

# The 2025 Spring Meeting of Japan Poultry Science Association

March 28, 2025

Online

Presentation	7 min.
Discussion	3 min.
Interval	2 min

## Morning Session (9:30~12:00)

### O 1 ~ O11 Best Presentation Award Candidate Oral Session

9:30~12:00 Best Presentation Award Candidate Oral Session  
(Genetics, Breeding, Reproduction, Physiology, Nutrition and Feeds)

9:30~10:40

- 1 Morphological comparison of four Japanese indigenous chicken breeds using skeletal specimens
  - Yume Okada, Yuma Nishida, Prudence Nyirimana, Dipson Gyawali and Tatsuhiko Goto (Obihiro Univ.)
- 2 Genome-wide association study of egg traits in Hinaidori chicken using restriction site-associated DNA sequencing
  - Dipson Gyawali<sup>1</sup>, Yume Okada<sup>1</sup>, Prudence Nyirimana<sup>1</sup>, Mana Furuta<sup>1</sup>, Yuma Nishida<sup>1</sup>, Ami Shikano<sup>2</sup>, Ken Tazawa<sup>2</sup>, Kazuhiro Rikimaru<sup>2</sup> and Tatsuhiko Goto<sup>1</sup>  
(<sup>1</sup>Obihiro Univ., <sup>2</sup>Akita Pref Livest. Cent.)
- 3 Basic studies for genome editing using avian adeno-associated virus vectors
  - Sodai Fujii<sup>1</sup>, Takumi Terada<sup>1</sup>, Tenkai Watanabe<sup>1</sup>, Ryo Ezaki<sup>1</sup>, Hiroyuki Horiuchi<sup>1,2</sup> and Mei Matsuzaki<sup>1</sup>  
(<sup>1</sup>Hiroshima Univ., <sup>2</sup>Hiroshima Univ. Innovation Ctr.)
- 4 Efficient transfection into chicken primordial germ cells by optimizing conditions for electroporation
  - Natsumi Takahashi<sup>1</sup>, Naoki Takamatsu<sup>1</sup>, Satoru Ohira<sup>2</sup>, Asma Khatun<sup>1</sup>, Masaki Kato<sup>1,2</sup> and Yoshiaki Nakamura<sup>1,2,3</sup>  
(<sup>1</sup>Grad. School of Integrated Sciences for Life, Hiroshima Univ., <sup>2</sup>School of Applied Biological Science, Hiroshima Univ., JAB, Hiroshima Univ.)
- 5 Demonstration of IgY binding to FcRY receptor expressed on vascular endothelial cells in avian ovaries

○ Mayuko Okamoto, Ryo Sasaki, Kyohei Furukawa and Atsushi Murai  
(Graduate School of Bioagricultural Sciences, Nagoya Univ.)

- 6 Is phosphorylation of medullary p38 MAPK involved in induction of postprandial satiety in chicks?

○ Miyu Kaihatsu, Junya Takegaki, Kazuhisa Honda and Takaoki Saneyasu  
(Grad. Sch. Agr. Sci., Kobe Univ.)

10:40~11:00

**Break (20 min.)**

11:00~12:00

- 7 Effects of hypertonic saline administration on protein and lipid metabolism-related gene expression in chicks

○ Kaoruko Murata, Yuhui Zhang, Junya Takegaki, Takaoki Saneyasu and Kazuhisa Honda  
(Grad. Sch. Agr. Sci., Kobe Univ.)

- 8 Sodium chloride gives a rewarding effect on chickens

○ Kazushi Koyama<sup>1</sup> and Fuminori Kawabata<sup>1,2,3</sup>

(<sup>1</sup>Grad. Sch. of Agric. and Life Sci., Hirosaki Univ, <sup>2</sup>Fac. of Agric. and Life Sci., Hirosaki Univ., <sup>3</sup>United Grad. Sch. of Agric. Sci., Iwate Univ.)

- 9 Effects of amino acid supplementation to a rice-based low-protein diet on the growth performance in broiler chicks

○ Risa Migita<sup>1</sup>, Junya Takegaki<sup>2</sup>, Takaoki Saneyasu<sup>2</sup> and Kazuhisa Honda<sup>2</sup>  
(<sup>1</sup>Fac. Agric., Kobe Univ. <sup>2</sup>Grad. Sch. Agr. Sci., Kobe Univ.)

- 10 The Effect of Waste Perilla Seeds Additive Feed on Egg Laying Rate in Guinea Fowl

Daiki Hayashi, ○ Chihiro Murai, Masahito Hikichi, Rin Kusubata, Ken Takahata, Koumei Shirasuna, Hisataka Iwata and Takehito Kuwayama  
(Tokyo Univ. of Agri.)

- 11 The effect of powdered additive feed of red swamp crayfish shell on egg shell strength and egg yolk color in Japanese bantam

○ Rin Kusubata, Chihiro Murai, Akira Kurosawa, Koumei Shirasuna, Hisataka Iwata, Takehito Kuwayama and Kouji Takeda  
(Tokyo Univ. of Agri.)

12:00~13:00

**Break (60 min.)**

13:00~14:00

**General meeting · Award Ceremony (60 min.)**

14:00~14:30

**Break (30 min.)**

## **Afternoon Session (14:30~17:00)**

### **12~ 22 General Presentation**

#### **14:30~17:00 General Presentation**

(Genetics, Breeding, Reproduction, Physiology, Anatomy and Histology,  
Nutrition and Feeds, Environment and Hygiene, Processing and Products)

#### **14:30~15:30**

- 12 QTL analysis of AI-estimated pecked area in chickens

○Akira Ishikawa<sup>1</sup>, Tomohiro Mori<sup>2</sup>, Hiromi Yuhashi<sup>3</sup>, Haruko Yamada<sup>3</sup>,  
Yoshiko Ochiai<sup>4</sup> and Shigeru Ichiura<sup>5</sup>

(<sup>1</sup>Nagoya Univ., <sup>2</sup>Spread Knowledge, <sup>3</sup>Poultry lab. Wakayama Pref., <sup>4</sup>Yamaguchi  
Agri. & Fore Gene Tec Ctr., <sup>5</sup>Yamagata Univ.)

- 13 Phenotypic analysis of egg production and quality traits in four Japanese  
indigenous chicken breeds

○Tatsuhiko Goto, Mana Furuta, Yuma Nishida and Yume Okada  
(Obihiro Univ.)

- 14 Regenerate barred gamecock from cryopreserved primordial germ cells

○Noriko Sato<sup>1</sup>, Hiromi Kawai<sup>1</sup>, Yuki Nakajima<sup>2</sup>, Akina Kanda<sup>2</sup> and  
Takahiro Tagami<sup>2</sup>

(<sup>1</sup> Livestock Research Institute, AITC, <sup>2</sup>NILGS)

- 15 Biochemical analysis of blood parameters of chicken and quail lines: GOT

Yuya Okuzaki<sup>1</sup>, Mitsuo Nunome<sup>1,2</sup>, Takeo Uemura<sup>1</sup>, Astushi Murai<sup>1</sup>,  
Yoichi Matsuda<sup>1</sup> and ○Ken-ichi Nishijima<sup>1</sup>

(<sup>1</sup>Nagoya Univ., <sup>2</sup>A Present address: Okayama University of Science)

- 16 Effect of glyoxal on organ injury and oxidative stress in chicks

Meiko Okino<sup>1</sup>, Ryosuke Makino<sup>2</sup> and ○Tetsuya Tachibana<sup>1</sup>  
(<sup>1</sup>Ehime Univ., <sup>2</sup>Iwate Univ.)

#### **15:30~15:50**

**Break (20 min.)**

15:50～17:00

- 17 Study on the adaptive immune response function and gut microbiota in the intestine of chicks  
Haruka Niino, Naoki Isobe and ○Takahiro Nii  
(Graduate School of Integrated Science for Life, Hiroshima Univ.)
- 18 Bacterial specificity of Bursa-dependent and -independent IgA in gut of chickens  
○Ryota Hirakawa, Motoshi Hisamatsu, Sayoko Maekawa, Eiki Asai,  
Islam Jahidul, Mutsumi Furukawa and Tomonori Nochi  
(Tohoku Univ.)
- 19 Evaluation of the effect of female sex hormones on the production of maternal IgA in the broiler oviduct  
○Sayoko Maekawa, Ryota Hirakawa, Motoshi Hisamatsu, Eiki Asai,  
Jahidul Islam, Mutsumi Furukawa and Tomonori Nochi  
(Tohoku Univ.)
- 20 The potential of L-citrulline-supplemented feed to mitigate the summer heat challenge in broiler chickens  
○Vishwajit S. Chowdhury<sup>1</sup>, Mohamed Z. Elhussiny<sup>1</sup>, Haruka Nishimura<sup>1</sup>,  
Yoshimitsu Ouchi<sup>2</sup>, Futoshi Koyama<sup>3</sup> and Takashi Bungo<sup>2</sup>  
(<sup>1</sup>Kyushu Univ., <sup>2</sup>Okayama Univ. Sci., <sup>3</sup>Fukuoka Argil. Forest. Res. Center)
- 21 *In ovo* green LED lighting promotes embryonic growth and shorten incubation time in ducks  
○Guofeng Han<sup>1</sup>, Yongsheng Li<sup>2</sup>, Berthie Tevanu<sup>2</sup>, Vishwajit S. Chowdhury<sup>3</sup>,  
Quanwei Wei<sup>4</sup> and Zhongchun Bai<sup>1</sup>  
(<sup>1</sup>Jiangsu Acad. Agri. Sci., <sup>2</sup>Nanjing Agr. Univ., <sup>3</sup>Kyushu Univ., <sup>4</sup>Univ. Virginia)
- 22 Food culture of Japanese quail, market research of quail egg commodity in Bangkok, Thailand  
○Akiko Sano  
(Quail Cultural Historian)

# 日本家禽学会 2025 年度春季大会講演目次 (オンライン 2025 年 3 月 28 日)

講演 7 分  
討論 3 分  
間隔 2 分

## 午前の部 (9:30~12:00)

- 1 ~ ○11 優秀発表賞対象講演  
(遺伝・育種・繁殖・生理・栄養・飼養)

9:30~10:40

- 1 骨格標本を用いた日本鶏 4 品種の形態比較 X  
○岡田優明・西田悠真・Prudence Nyirimana・Dipson Gyawali・後藤達彦 (帶畜大畜産)
- 2 Genome-wide association study of egg traits in Hinaidori chicken using restriction site-associated DNA sequencing  
(RAD-seq を用いたヒナイドリの卵形質に関するゲノムワイド関連解析)  
○Dipson Gyawali<sup>1</sup>・岡田優明<sup>1</sup>・Prudence Nyirimana<sup>1</sup>・古田真菜<sup>1</sup>・西田悠真<sup>1</sup>・鹿野亜海<sup>2</sup>・  
田澤 謙<sup>2</sup>・力丸宗弘<sup>2</sup>・後藤達彦<sup>1</sup> (<sup>1</sup>帶畜大畜産, <sup>2</sup>秋田畜試)
- 3 鳥類アデノ随伴ウイルスベクターを用いたウズラへのゲノム編集のための基礎的研究  
○藤井想大<sup>1</sup>・寺田拓実<sup>1</sup>・渡邊天海<sup>1</sup>・江崎僚<sup>1</sup>・堀内浩幸<sup>1,2</sup>・松崎芽衣<sup>1</sup>  
(<sup>1</sup>広島大学院統合生命, <sup>2</sup>広島大学イノベーションセンター)
- 4 エレクトロポレーション条件の最適化によるニワトリ始原生殖細胞への効率的な遺伝子導入  
○高橋夏実<sup>1</sup>・高松直輝<sup>1</sup>・大平暁<sup>2</sup>・Asma Khatun<sup>1</sup>・加藤正暉<sup>1,2</sup>・中村隼明<sup>1,2,3</sup>  
(<sup>1</sup>広島大院統合生命科学・<sup>2</sup>広島大生物生産・<sup>3</sup>広島大日本鶏資源プロジェクト研究センター)
- 5 鳥類卵巣の血管内皮細胞で発現する FcRY 受容体と IgY との結合の証明  
○岡本真由子・佐々木諒・古川恭平・村井篤嗣 (名大院生命農)
- 6 延髓の p38 MAPK のリン酸化はニワトリヒナにおける食後の満腹感の誘導に関与するか?  
○改發美友・竹垣淳也・本田和久・實安隆興 (神戸大院農)

10:40~11:00

休憩 (20 分)

**11:00～12:00**

- 7 高張液投与がニワトリのタンパク質・脂質代謝関連遺伝子の発現に及ぼす影響  
○村田薰子・ZHANG Yuhui・竹垣淳也・實安隆興・本田和久（神戸大院農）
- 8 塩化ナトリウムはニワトリに報酬をもたらす  
○小山和士<sup>1</sup>・川端二功<sup>1,2,3</sup>（<sup>1</sup>弘前大院農生・<sup>2</sup>弘前大農生・<sup>3</sup>岩大院連合農）
- 9 玄米主体低窒素飼料へのアミノ酸添加がブロイラーの成長成績に及ぼす影響  
○右田梨紗<sup>1</sup>・竹垣淳也<sup>2</sup>・實安隆興<sup>2</sup>・本田和久<sup>2</sup>（<sup>1</sup>神戸大農・<sup>2</sup>神戸大院農）
- 10 廃棄エゴマ種子添加飼料がホロホロチョウの産卵率に及ぼす影響  
林大輝・○村井千尋・引地政仁・楠畠倫・高畠健・白砂孔明・岩田尚孝・桑山岳人（東京農大農）
- 11 アメリカザリガニ殻粉末添加飼料が桂矮鶏の卵殻破壊強度と卵黄色に及ぼす影響  
○楠畠倫・村井千尋・黒澤亮・白砂孔明・岩田尚考・桑山岳人・武田晃治（東京農大）

**12:00～13:00**

休憩

(60分)

**13:00～14:00**

総会・優秀論文賞・優秀発表賞授与式

(60分)

**14:00～14:30**

休憩

(30分)

## 午後の部（14:30～17:00）

### 12～22 一般講演

(遺伝・育種・繁殖・生理・解剖・組織・栄養・飼養・管理・衛生・生産物・加工)

#### 14:30～15:30

##### 12 ニワトリにおけるAI推定突かれ面積のQTL解析

○石川明<sup>1</sup>・森智洋<sup>2</sup>・湯橋宏美<sup>3</sup>・山田陽子<sup>3</sup>・落合芳子<sup>4</sup>・市浦茂<sup>5</sup>

(<sup>1</sup>名大院生命農・<sup>2</sup>スプレッドナレッジ・<sup>3</sup>和歌山県養鶏研・<sup>4</sup>山口農林総技セ・<sup>5</sup>山形大)

##### 13 日本鶏4品種の卵生産および卵質形質の表現型解析

○後藤達彦・古田真菜・西田悠真・岡田優明（帶畜大畜産）

##### 14 凍結保存始原生殖細胞からの横斑シャモ個体再生の取組み

○佐藤典子<sup>1</sup>・河合宏美<sup>1</sup>・中島友紀<sup>2</sup>・神田亜樹奈<sup>2</sup>・田上貴寛<sup>2</sup>

(<sup>1</sup>青森産技畜産研・<sup>2</sup>農研機構 畜産研究部門)

##### 15 家禽リソースの血液生化学解析：GOT

奥崎雄也<sup>1</sup>・布目三夫<sup>1,2</sup>・植村武夫<sup>1</sup>・松田洋一<sup>1</sup>・村井篤嗣<sup>1</sup>・○西島謙一<sup>1</sup>

(<sup>1</sup>名大院農・<sup>2</sup>現岡山理科大)

##### 16 グリオキサールがニワトリヒナの臓器損傷と酸化ストレスに与える影響

沖野芽衣子<sup>1</sup>・牧野良輔<sup>2</sup>・○橘哲也<sup>1</sup>（<sup>1</sup>愛媛大農・<sup>2</sup>岩手大農）

#### 15:30～15:50

休憩（20分）

#### 15:50～17:00

##### 17 ニワトリヒナの腸における獲得免疫応答機能と腸内細菌叢に関する研究

二井野遙<sup>1</sup>・磯部直樹<sup>2</sup>・○新居隆浩<sup>2</sup>（<sup>1</sup>広大生生、<sup>2</sup>広大院統合生命）

##### 18 ファブリキウス嚢依存的・非依存的に分泌される腸管IgA抗体の腸内細菌叢制御機構の解明

○平川良太・久松基史・前川紗佳子・浅井映輝・Islam Jahidul・古川睦実・野地智法

(東北大院農)

##### 19 ニワトリ卵管での母子移行型IgA産生に与える雌性ホルモンの影響評価

○前川紗佳子・平川良太・久松基史・浅井映輝・Jahidul Islam・古川睦実・野地智法

(東北大院農)

##### 20 The potential of L-citrulline-supplemented feed to mitigate the summer heat challenge in broiler chickens

（肉用鶏の猛暑対策としてのL-シトルリン添加飼料の有用性）

○スルチョードリビシュワジット<sup>1</sup>・モハメド Z. エルホセーニ<sup>1</sup>・西村悠<sup>1</sup>・大内義光<sup>2</sup>・

小山 太<sup>3</sup>・豊後貴嗣<sup>2</sup>（<sup>1</sup>九州大・<sup>2</sup>岡山理科大・<sup>3</sup>福岡農林試資源セ）

- 21 In ovo green LED lighting promotes embryonic growth and shorten incubation time in ducks

(卵内の緑色 LED 照明はアヒルの胚の成長を促進し、孵化時間を短縮する)

○韓 国鋒<sup>1</sup>・李 勇勝<sup>2</sup>・ベルティエ テヴァヌ<sup>2</sup>・スルチードリ ビシュワジット<sup>3</sup>・魏 全ウェイ<sup>4</sup>・  
柏 ゾン春<sup>1</sup>（<sup>1</sup>江蘇省農科院・<sup>2</sup>南京農大・<sup>3</sup>九州大学・<sup>4</sup>バージニア大学）

- 22 現代のウズラの食文化—タイ・バンコク周辺におけるウズラ卵関連商品の市場調査—

○佐野晶子（ウズラ文化史家）