*

Metabolism and Nutrition: Vitamins and Minerals

- 206P **Mechanism of action of organic zinc in regulating the growth performance and meat quality of yellow-feathered broilers**
Xiangtian Yao^{*1}, Yibing Wang¹, Shouqun Jiang¹ ¹*Institute of Animal Science, Guangdong Academy of Agricultural Sciences, Guangzhou, Guangdong, China*

- 207P **Chromium propionate as a dietary strategy for heat stress mitigation in broilers**
Hyuck Kim^{*1}, Jungseok Choi¹, Wonhyung Park¹, Dongcheol Song¹, Kyeongho Jeon¹, Jinmo Yang¹, Chunghan Lee², Chia Juan Lim², Dexter Lee², Jinho Cho¹
¹Chungbuk National University, Cheongju-si, Korea (the Republic of); ²Kemin Industries, Inc., Singapore, Singapore

Microbiology and Physiology

- 208P **Multidrug-resistant *Salmonella enterica* isolated from locally available broiler markets in Bangladesh.**
Bijoy Banik^{*1}, Ayesha Siddiqua¹, Proshanto S. Pranto¹, Md. Fauzul A. Fahim¹, Saiful Islam¹
¹Sylhet Agricultural University, Sylhet, Bangladesh
- 209P **Comparative analysis of the chicken gut microbiome with cattle and pig through metagenome sequencing**
Haram Kim^{*1}, Yeongjae Chae¹, Hyunok Doo¹, Jinok Kwak¹, Yejin Choi¹, Juyoun Kang¹, Suyoung Lee¹, Hyunjin Yang¹, Sheena Kim¹, Minho Song², Jinho Cho³, HyeunBum Kim¹
¹Dankook University, Cheonan, Chungnam, Korea (the Republic of); ²Chungnam National University, Daejeon, Chungnam, Korea (the Republic of); ³Chungbuk National University, Cheongju, Chungbuk, Korea (the Republic of)
- 210P **First validation of a multiplex real-time PCR assay for simultaneous detection and genotyping of major fowl avian adenovirus serotypes associated with poultry diseases**
Amina Kardoudi^{*1}, Siham Fallahi¹, Faouzi Kichou¹, Abdelouheb Benani²
¹Institute of Agriculture and Veterinary Institute Hassan II, Casablanca, Morocco; ²Pasteur Institute of Morocco, Casablanca, Morocco
- 211P **Losing to win: Fimbriae loss boosts *Salmonella pullorum* vertical transmission via immune evasion**
Xiamei Kang¹, Xiuyan Jin^{*1}, Min Yue^{1,2,3}
¹Zhejiang University College of Animal Sciences, Hangzhou, China; ²School of Life Science, Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences, Hangzhou, China; ³Hainan Institute of Zhejiang University, Sanya, China
- 212P **Effect of dielectric barrier discharge cold plasma combined with lactic acid on the microbial community structure of yellow-feather chicken carcasses**
Tianran Huang^{*1}, Xincheng Mei¹, Peng Wang¹
¹Nanjing Agricultural University, Nanjing, China
- 213P **Age-dependent dynamics and fermentation-mediated shifts in the cecal microbiome of commercial layer chicken**
Moin Uddin^{*1}, Khatun-A-Jannat Esha¹, Nazmul Hoque², Abu Sadeque Md. Selim¹, Md. Mordhedur Rahman³
¹Gazipur Agricultural University, Gazipur, Bangladesh; ²Gazipur Agricultural University, Gazipur, Bangladesh; ³Gazipur Agricultural University, Gazipur, Bangladesh

- 214P **Single-cell sequencing reveals an imbalance of cellular homeostasis in the uterus of laying hens during the late laying period**
Dong Dai^{*1}, Haijun Zhang¹, Shugeng Wu¹, Guanghai Qi¹, Jing Wang¹ ¹*Institute of Feed Research, Chinese Academy of Agricultural Sciences, Beijing, China*
- 215P **Extreme acute heat stress: Effects on rectal temperature and gut morphology of broilers**
Vaishali Gupta¹², Yun-Ji Hwang², Meg Aui¹², Yang-Ho Choi^{*123} ¹*Gyeongsang National University, Jinju-si, Korea (the Republic of);* ²*Gyeongsang National University, Jinju-si, Gyeongsangnam-do, Korea (the Republic of);* ³*Gyeongsang National University, Jinju-si, Gyeongsangnam-do, Korea (the Republic of)*

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- 218P **Continuing education program for the Asian poultry sector**
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- 219P **Protein differences reveal the key mechanism for the high-value utilization of broiler breast fillet myopathy**
Xiao Sun^{*1}, Jiahang Yu¹, Aowei Li¹, Chi Wan²¹ ¹*Chuzhou University, Chuzhou, China;* ²*Chuzhou Zhicheng Agricultural Co., Ltd, Chuzhou, China*
- 220P **Antioxidative and neuroprotective effects of phosvitin phosphopeptides against H2O2-induced oxidative stress in SH-SY5Y cells**
Ji Eun Lee¹, Jae Hoon Lee², Hyun Dong Paik¹, Dong Ahn^{*31} ¹*Konkuk University, Seoul, Korea (the Republic of);* ²*Jeonbuk University, Jeonju, Jeonbuk, Korea (the Republic of);* ³*Iowa State University, Ames, Iowa, United States*
- 221P **A novel method to quantify viable *Enterococcus faecium* in pellet feed**
Jingjing Xie^{*1}, Ying Zhang¹ ¹*Institute of Animal Sciences of Chinese Academy of Agricultural Sciences, Beijing, China*

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Antibiotics use in small scale poultry farms in Nepal

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