

SCIENTIFIC PROGRAM EPC 2024

24TH – 28TH JUNE 2024



Decades of Breeding for Welfare and Sustainability

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Monday, 24th June 2024

## REGISTRATION

### **REGISTRATION DESK**

11:00-19:00

## SET UP FOR SPONSORS

## **EXHIBITION AREA**

09:00 - 11:00

## **YOUTH PROGRAM**

10:00-19:00

## SATELLITE MEETINGS

### **BREAK-OUT ROOMS**

16:00-19:00

## **OPENING CEREMONY**

### **AUDITORIUM 1**

19:30 - 22:00



## SATELLITE MEETINGS

## Monday, 24th June 2024

ROOM 6 + 7 15:00-18:30 PERSTOP



ROOM 1 + 2

15:00-18:30

CJ BIO



### **AUDITORIUM 3**

15:00-18:30 *EVONIK* 



VOUIK

## Tuesday, 25th June 2024

### **MULTIPURPURSE 1**

16:00-19:30

MSD



## Wednesday, 26th June 2024

**MULTIPURPURSE 2** 

09:30-14:00 CEVA





### **COMPANY MEETINGS**

## Tuesday, 25th June 2024

### **AUDITORIUM 3**

12:45-13:45

ELANCO

**ROOM 1 + 2** 

12:45-13:45

CALIER

ROOM 5

12:45-13:45 NUTEGA

ROOM 6 + 7 12:45-13:45

HIPRA

ROOM 8

12:45-13:45 CARGILL Cargill

Elanco

C. CALIER

CCPA-6

HIPRA

### ROOM 9

12:45-13:45 PERSTOP



Wednesday, 26th June 2024

## ROOM 1 + 2

12:45-13:45 ADISSEO



## ROOM 5

**CJ BIO** 

12:45-13:45





#### **ROOM 6 + 7**

12:45-13:45 KEMIN

### **ROOM 8**

12:45-13:45 EVONIK

### ROOM 9

12:45-13:45 IFF







## Thursday, 27th June 2024

### ROOM 1 + 2

12:45-13:45 NOVUS NOVUS

### **ROOM 5**

12:45-13:45 NANTA a Nutreco company

### **ROOM 6 + 7**

12:45-13:45

ROYAL GD

### ROOM 8

12:45-13:45 ZENDAL

### ROOM 9

12:45-13:45 TASHIA









HOSPITALITY SUITE

ROOM 3 CEVA



ROOM 4 MSD





### **WORKING GROUPS**

## Monday, 24th June 2024

#### ROOM 5

16:30-18:30 "Mediterranean and Porultry Network"

## Tuesday, 25th June 2024

### **40 B**

13:00-14:00 WG3 "Breeding and Genetics"

40 A 13:00-14:00 WG4 "Egg Quality"

### ROOM 5

15:30-16:30

WG5 "Poultry Meat Quality"

## Wednesday, 26th June 2024

### **AUDITORIUM 3**

12:30-14:00

WG1 "Economics, Markets and Sustainability"

## Thursday, 27th June 2024

**RECATÍ B** - Hotel Sorolla Palace

12:10-12:40 WG12 "Phisiology"



## Tuesday, 25th June 2024

## PLENARY SESSION **01** Precision Farming & Sustainability

#### AUDITORIUM 1 & 2

*Chairpersons: M. Grashorn (European Federation-WPSA, Germany) & F. Bradley (University of California, U.C. Davis, USA)* 

08:30-09:15

**K01-01.** How can precision livestock farming help improve sustainable poultry production?

T. Norton (KU Leuven, Belgium)

09:15-10:00

**K01-02.** A holistic and pragmatic view of sustainable development pathways in poultry production

R. Kleyn (Spesfeed Consulting Pty Limited, South Africa)

#### **EXHIBITION AREA AND MULTIPURPOSE 1**

10:00-10:30

**Coffee Break** 

PARALLEL SESSION

02 Health: Respiratory Viruses

#### **AUDITORIUM 1**

Chairpersons: A. Moreno (IZSLER, Italy) & J.L. Guérin (UMR IHAP ENVT-INRA, France)

10:30-11:00

**K02-01.** Chicken-derived airway organoids: a model to study viral dynamics for infectious bronchitis, Newcastle disease, and avian influenza viruses



### F. Tarrés-Freixas (IRTA-CReSA, Spain)

**11:00-11:10 002-04.** An integrated approach for the management of avian influenza information

### Giacomo Nalesso







#### 11:10-11:20

**002-05.** A chicken blood transcriptomic signature related to adaptive immune responses is associated with resistance to highly pathogenic avian influenza virus infection

### María José Valdez-May

11:20-11:30

**O02-06.** Efficacy of an Inactivated Monovalent AIV-H5 Vaccine against early challenge with HPAI-H5N8 clade 2.3.4.4b

### **Ricardo Neto**

#### 11:30-11:40

**O02-07.** A comparative study of epigenetic and pathogenesis mechanisms between the virulent and avirulent strains of Newcastle disease viruses using bioinformatics analysis

### Aleksandar Dodovski

11:40-11:50

**O02-08.** First report of molecular detection of aMPV circulation in domestic and wild birds in Colombia

### David Escobar

11:50-12:00

**002-09.** Avian metapneumovirus circulation in broiler farms in Italy

Claudia María Tucciarone

12:00-12:10

**002-10.** Infectious bronchitis virus surveillance in layers and broiler breeders in Spain from 2020 to 2023

### Ángela Blanco



Carqıll

## PARALLEL SESSION03Nutrition : Additives & Phytogenics

### AUDITORIUM 2 & 3

*Chairpersons: M. Rodehutscord (University of Hohenheim, Germany) & J.F. Pérez-Hernández (SNiBA Universitat Autonoma de Barcelona, Spain)* 

10:30-11:00

**K03-01.** Optimizing poultry production through feed technology: It's all about structure

B. Svihus (Norwegian University of Life Sciences, Norway)

#### 11:00-11:10

**O03-04.** Effects of poliherbal based product supplementation on growth performance, and gut health in broiler chickens challenged with Eimeria spp

### Cinta Sol

#### 11:10-11:20

**O03-05.** Dietary phytogenic inclusion level affects performance and expression of heat shock and inflammatory genes in the whole blood of cyclic heat-stressed broilers

#### Eugenia Iliopoulou

#### 11:20-11:30

**003-06.** Growth performance and antioxidant response of broiler chicken fed oxidized lipids with or without phytogenic feed additives

### Fernando Sevillano

#### 11:30-11:40

**O03-07.** Effect of dietary supplementation and in ovo feeding of menthol on the immunocompetence traits, mineral composition and fatty acid profile of breast and thigh muscle of commercial broilers

#### Amitav Bhattacharyya

#### 11:40-11:50

**003-08.** Quantitative and qualitative evaluation of plant intake in laying hens: n-alkanes as predictive fecal markers for dietary composition assessment

#### Laid Dardabou



#### 11:50-12:00

**O03-09.** Effects of dietary supplementation of essential oils, lysozyme and vitamins blend on layer hen performance, viral vaccinal response and egg quality characteristics

### Ilias Giannenas

12:00-12:10

**O03-10.** Application of cannabis-originated products in turkey nutrition *Pawel Konieczka* 

12:10-12:20

**003-11.** Standardized Natural Citrus Extract stimulates the production of endogenous butyric acid in the gut

Juan Manuel García Coronel

## PARALLEL SESSION 04 Egg quality





Chairpersons: J. Gautron (INRAE, France) & M.M. Campo (University of Zaragoza, Spain) 10:30-11:00 K04-01. Nourished mind: Egg Nutrients and Cognitive Function

A.M. López Sobaler (Universidad Complutense de Madrid, Spain)

11:00-11:10

**O04-04.** A sustainable and efficient strategy to enrich eggs with n-3 LC-PUFA

Jesús Villora

11:10-11:20

**O04-05.** Effect of activated vitamin D3 on eggshell quality and performance in brown laying hens to 100 weeks of age

**Christine Clark** 

11:20-11:30

**O04-06.** Effects of hen age and egg storage conditions on the quality and protein composition of the vitelline membrane

### Océane Hervé



#### 11:30-11:40

**O04-07.** Nutritional value and sensory characteristics of eggs from laying hens fed hempseed

#### Mattia Pravato

11:40-11:50

**O04-08.** Determination of elemental composition of chicken eggs using X-ray fluorescence spectroscopy

#### Maryam Mehri

11:50-12:00

**O04-09.** Incidence of internal spots in commercial eggs in Spain

#### Maria Del Mar Campo

12:00-12:10

**O04-10.** Cut-off rate of floor eggs in the cage-free system: exploring possible contributing factors

### Claudia Ciarelli

12:10-12:20

**O04-11.** Impact of eggshell translucency and trace mineral supplementation on eggshell quality parameters

#### **Duarte Neves**

### PARALLEL SESSION

### **05** Incubation & Fertility

### **RECATÍ B** - Hotel Sorolla Palace

*Chairpersons: A. Blanco (Independent Poultry Consultant, Spain) & Y. Cinnamon (The Volcani Institute, Israel)* 

10:30-11:00

**K05-01.** All Chickens Fast and Slow- assessing the "embryonic developmental tempo" phenotype of poultry breeds

M. Davey (The Roslin Institute, U.K.)

#### 11:00-11:10

**O05-04.** Non-invasive early assessment of chicken egg fertilization through VOC profiling using HSSE-GC-MS

### **Matthias Corion**





#### 11:10-11:20

**O05-05.** Non-invasive embryonic blood vessel detection during automated in-ovo sexing

#### Carla Van Der Pol

#### 11:20-11:30

**O05-06.** Epigenetic programming of avian hypothalamus by in-ovo green monochromatic illumination and its effect on growth, appetite and metabolism in broilers

#### Joanna Bartman

#### 11:30-11:40

**O05-07.** Effect of thermal manipulation of slow-growing broiler chickens on chick quality and physiology

#### Roos Molenaar

11:40-11:50

**O05-08.** Impact of feed restriction on testicular parameters in broiler breeder roosters during the production period

#### Silvia Elena Palao

**11:50-12:00 O05-09.** Incubation of chicken eggs should take 24 days instead of 21 days

Jan Wijnen

#### 12:00-12:10

**O05-10.** Rediscovering Italian poultry treasures: reviving the Millefiori Piemontese breed

### Eleonora Erika Cappone

#### 12:10-12:20

**005-11.** In ovo delivery of carvacrol triggered the expression of antimicrobial peptides in the yolk sac of broiler embryos

#### Mila Meijer



C CALIER

### **EXHIBITION AREA AND MULTIPURPOSE ROOM 1**

12:30-14:00 Lunch Break

### PLENARY SESSION

## **06** Breeding and Ovosexing

### AUDITORIUM 1 & 2

Chairpersons: V. Michel (ANSES, France) & I. Estevez (NEIKER BRTA, Spain)

14:00-14:20

**K06-01.** Breeding for new requirements and future production systems. Laying hens

### T. van der Braak (Hendrix Genetics, The Netherlands)

14:20-14:50

**K06-02.** Breeding for new requirements and future production systems. Broilers - Breeding for Welfare in Meat Poultry

### A.M. Neeteson & T. Burnside (Aviagen, U.K.)

14:50-15:30

**K06-03.** Sexual dimorphism during egg incubation and development of ovosexing methods

S. Réhault-Godbert (BOPP, INRAE, France)

### **EXHIBITION AREA AND MULTIPURPOSE ROOM 1**

15:30-16:00

**Coffee Break** 

PARALLEL SESSION

## **07** Nutrition: Energy & Proteins

### **AUDITORIUM 1**

*Chairpersons: B. Svihus (NMBU, Norway) & A. Cerisuelo (Instituto Valenciano de Investigaciones Agrarias, Spain)* 

16:00-16:10

**O07-01.** The influence of nutrition on body composition and allometric growth patterns in laying hen pullets

### Lieske Van Eck







### 16:10-16:20

**O07-02.** Effect of dietary balanced protein levels during rearing on early egg production and egg quality of white and brown egg-type strains

### Jo Ann Chew

#### 16:20-16:30

**007-03.** Adequate dietary amino acid supply allows to moderately reduce dietary crude protein at the onset of lay without affecting laying performance of Isabrown layers

### Maeva Durand

#### 16:30-16:40

**O07-04.** Impact of soybean origin and harvest year on chemical composition, amino acid profile, and protein quality indicators of soybean meals collected from 2007 to 2023

#### Nereida Luna Corrales

#### 16:40-16:50

**O07-05.** The impact of digestible lysine on egg weight control and eggshell quality in old Lohmann Brown hens during 82 to 92 weeks

### Reza Akbari Moghaddam Kakhki

#### 16:50-17:00

**007-06.** Cytokine expression during a mixed Eimeria infection in broilers given low protein diets supplemented with methionine or threonine

### James Taylor

#### 17:00-17:10

**O07-07.** Is the expression of markers for breast muscle development in broiler chickens affected by breed, sex, age, and dietary energy level?

### **Regiane Santos**

#### 17:10-17:20

**007-08.** Comparative effects of low-protein soybean meal or high-protein soybean meal with wheat bran or prebiotics in broilers challenged with Eimeria using immune response and bacterial antimicrobial resistance gene abundance

### Oluyinka Olukosi



#### 17:20-17:30

**O07-09.** Caecal microbiota composition in chickens of different genotypes fed low-input diets

### Giulia Zardinoni

17:30-17:40

**O07-10.** Effects of in ovo feeding of sericin on hatching performances and hepatic gene expression of broilers

### Vaishali Gupta

17:40-17:50

**007-11.** Dietary amino acid density affects growth rate and body composition of fast- and slow-growing broiler chickens

Hsuan Chen

17:50-18:00 007-12. Nutritional needs of slow-growing broilers *Renée De Baets* 

PARALLEL SESSION

Health: Antibiotic Resistances & Alternatives

### AUDITORIUM 2 & 3

Chairpersons: P. Catalá (CECAV, Spain) & P. Gil (Independent Poultry Consultant, Spain)



16:00-16:30

**K08-01.** Antibiotic resistance, the big one health deal **B.** González-Zorn (ARU, Universidad Complutense de Madrid, Spain)

16:30-16:40

**O08-04.** Association between genotypic and phenotypic characteristics of E. coli strains isolated from broiler breeder flocks

Lica Lozica

16:40-16:50

**008-05.** Full characterization of 23 salmonella wild type bacteriophages suitable for the eradication of the most relevant salmonella zoonotic serovars

### Jan Torres-Boncompte



### 16:50-17:00

**008-06.** In ovo carvacrol delivery downregulated splenic inflammatory responses after a post-hatch lipopolysaccharide challenge in broiler chicks

### Mila Meijer

#### 17:00-17:10

**008-07.** Understanding the mode of action of Bacillus subtilis 29784 poultry probiotic through its secreted metabolites: A resilient approach

## Nuria Vieco-Saiz

#### 17:10-17:20

**O08-08.** Microbiome Modulation by a precision biotic lead to increased production of short-chain fatty acids in the intestine of broiler chickens

### Cristiano Bortoluzzi

#### 17:20-17:30

**008-09.** Probiotics or Prophybiotics? Validation of effects of in-ovo administration on gut health and production of broiler chickens

### Ramesha Nirmali Wishna Kadawarage

### 17:30-17:40

**008-10.** An assessment of the antibacterial properties of black soldier fly larvae (Hermetia illucens) meal against several pathogenic bacteria found in poultry

### Dumeshi Ellawidana

#### 17:40-17:50

**008-11.** Butyric acid and medium-chain fatty acids improve vaccine efficacy in broiler chickens by modulating the adaptive immune system

### **David Hermans**



### PARALLEL SESSION

### **O** Poultry Welfare

### **RECATÍ A** - Hotel Sorolla Palace

*Chairpersons: I. de Jong (Wageningen Livestock Research, WUR, The Netherlands) & A. Harlander (University of Guelph, Canada)* 



## **16:00-16:30 K09-01.** Farm animal welfare assessment and certification

### A. Dalmau (IRTA, Spain)

## **16:30-16:40 009-04.** Use of artificial intelligence tools to simplify broiler welfare assessment protocols

### Xavier Averós

### 16:40-16:50

**O09-05.** Welfare evaluation in the main Italian rearing system for poultry meat production by ebene app

### Alice Cartoni Mancinelli

### 16:50-17:00

**009-06.** Broiler welfare assessment: footpad and hock health analysis in Austrian abattoirs, 2020-2022

### Janja Sirovnik

### 17:00-17:10

**009-07.** Interobserver reliability of a scoring system to evaluate bruises in turkey carcasses

### Luisa Raederscheidt

### 17:10-17:20

**O09-08.** LEGMONI, a ready-to-use tool for evaluating laying hen welfare at the slaughterhouse

### Anneleen Watteyn

### 17:20-17:30

**009-09.** Determination of ideal perch space allowance for pullets in Canada

### **Carolin Adler**



#### 17:30-17:40

**009-10.** Direct and carry-over effects of feeding pullets during sensitive periods in early rearing

#### Annemarie Mens

#### 17:40-17:50

**O09-11.** Status quo of light conditions in turkey barns to identify lightassociated risk factors of behavioral disorders in turkey flocks

### Kathrin Toppel

17:50-18:00O09-12. Will turkey hens utilize a perch when given the opportunity?*Kailyn Buchynski* 

## PARALLEL SESSION 10 Breeding & Genetics

### **RECATÍ B** - Hotel Sorolla

Chairpersons: Chairpersons: S. Weigend (Friedrich-Loeffler-Institut, Germany) & I. Dunn (The Roslin Institute, U.K.)



16:00-16:30

**K10-01.** Heritability estimates for movement of laying hens within a quasi-commercial aviary barn

M. Toscano (ZTHZ - Universität Bern, Switzerland)

### 16:30-16:40

**O10-04.** Genetics of feeding behavior in medium-growing broiler chickens *Sandrine Mignon-Grasteau* 

16:40-16:50

**O10-05.** Evaluation of selection indices for adoption in dual-purpose and specialized breeding goals in indigenous chicken breeding programmes

### Sophie Miyumo

#### 16:50-17:00

**O10-06.** Morphological characteristics of breeder males at 60 weeks of age and their relationship with fertility and testicular development *Cristina Guerra* 



**17:00-17:10 O10-07.** Genetic evaluation of clutch traits in laying hens *Roberto Espinola* 

#### 17:10-17:20

**O10-08.** Bone quality evaluation by keel bone palpation and live tibial X-ray density measurement in a White Leghorn pure line population

#### Björn Andersson

#### 17:20-17:30

**O10-09.** Genome-wide association study on egg quality, laying performance and body weight in a backcrossing scheme between Araucana chicken and white layers

#### Chi Mei Sun

17:30-17:40

**O10-10.** Studying glycerol toxicity on frozen chicken sperm and strategies to mitigate it

#### Hsiu-Lien Herbie Lin

#### 17:40-17:50

**O10-11.** The antibody response to experimental Ascaridia galli infection in three local chicken breeds

### Emel Zergani

17:50-18:00

**O10-12.** New insight into Wooden breast myopathy by physics behind type III collagen structure

Eleonora Iaccheri

### POSTER SESSION 1 & 2

#### **MULTIPURPOSE ROOM 1**



**18:00-19:00** *\*Full details can be found from page 44 onwards* 



## Wednesday, 26th June 2024

## PLENARY SESSION

### GUT-BRAIN AXIS & EMBRYO DEVELOPMENT



### AUDITORIUM 1 & 2

*Chairpersons: S. Yalçin (Ege University, Turkey) & D. Menoyo (Universidad Politécnica de Madrid, Spain)* 

08:30-09:15

**K11-01.** The microbiome-gut-brain axis in poultry production: what we know and don't know and why it matters

11

### M. Lyte (Iowa State University, USA)

09:15-10:00

**K11-02.** Fostering embryonic development in chickens: maternal and in ovo nutritional strategies

### E. Roura (QAAFI, The University of Queensland, Australia)

### **EXHIBITION AREA AND MULTIPURPOSE ROOM 1**

10:00-10:30

**Coffee Break** 

**PARALLEL SESSION** 

## **12** Health: Pathology & Immunology

### **AUDITORIUM 1**

zoetis

CALIER

Chairpersons: S. de Wit (Royal GD Animal Health and Utrecht University, The Netherlands) & S. García (Boehringer Ingelheim Animal Health, Spain)

**10:30-10:40 O12-01.** Adenoviral gizzard erosion complicated with Clostridium Perfringens ventriculitis in a laying hen flock

### Àlex Cobos Arnalot



#### 10:40-10:50

**O12-02.** Evaluating the impact of intermittent multi-mycotoxin exposure on layer breeder performance, egg quality, and hatchability: insights from an intervention study

### Marisabel Caballero

**10:50-11:00 O12-03.** Impact of moulting on the immune system of commercial layers

### Silke Rautenschlein

#### 11:00-11:10

**O12-04.** Protection against experimental infection by Salmonella Gallinarum biovar Gallinarum using different live vaccination programs

### Rafael Penha

11:10-11:20

**O12-05.** Combination of live and inactivated Salmonella vaccines to control Fowl Typhoid in laying hens

### Jesús Rubio

**11:20-11:30 O12-06.** Avian intestinal spirochaetosis in poultry in Ireland – preliminary results

Sebastian Alessandro Mignacca

#### 11:30-11:40

**O12-07.** Compatibility of mixing of several respiratory vaccines in spf chickens

### **Enrique Carceller**

11:40-11:50

**O12-08.** Molecular characterization of Mycoplasma gallisepticum and Mycoplasma synoviae in clinical samples from Spanish poultry flocks

### José Luis Arnal



#### 11:50-12:00

**O12-09.** Comparison of fowl adenovirus ELISA and virus neutralization titers in commercial broiler breeder flocks with distinct vaccination schemes against avian adenovirus

#### **Roser Dolz**

#### 12:00-12:10

**O12-10.** IBDV detection in Northwestern Germany: Epidemiology and correlation to broiler performance

#### Violette Naccache

#### 12:10-12:20

**O12-11.** Pathology of colibacillosis and its molecular detection from recent outbreaks in Chicks

#### Md. Golam Haider

#### 12:20-12:30

**O12-12.** Morphological and immunological effect of in ovo administration in chickenof two different compound with probiotic and postbiotic feature

Lucia Biagini

PARALLEL SESSION

### **13** Nutrition: Fats & Oils

#### AUDITORIUM 2 & 3

*Chairpersons: Z. Uni (Hebrew University, Israel) & M. Soto (Kemin Ibérica, Spain)* 

10:30-11:00

**K13-01.** Transfer of undesirable substances from feed into meat and eggs - from experimental data to predictive models

R. Pieper (German Federal Institute for Risk Assessment, Germany)

11:00-11:10

**O13-04.** Lipids: Consistently inconsistent – Variability in commercial fats and oils

### David González Sánchez

#### 11:10-11:20

**O13-05.** Evaluation of the simple and interactive effect of corn and oil quality in 21-day-old broiler chickens

### Sunday Adedokun





#### 11:20-11:30

**O13-06.** Inclusion of a stabilized emulsifier in low-energy diet for broilers: effects on nutrients retention, excreta trait and growth performances

#### Luca Marchetti

11:30-11:40

**O13-07.** Intelligent emulsifier addition to broiler feed formulations to improve FCR

**Daphne Michels** 

#### 11:40-11:50

**O13-08.** The effect of a combination of organic acids and medium chain fatty acid mono esters administered via water on broiler performance, mortality rate, and foot pad score

### **Pedro Medel**

#### 11:50-12:00

**O13-09.** Influence of free fatty acid content and degree of fat saturation in laying hen diets on bone quality

### María Palomar

#### 12:00-12:10

**O13-10.** Apparent fatty acid digestibility in laying hens fed medium-chain fatty acid-rich diets

#### Araceli Orozco Mas

#### 12:10-12:20

**O13-11.** Dietary inclusion of Echium plantagineum oil and metabolism modulation of n-3 LC-PUFA in Canarian chicken

### Jesús Villora

12:20-12:30

**O13-12.** Effect of a high-energy diet on liver stress and lipid metabolisms, meat and carcass traits in a slow-growing chicken breed

### Nadia Stoppani



## PARALLEL SESSION 14 Meat Quality

### RECATÍ A - Hotel Sorolla Palace

*Chairpersons: A. Cahaner (WPSA-Israel) & E. Baeza-Campone (UMR, INRAE, France)* 

10:30-11:00

**K14-01.** How do farming methods in Europe influence the quality of chicken meat? H2020 INTAQT project "One quality" concept

### C. Berri (UMR, INRAE, France)

#### 11:00-11:10

**O14-04.** Computed tomography as a non-invasive tool to characterize and advance on chicken breast myopathies

### Cristina Zomeño

11:10-11:20

**O14-05.** Use of shear-wave elastography to predict *in vivo* the presence and severity of the wooden breast defect in chickens

### Cécile Berri

#### 11:20-11:30

**O14-06.** Chicken breast myopathies affect colour acceptance and willingness to purchase during shelf life

### Míriam Muñoz-Lapeira

#### 11:30-11:40

**O14-07.** Gene expression patterns associated with processing yield of marinated breast meat in broilers affected by white striping and wooden breast defects

### Martina Bordini

11:40-11:50

**O14-08.** Dietary specification on meat quality of fast and slow growing broilers

### Hannah Scott-Cook

#### 11:50-12:00

**O14-09.** Meat quality: electrical water bath stunning vs. CO2 gas stunning in broiler welfare assessment

### Jolien Hacker



#### 12:00-12:10

**O14-10.** Effects of provisioning black soldier fly whole larvae or larvae meal on carcass and meat quality traits in fast-growing broilers

### Elisabeth Baeza

#### 12:10-12:20

**O14-11.** Palm kernel fatty acid distillates: revalorizing this by-product as feeding fat. Effects on lipid composition, oxidation and sensory acceptance of chicken meat.

### Laura Parro

#### 12:20-12:30

**O14-12.** Whole dehydrated and live black soldier fly larvae in autochthonous chicken breeds, effects on slaughtering performance and meat quality

### Edoardo Fiorilla

### PARALLEL SESSION

## **15** Economy & Education

### **RECATÍ B - Hotel Sorolla Palace**

Chairpersons: P. van Horne (WUR, Netherlands) & E. Sossidou (Ellinikos Georgikos Organismos-DIMITRA, Greece)

10:30-11:00

K15-01. Growing broilers during tough economic conditions

### A. Catlett (Cobb Europe, U.K.)

#### 11:00-11:10

**O15-04.** Economic effects of EFSA's welfare recommendations *Simon Fourdin* 

#### 11:10-11:20

**O15-05.** HPAI vaccination in France: Concept, Experiences during the first stages and economic effects of the choice for vaccination

#### Simon Fourdin

11:20-11:30 O15-06. Economic perspectives of the dutch broiler sector *Luuk Vissers* 



#### 11:30-11:40

**O15-07.** Additional costs of turkey hens with untrimmed beaks in enriched housing conditions

### Petra Thobe

11:40-12:10

**K15-08.** Cost factors in broiler meat production. An alternative analysis *J. I. Barragán (Galimetria SL, Spain)* 

12:10-12:20

**O15-11.** BroilerNet- Practice and Science Broiler production innovation network

### Natàlia Majó

12:20-12:30

**O15-12.** Animal health law: Qualification and current skills regarding biosecurity in commercial poultry farms

### Luisa Raederscheidt

### **EXHIBITION AREA AND MULTIPURPOSE ROOM 1**

12:30-14:00

**Lunch Break** 

### PLENARY SESSION

## **16** Vaccination & Immune System

### **AUDITORIUM 1 & 2**

Chairpersons: E. Prukner-Radovcic (European Federation-WPSA, Croatia) & N. Majó (IRTA-CReSA, Spain)

14:00-14:45

**K16-01.** Vaccination against avian influenza: adapting our strategy to changing challenges

### J.L. Guérin (ENVT-INRAE, France)

#### 14:45-15:30

**K16-02.** Unlocking Immune System Potential in Chickens through Gene Editing: A Promising Frontier

B. Schusser (Technische Universität München, Germany)





### **EXHIBITION AREA AND MULTIPURPOSE ROOM 1**

15:30-16:00 Coffee Break

### PARALLEL SESSION

**17** Nutrition: Additives

### **AUDITORIUM 1**

*Chairpersons: Y. Nys (INRAE, France) & L. Castillejos (SNiBA, Universitat Autònoma de Barcelona (UAB), Spain)* 

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#### 16:00-16:30

**K17-01.** The role of plant-based antinutritional factors in poultry diets. New progress on their effects on chicken growth and health

### G.G. Mateos (Universidad Politécnica de Madrid, Spain)

#### 16:30-16:40

**O17-04.** Diet composition influences probiotic and postbiotic effects on broiler growth, physiology and microbiota

### Samuel Jansseune

### 16:40-16:50

**O17-05.** Transcriptomics reveals different modes of action of three probiotic strains compared with an antibiotic growth promoter in broiler chickens

### Muzahir Hussain

#### 16:50-17:00

**O17-06.** Dietary muramidase improves apparent ileal energy digestibility, gut functionality and increases broiler growth performance independent of diet nutrient density development

### Aurelia A. Séon Simon

#### 17:00-17:10

**O17-07.** The effect of NSPase and feeding regimen on performance of broilers fed diets based on high and low viscosity barley

### Muhammad Ahmad



### 17:10-17:20

**O17-08.** Differences in origin and dose of dietary endoxylanases result in distinct arabinoxylan degradation patterns in the gi tract of broilers fed wheat-based diets

### An Bautil

#### 17:20-17:30

**O17-09.** Assessment of in vitro fermentation efficacy of yeast-derived  $\beta$ -glucans with different molecular mass and solubility using broilers' caecal content

Yunfeng Gu

### 17:30-17:40

**O17-10.** Impacts of early nutritional strategies on digestive homeostasis of chicks

### Vincent Jonchère

### 17:40-17:50

**O17-11.** Effect of the dietary supplementation with sodium butyrate on gut morphology and caecal microbiota of broiler chickens

### Almudena Huerta

#### 17:50-18:00

**O17-12.** In-ovo injection of sodium butyrate improves growth performance in underweight broilers by modulating microbiota and gut barrier gene expression

### Muhammad Zeeshan Akram

**PARALLEL SESSION** 



# Poultry Health: Management & Biosecurity

### **AUDITORIUM 2 & 3**

Chairpersons: C. Marín (Universidad CEU Cardenal Herrera, Spain) & J.C. Regojo (Medprovet, Spain)

16:00-16:10 O18-01. A walk through the broiler breeder life *Käthe Kittelsen* 





#### 16:10-16:20

**O018-02.** Contact with an adult hen after hatching promotes maturation of the chick caecal microbiota and has a greater effect than hatching systems

### Laurence Guilloteau

16:20-16:30

**O18-03.** Microbiome diversity along the GIT of indigenous chicken

### Armel Tangomo Ngnintedem

#### 16:30-16:40

**O18-04.** The microbial evaluation of the Boschveld chickens fed Sorghumbased diets

### Monnye Mabelebele

#### 16:40-16:50

**O18-05.** The effect of non-starch polysaccharide degrading enzymes (NSPase) on gut leakage and intestinal histology in young broilers fed high-fiber, viscous, diets

#### Ester Vinyeta

#### 16:50-17:00

**O18-06.** Effects of electrolyzed-reduced water and functional amino acid supplementation in drinking water to alleviate heat stress in broilers

### Renée De Baets

#### 17:00-17:10

**O18-07.** Exploring the avian breath: a comprehensive meta-analysis of factors shaping chicken respiratory microbiota

### Alejandro Moreno

#### 17:10-17:20

**O18-08.** Potential biosecurity breaches in laying hen farms: characterization of the poultry-wildlife interface through a camera trap study

#### Giulia Graziosi

#### 17:20-17:30

**O18-09.** The biofilm removing capacity of drinking water disinfectants in an in vitro model

### **Daisy Roijackers**



#### 17:30-17:40

**O18-10.** A comprehensive review on backyard poultry: exploring non intensive production systems

Fernando Carrasquer Puyal

17:40-17:50

**O18-11.** Light as an enrichment tool: effects on animal health and behavior in commercial turkey production

Silke Rautenschlein

#### 17:50-18:00

**O18-12.** Effects of Aflatoxin B1 and Ochratoxin on the Fitness and Neonatal Growth of White Pekin Ducks: An In Ovo Injection Study with and without Ameliorants, Investigating Mycotoxin-Threshold and Toxin-Toxin Interaction

Navniet Mishrra

### PARALLEL SESSION

### **19** Poultry Welfare

### **RECATÍ A - Hotel Sorolla Palace**

*Chairpersons: I. Temann (University of Bonn, Alemania) & S. Struthers (Roslin Institute, University of Edinburgh, Reino Unido)* 



16:00-16:30
K19-01. Dealing with Global Supply Chain Realities, Layer Genetics
J. Ramírez & S. van der Beek (Global Layer Genetics GmbH, Germany)

16:30-16:40

**O19-04.** Spatial patterns in the use of aviaries in relation to body condition and production – A study on individual laying hens

#### Sabine Gebhardt-Henrich

#### 16:40-16:50

**O19-05.** Influence of light exposure and early feed access on the stress response during the developmental and early posthatch period in laying hen chicks

Catharina M. H. Broekmeulen



#### 16:50-17:00

**O19-06.** Cost-benefit analysis of the upright versus conventional method for catching and loading end-of-lay hens

#### Femke Delanglez

#### 17:00-17:10

**O19-07.** Long-term effects of ramps provided during rearing and laying phases in laying hens

#### Alex Johny

#### 17:10-17:20

**O19-08.** Exercise using wing-assisted incline running during rearing affects initial descent velocity in adult laying hens

### **Grace Hong**

#### 17:20-17:30

**O19-09.** Access to outdoor space for laying hens: evaluating motivation and behavior of the animals

#### Marco Birolo

#### 17:30-17:40

**O19-10.** Using a validated x-ray method on individual living hens, bone density does not decline over their lifetime

#### Ian Dunn

#### 17:40-17:50

**O19-11.** Occurrence of keel bone lesions measured at the slaughterhouse in laying hens: analysis of risk factors for on farm animal welfare

#### Angela Trocino

**17:50-18:00 O19-12.** The effect of hypocalcaemia on keel bone radiodensity and damage

### Maisarah Maidin



### PARALLEL SESSION

**20** Sustainability

### **RECATÍ B** - Hotel Sorolla Palace



Chairpersons: E.F. Guèye (FAO, Senegal) & M. Láinez (Fundación Grupo Cajamar, Spain)

16:00-16:30K20-01. Greenhouse Gas EmissionsS. Calvet (Universitat Politècnica de València, Spain)

#### 16:30-16:40

**O20-04.** Analyzing attitudes and satisfaction level of digital on-farm technologies for climate change adaptation and mitigation in poultry farming

#### Pia Münster

#### 16:40-16:50

**O20-05.** Comparing Soybean Meal Reduction on Performance of Fast and Slow-Growing Chickens

#### Clara Alfonso-Carrillo

#### 16:50-17:00

**O20-06.** Performance and environmental implications of modulating the metabolizable energy content in broiler chicken diets

### Marco Zampiga

#### 17:00-17:10

**O20-07.** Ammonia emissions can be reduced through a quality-controlled bedding material in broiler housing systems

### **Benedikt Thesing**

#### 17:10-17:20

**O20-08.** Impact of slower growing broilers and reduced stocking density on ammonia emission and animal welfare

#### Ine Kempen

**17:20-17:30 O20-09.** Feasibility of purified rainwater as drinking water for broilers

### Peter Bleyen



#### 17:30-17:40

**O20-10.** Reusing cleaning water from broiler farms: on-site biological treatment and membrane filtration

### **Bleyen Peter**

**17:40-17:50 O20-11.** Comparative life-cycle assessment for the sustainable production of fermentation-based L-methionine (L-Met)

Behnam Saremi

**17:50-18:00 O20-12.** Exploring BroilerNet stakeholders' attitudes towards the sustainability of broiler industry in Greece

Evangelia Sossidou

### POSTER SESSION 3 & 4

#### **MULTIPURPOSE ROOM 1**



**18:00-19:00** \*Full details can be found from page 62 onwards

### **GALA DINNER**

### MUSEO DE LAS CIENCIAS PRINCIPE FELIPE. CIUDAD DE LAS ARTES Y CIENCIAS

19:45 Buses departure from the Valencia Conference Venue

20:30 - 23:30 Gala Dinner

\*Shuttle bus service available from the Museo de las Ciencias Príncipe Felipe



## Thursday, 27th June 2024

## PLENARY SESSION **21** Politics and Education

### AUDITORIUM 1 & 2

### Chairpersons: P. van Horne (WUR, Netherlands) & G. Sayegh (SaySoft di Ghassan Sayegh, Italy)



08:30-09:15

**K21-01.** Global Poultry Outlook - Consequences of political tensions in the poultry sector

N.D. Mulder (Rabobank, The Netherlands)

09:15-10:00

**K21-02.** Trends for the future of the Poultry sector: Education, Employment, and Research

V. Guyonnet (FFI Consulting Ltd., Canada)

### **EXHIBITION AREA & MULTIPURPOSE ROOM 1**

10:00-10:30 Coffee Break

PARALLEL SESSION

22 Food safety

### **AUDITORIUM 1**

*Chairpersons: K. de Reu (ILVO, Belgium) & H. Médic (University of Zagreb, Croatia)* 

10:30-11:00

**K22-01.** Phage Therapy Against Superbugs: Promising Strategies and Insights

S. Sevilla-Navarro (CECAV, Spain)



HIPBA



#### 11:00-11:10

**O22-04.** Antimicrobial resistance in eggs: the role of layer production system. Preliminary results

#### Laura Montoro-Dasi

#### 11:10-11:20

**O22-05.** Salmonella Infantis rules the roost: a continuous cycle of contamination between broiler farms and slaughterhouses

#### Lisa De Witte

#### 11:20-11:30

**O22-06.** A double encapsulation of bioactives to reduce salmonella livingstone shedding in artificially infected broiler chickens

#### Stephanie Ladirat

#### 11:30-11:40

**O22-07.** Aerotolerance and haemolytic activity of invasive and non-invasive campylobacter coli strains from broiler chickens

### María Pilar González Navarro

#### 11:40-11:50

**O22-08.** Colonization by different Campylobacter jejuni strains produces distinct effects on broiler chickens performance

#### Borja Vilà

#### 11:50-12:00

**O22-09.** Host immune response of broiler chickens to campylobacter jejuni strains with different pathogenic potential

### Alicia Manzanares

12:00-12:10

### 022-10.

#### 12:10-12:20

**O22-11.** Assessing the impact of a commercial water disinfectant, blend of hydrogen peroxide, acetic, and peracetic acid on the performance and Campylobacter jejuni counts in experimentally challenged broiler chicks

### **Tilemachos Mantzios**



PARALLEL SESSION

# **23** Poultry Nutrition: Vitamins & Minerals

# AUDITORIUM 2 & 3

*Chairpersons: G. G. Mateos (Universidad Politécnica de Madrid, Spain) & E. Roura (QAAFI, The University of Queensland, Australia)* 



10:30-11:00

**K23-01.** Early feeding nutrition of minerals and vitamins: implications and applications

Z. Uni (Hebrew University, Israel)

#### 11:00-11:10

**O23-04.** Effect of dietary supplementation and in ovo feeding of alpha ketoglutaric acid on the immunocompetence traits, mineral composition and fatty acid profile of breast and thigh muscle of commercial broilers

# Amitav Bhattacharyya

# 11:10-11:20

**O23-05.** Accessing the impact of feeding different, highly available sources of essential trace minerals delivered from a premix blend on broiler performance

# Gavin Boerboom

11:20-11:30

**O23-06.** A combination of 25-Hydroxycalciferol, carotenoid, organic copper and glycans improved broiler breeder performance, egg quality and hatchability traits

# Konstantinos Mountzouris

#### 11:30-11:40

**O23-07.** Broiler breeder hens significantly benefit by replacing inorganic trace minerals with glycinates

# Susanne Rothstein

11:40-11:50

**O23-08.** Reducing breast myopathies with supplementation of Solanum glaucophyllum

# Katia Pedrosa



#### 11:50-12:00

**O23-09.** Enhancing feed digestibility : Exploring the potential of calcium humophosphate as a novel source of phosphorus on broiler nutrition

# Amélie Juanchich

#### 12:00-12:10

**O23-10.** Changes in the acid-base balance of broiler chickens after a substitution of peptide-bound with free amino acids in the diet

# Wolfgang Siegert

#### 12:10-12:20

**O23-11.** Laying hens require a minimum supplementation of riboflavin to maintain body weight, egg weight, and optimize egg riboflavin content

Matheus Reis

# PARALLEL SESSION 24 Poultry Welfare

# **RECATÍ A - Hotel Sorolla Palace**

*Chairpersons: Chairpersons: A. Trocino (University of Padova, Italy) & M. Toscano (ZTHZ, Universität Bern, Germany)* 



10:30-11:00

**K24-01.** Beak trimming or breeding for better beaks? A genetic approach to reducing feather pecking damage

# S. Struthers (The Roslin Institute, U.K.)

#### 11:00-11:10

**O24-04.** Breaking the beak conundrum: navigating laying hen welfare in beak-trimmed and non-trimmed flocks

# Niels Demaître

11:10-11:20

**O24-05.** Associations between the gut-brain axis and feather pecking in laying hens

# Alexandra Harlander



#### 11:20-11:30

**O24-06.** Toe injuries are linked to altered movement behavior in laying hens in a semi-commercial aviary system

# Michael Toscano

#### 11:30-11:40

**O24-07.** Lower stocking densities support broiler welfare – A proof of concept of the behavioural space model

# Inga Tiemann

#### 11:40-11:50

**O24-08.** A slow-growing broiler strain has more beneficial effects on broiler welfare than providing environmental enrichment

# Ingrid De Jong

#### 11:50-12:00

**O24-09.** Multifactorial evaluation of poultry welfare in different genotypes and farming systems

# Cecilia Mugnai

#### 12:00-12:10

**O24-10.** The effect of on-farm hatching on spatial traits in a quasicommercial barn

#### **Matthew Petelle**

#### 12:10-12:20

**O24-11.** Effects of providing uniform or gradient light intensity on behaviour and welfare of fast- and slower-growing broiler chickens

# Ingrid De Jong

#### 12:20-12:30

**O24-12.** Stunning effectiveness: electrical water bath stunning vs. CO2 gas stunning in broiler welfare assessment

# Yukari Togami



PARALLEL SESSION 25 Physiology

# **RECATÍ B** - Hotel Sorolla Palace

*Chairpersons: B.Tzschentke (IASP Humboldt-Universität Berlin, Germany) & M. Casandro (University of Padova, Italy)* 



10:30-11:00

**K25-01.** Towards a Humane and Sustainable Solution: A Genetic Model to Eliminate Male Chicks Culling in the Egg Industry

Y. Cinnamon (The Volcani Institute, Israel)

#### 11:00-11:10

**O25-04.** Exogenous supplementation of additional level of arginine (L\_Arg) in corn-soy based diets is required for broiler breeder hens during late production phase

# Gautham Kolluri

#### 11:10-11:20

**O25-05.** Expression of genes involved in calcium and phosphorus homeostasis in hen's kidney: effects of sexual maturity and PO stage

# Baraa Ezzo

**11:20-11:30 O25-06.** Neural regulation of the stress response in chicken

# Loreta Medina

# 11:30-11:40

**O25-07.** Long-term effects of prenatal temperature stimulation on mRNA expression of Bdnf, Npy, and Pomc in the chicken hypothalamus

# Tzschentke Barbara

11:40-11:50

**O25-08.** Comparative analysis of transcriptional profiles of chicken jejunum and -derived organoids collected early post-hatch

# Vincent Jonchère

# **EXHIBITION AREA AND MULTIPURPOSE ROOM 1**

12:30-14:00 Lunch Break



HIPRA

# PLENARY SESSION **26** Meat & Egg Quality

# AUDITORIUM 1 & 2

*Chairpersons: M. Petracci (University of Bologna, Italy) & C. Alamprese (University of Milan, Italy)* 

14:00-14:45

**K26-01.** Strengths and weaknesses of poultry meat quality attributes for meeting the increasing global protein demand

# S. De Smet (Ghent University, Belgium)

14:45-15:30

**K26-02.** Bone and eggshell quality in hens in extended laying cycles *A. Rodríguez-Navarro (University of Granada, Spain)* 

# **EXHIBITION AREA & MULTIPURPOSE ROOM 1**

15:30-16:00 Coffee Break

# PARALLEL SESSION

**27** Nutrition: Alternative ingredients

# **AUDITORIUM 1**

*Chairpersons: A. Schiavone (University of Turin, Italy) & B. Vila (IRTA, Spain)* 

16:00-16:10

**O27-01.** Comparative analysis of caeca microbiota composition in broiler chickens fed diets with alternative protein sources

# Alessandra De Cesare

16:10-16:20

**O27-02.** Impact of protein source and digestibility marker on nutrient digestibility in broilers

# Ibtissam Kaikat



NOVUS



#### 16:20-16:30

**O27-03.** Are heat treated mixed crops of faba beans and wheat suitable for broiler feeds?

# Noémie Van Noten

#### 16:30-16:40

**O27-04.** Maintaining an adequate amino acid profile allows to successfully reduce dietary crude protein in broiler chickens in both wheat or corn-based diets

# William Lambert

#### 16:40-16:50

**O27-05.** The inclusion of full-fat Black Soldier fly larvae in broiler's feed in different forms (meal and whole): effects on growth performance and breast fatty acids' composition

#### Alba Cerisuelo

#### 16:50-17:00

**O27-06.** Assessing the environmental impact of poultry feed in meat type autochthonous chicken farming

# Edoardo Fiorilla

#### 17:00-17:10

**O27-07.** Bran particle size impacts the precaecal fibre particle size distribution, caecal influx and caecal fibre fermentation differently with age

# Paulien Vanderghinste

#### 17:10-17:20

**O27-08.** Effect on degradation and passage of oat hulls through digestive tract of broilers at different time points

#### Shlesha Ghimire

17:20-17:30

**O27-09.** Assessing the flow of digesta and digestive dynamics in broiler chickens: A comparative study with growing pigs

#### Lucas Bassi



17:30-17:40

**O27-10.** Influence of coarse mash and crumbled diets on productive performance and nutrient digestibility of laying hens from 74 to 85 weeks of age

Jihed Zemzmi

17:40-17:50

**O27-11.** Use of almond shells as insoluble fibre source for 5 weeks old pullets feeding: effect of particle size and inclusion levels

# Eduardo Ruíz Herrero

# PARALLEL SESSION

# 28 Health: Enterococcus, Coccidiosis & NE

# AUDITORIUM 2 & 3

*Chairpersons: S. Rautenschlein (University of Veterinary Medicine Hannover, Germany) & R. Dolz (MSD AH, Spain)* 



16:00-16:30

**K28-01.** Enterococcus cecorum: An Emerging Pathogen of Meat-Type Chickens

A. Jung (University of Veterinary Medicine Hannover, Germany)

16:30-16:40

**O28-04.** Establishment of an immunological cell model for investigating amyloid arthropathy in chickens

# Nora-Fabienne Paul

**16:40-16:50 028-05.** Gut microbiota and host interactions in chickens: a dynamic interplay with performance implications

# Ester Arevalo Sureda

16:50-17:00

**O28-06.** Antimicrobial resistance profiles of Enterococcus spp. associated to poultry diseases and their susceptibility to probiotic Bacillus

# Kirsty Gibbs



#### 17:00-17:10

**O28-07.** Study of the combined therapy of antibiotics and bacteriophages for the control of enterococcus spp. in poultry farming

# Josep García-Llorens

#### 17:10-17:20

**O28-08.** Air sample based detection of Eimeria spp. in broiler houses *Julia Skov* 

#### 17:20-17:30

**O28-09.** Turkey productivity improvement and poult gut health support during Eimeria spp. challenge using a poultry specific synbiotic

# Luis Valenzuela

#### 17:30-17:40

**O28-10.** Coniferous rosin-based soap formulations inhibit the sporulation and infectivity of Eimeria tenella oocysts in vitro

# Hannele Kettunen

#### 17:40-17:50

**O28-11.** Investigation of the dietary supplementation of lauric and butyric acid glycerides on the performance, intestinal gross lesions and cecal microbiota in a subclinical necrotic enteritis challenge model in broiler chicks

#### Vasileios Tsiouris

#### 17:50-18:00

**O28-12.** Induction of protective immunity against necrotic enteritis by delivering live Clostridium perfringens by the intrapulmonary route at hatch

#### Susantha Gomis



# PARALLEL SESSION

# **29** Smart Farming & Housing

# **RECATÍ A** - Hotel Sorolla Palace

*Chairpersons: M. Makagoon (University of California Davis, USA)* & S. Calvet (Universitat Politècnica de València, Spain)



16:00-16:10

**O29-01.** Navigation ability of white and brown hens in an aviary system during laying phase

Francesco Bordignon

#### 16:10-16:20

**O29-02.** Tag 'n' Track: simplifying the validation of animal behaviour tracking technologies with an automated annotation method

# Serge Alindekon

#### 16:20-16:30

**O29-03.** Development of a temperature based non-invasive sensor system for controlling heart rate during temperature training of broiler embryos in the hatching phase

# Barbara Tzschentke

16:30-16:40

**O29-04.** Enhancing broiler welfare through precision classification of stress calls in varied environmental conditions

# Shelly Druyan

16:40-16:50

**O29-05.** Autonomous bioacoustics system for monitoring broiler welfare in hatcheries using artificial intelligence

# Gerardo José Ginovart-Panisello

16:50-17:00

**O29-06.** Does distribution of light intensity impact broiler production or welfare?

Tory Shynkaruk



#### 17:00-17:10

**O29-07.** Stocking density and access to open-air influences feed efficiency in a strain of slow-growing naked neck chicken

# Chaumont Salomé

#### 17:10-17:20

**O29-08.** Relationships between range use, performances and health and welfare related traits in four strains of organic broilers

# Elisabeth Le Bihan-Duval

17:20-17:30

**O29-09.** Performance of dual-purpose chickens in organic farming

#### Philipp Hofmann

#### 17:30-17:40

**O29-10.** Egg and meat performance of three dual-purpose hen genotypes reared under free-range conditions

# Alexandr Torres

#### 17:40-17:50

**O29-11.** Starling movements: connectivity at the human-domestic animal -wildlife interface

# Alberto Sánchez Cano

17:50-18:00

**O29-12.** Bonelli's eagles as a biomarker: multi-resistant strains and biosecurity in a One Health framework

#### Bárbara Martín-Maldonado

PARALLEL SESSION

# Spanish Egg and Meat Producers Meeting (Inprovo & Avianza)

# **RECATÍ B** - Hotel Sorolla Palace

16:00-16:10

M30. Spanish Egg and Meat Producers Meeting (Inprovo & Avianza)



# **CLOSING CEREMONY**

# **AUDITORIUM 1**

18:00-19:00





# **POSTER SESSION 1**

# **MULTIPURPOSE ROOM 1**



Chairpersons: L. Castillejos (SNiBA, Universitat Autònoma de Barcelona (UAB), Spain) & C. Marín-Orenga (University CEU Cardenal Herrera, Spain)

18:00-18:30

**P1-01.** Study of economic parameters in Uttara chicken: A promising native chicken of Uttarakhand state of India

## Anil Kumar

**P1-02.** Sea urchin waste as a sustainable source of calcium in laying hens production

#### Francesca Leone

**P1-03.** Effects on the carbon footprint of chicken meat by an infection with Eimeria spp

#### Julia Gickel

P1-04. Feasibility of purified rainwater as drinking water for laying hens

# Neil Van Den Broeck

**P1-05.** Improve broiler production sustainability reducing N and P excretion through diet optimization with multi-enzymatic complex with high doses of phytase

## Davide Militello

**P1-06.** Comparing the improvement in feed sustainability through multicarbohydrase complex with high doses of phytase using two different GFLI databases

# Davide Militello



**P1-07.** Effect of the addition of protected sodium butyrate in broiler diet on nitrogen and phosphorus excretion

# Beatriz Saldaña Mancebo

**P1-08.** Sustainable utilisation of eggs lost during further processing and packaging

# Simone Pauling

**P1-09.** Effect of genotype on human-edible protein conversion efficiency: valorisation of local chicken breeds through cross-breeding strategy

#### Federica Volpe

**P1-10.** Pecking behaviour of turkey hens in proximity to the feeding pan – any influence of beak condition?

#### Nina Volkmann

**P1-11.** Effect of stocking density on performance and footpad dermatitis in broilers

#### Lidija Peric

**P1-12.** Effects of a twin shell building and proactive ventilation on litter humidity and health of broiler chicken

# Stephanie Schäfers

**P1-13.** Hanging poultry scales as a model for environmental enrichments in commercial broiler houses

#### Brenda Hernández Tapia

**P1-14.** Welfare of turkey hens with untrimmed beaks in enriched housing conditions

**Birgit Spindler** 



**P1-15.** Hatching on-farm under practical conditions - first experiences on the behavior in on-farm hatched and hatchery-hatched broiler chicks

#### Sabine Vossler

P1-16. Effect of bedding material on leg quality in broilers

# Sava Spiridonovic

**P1-17.** Climate change: heat stress trends in German regions of intensive turkey production

#### Nina Volkmann

**P1-18.** Effect anti-stressor supplementation on body weight changes, SOD (Superoxide Dismutases), and Glucocorticoids (GC) gene expression in transport stressed broiler chicken

#### Jaydip Rokade

**P1-19.** On-farm hatching in slow growing broilers: an experience out of the practice

#### Anna Schwarz

**P1-20.** Stripped to the Bone: Comparing Broiler Bone Strength and Bone Density Across German Fattening Methods

# Jolien Hacker

**P1-21.** Effect of different litter types on occurrence and severity of pododermatitis in broiler production

# Slobodan Kneževic

**P1-22.** Effects of a triple-strain Bacillus-based probiotic in ameliorating stress-related impacts on broiler gut microbiota for improved well-being and productivity

## Antoine Meuter



**P1-23.** Expression of regulatory neuropeptides in broiler breeder females fed diets with decreased energy and protein content

# **Gillian Cherrie**

**P1-24.** Effects of Quillaja saponaria and Yucca schidigera saponins and polyphenols on intestinal health, welfare, and performance of broilers under commercial conditions in Belgium

#### Vasil Stanev

**P1-25.** Effect of Dietary Supplementation of Arjuna (Terminalia arjuna) Bark and Sahjan (Moringa oleifera) Leaf Powder on the Growth Performance and Egg Quality of Uttara chicken

#### Ankit Sharma

**P1-26.** Production performance and egg quality parameters of laying hen supplemented with black turmeric under heat stress

#### Vinay Singh

**P1-27.** Dietary phytogenic inclusion level improves performance and egg quality by regulating cytoprotective and inflammatory responses in the ovary and duodenum of laying hens

#### Ioannis Brouklogiannis

#### P1-28.

**P1-29.** Enhancing Reproductive Performance of Broiler Breeders and Progeny Quality and Performance Through Phytomolecules

#### Twan Van Gerwe

**P1-30.** Dietary manipulations with herbal feed additives to produce value added egg from laying chicken

# **MSK Sarker**



**P1-31.** Proving the use of nutritional matrix values for Phytogenic Feed Additives through modeling

#### Manu De Laet

**P1-32.** Effects of feeding oxidized lipids and an extract from an olive oil byproduct, rich in Hydroxytyrosol, on cecal fermentation in broilers at 21 days of age

# Joel Alexis Maldonado

**P1-33.** Effects of a Chinese herbal extract on gut microbiota, production performance, immune organ indices, meat quality, and serum biochemical indices of white carneau squabs

#### Zhixuan Chen

**P1-34.** Effects of supplementation of salinomycin and herbal feed additive on growth performance and oocyst shedding in broiler chickens challenged with Eimeria spp

#### **Gabriel Moyano**

**P1-35.** Artichoke extract (Cynara scolymus L.) improves production performance of laying hens after long-term stress of feeding mycotoxin-contaminated diets

# Konkawat Rassmidatta

**P1-36.** Effects of an encapsulated phytogenic and phycogenic solution when used in a diet formulated with or without matrix value on performance, egg quality and nutrient digestibility of laying hens

#### Stephanie Ladirat

P1-37. Effects of natural extracts on the oxidative stability of poultry feeds

# Marta Blanch



**P1-38.** Influence of purslane extract and probiotic on welfare related parameters and droppings characteristics of broilers at high stocking density

# Ahmad Tatar

**P1-39.** Live Salmonella vaccine compatibility with different microbial based solutions

#### Florence Barbe

**P1-40.** Poultry vector vaccines: innovative serological assays for vaccination monitoring and DIVA testing for H5 avian influenza A

# Ignacio García-Pastor

**P1-41.** Evaluation of inactivated vaccine formulated with new polymeric adjuvant against Salmonellosis in layers

# Andra Corder

**P1-42.** Compatibility of innovax-nd-ibd + nobilis h9-nd p vaccine against 3 challenge strains (ibd. nd, ai) in spf birds at t=3 or t=4 (ibd at 3 weeks, nd and ai at 4 weeks)

# **Rüdiger Raue**

**P1-43.** Evaluation of compatibility and production performance in commercial layers immunized with vectorized vaccines rHVT-H7 and rHVT-F and immune-complex vaccine against Gumboro applied simultaneously in the hatchery

# **Ricardo Franco**

**P1-44.** Evaluation of vaccination strategies against highly pathogenic avian influenza H5 in Spanish poultry production: application of the EVACS tool

# Marta Perelló



**P1-45.** Study to assess the correlation between Infectious Bronchitis live vaccine volume applied by spray to day-old chick boxes and the percentage of positivity and Ct values

# Alberto Giner

**P1-46.** Bacillus coagulans DSM 32016 controls Salmonella Typhimurium-Caused performance decline in broiler through improved gut histomorphology and beneficial microbiota modulation

# Rubén Crespo Sancho

**P1-47.** Development of a new probiotic feed additive based on the microbial consortium of Limosilactobacillus fermentum and Ligilactobacillus salivarius for the prevention of salmonellosis in broiler chickens

# Ilya Nikonov

**P1-48.** Effect of in feed galactomannans in broiler chickens challenged with different Campylobacter jejuni strains

# Borja Vilà

**P1-49.** Comparative analysis of resistance to salmonella enterica serovar enteritidis in guinea fowl and chicken

# Girraj Goyal

**P1-50.** Assessment of the activity of Lactobacillus spp commercial against Salmonella Minnesota with multiple drug resistance profile

# **Bruno Milagres**

**P1-51.** Protective Efficacy of Inactivated Trivalent-H5 Vaccine Against Challenge with Both HPAIV-H5N1 and H5N8 Viruses in Turkey Poults Under Both Laboratory and Field Conditions

# Wael Elfeil



**P1-52.** Efficacy of the application of an attenuated Salmonella Typhimurium vaccine in a broiler farm to reduce excretion and colonization of field strains after and experimental infection

#### Lourdes Sisquella

**P1-53.** Stability of a bivalent live Salmonella vaccine in drinking water over a 24-hour period, with and without the addition of a water stabilizer

#### **Doris Mueller-Doblies**

**P1-54.** Removal of Aflatoxin B1 Using Alfalfa Leaves as an Adsorbent Material: A Comparison between Two In Vitro Experimental Models

#### María De Jesús Nava Ramírez

**P1-55.** Influence of inactivated Salmonella vaccine in breeders on the vertical transference of MDA in day-old chicks

#### Santiago De Castro

**P1-56.** Prevalence and characterization of ESBL producing Klebsiella pneumoniae from Sonali chicken meat in Narsingdi district, Bangladesh

#### Muhammad Ali

**P1-57.** Phage Therapy Modifies the Host's Intestinal Ecosystem by Modulating the Microbiome: A Meta-Analysis Approach

#### Laura Lorenzo-Rebenaque

**P1-58.** Prevalence and antibiotic resistance of Enterococcus faecium /faecalis isolated from broiler chicken meat in Poland

#### Olimpia Kursa

**P1-59.** Multidrug resistant escherichia coli and salmonella isolated from water, litter and meat in commercial poultry farms bio-security concern and emerging public health threat in pakistan

# Aayesha Riaz



**P1-60.** Characterization of the Clostridium perfringens and Clostridioides difficile hazards in broiler slaughterhouses

# Adeline Huneau-Salaün

**P1-61.** Identification and antibiotic susceptibility profiling of bacteria isolated from backyard poultry

#### Aayesha Riaz

**P1-62.** The fatty acid composition of egg yolk from hens fed diets differing in maize hybrid, rapeseed oil level and addition of emulsifier

#### Nives Marušic Radocic

**P1-63.** Effect of a new 3-phytase on egg production and quality and bone mineralisation traits in laying hens

#### Mehran Javadi

P1-64. Eggshell quality in extended laying cycle

#### Nicolas Guyot

**P1-65.** Influence of natural pigments on the shelf life of eggs from Isa Brown layers

# Cristina-Camelia Matache

**P1-66.** Evaluating the impact of temperature and storage duration on egg quality under tropical climatic conditions

# Sonale Nagesh

**P1-67.** The effect of experimental Ascaridia galli infection on egg quality in three local chicken breeds

#### Leopold Schwarz



**P1-68.** From colorimetry to carotenoids deposition in egg yolk: impact of carotenoids combination on egg yolk pigmentation

# Aurelia A. Séon Simon

**P1-69.** Protected sodium butyrate improves productive performance and egg quality in old laying hens

#### Beatriz Saldaña

**P1-70.** Influence of age on eggshell colour persistency in greenshell and blueshell layers

# Filip Dytrt

# **POSTER SESSION 2**



#### **MULTIPURPOSE ROOM 1**

hairpersons: L. Castillejos (SNiBA, Universitat Autònoma de Barcelona (UAB), Spain) & C. Marín-Orenga (University CEU Cardenal Herrera, Spain)

18:30-19:00

P2-01. Design of a moist feeding system for poultry

# Salma Rian

**P2-02.** The effect of different indoor layers' housing systems on the changing of live weight of laying hens and its uniformity

# Lilla Pető

**P2-03.** Productive and reproductive performance, dressing yield and chemical composition of different varieties of guinea fowl

# Nushrat Nourin Lisa



**P2-04.** Promoting an innovative heating system for broiler chickens in rural communities in Cameroon: a preliminary study

# Achille Schiavone

**P2-05.** Validation of an automated scale for continuous monitoring of the body weight in broiler chicken farming

# Maria Roda Tena

P2-06. Thermographic analysis in 11 week old turkeys

#### **Ezequiel Sánchez**

**P2-07.** Poultry thermoregulation in the heat: seasonal acclimatization and partitioning of evaporative water losses

# Thobela Nkukwana

**P2-08.** The impact of different types of serine proteases on growth performance and jejunal morphology in broilers

#### Reza Akbari Moghaddam Kakhki

**P2-09.** Microbiota profile and antibiotic resistance genes in the caecal content of broiler chickens are influenced by dietary protein content and the plant protein source

# Oluyinka Olukosi

**P2-10.** Ileal amino acid digestibility of extracted sunflower meal, determined with layer type pullets

#### Nikoletta Such

**P2-11.** Maternal supplementation of guanidino acetic acid: Influence on egg composition and chick development

#### Corey-Ann Firman



**P2-12.** Neuropeptide hormone responses and jejunal absorption rate in broiler chickens receiving reduced protein diets: A comparison of branched-chain amino acids with lysine as proteinogenic amino acids

#### Oluyinka Olukosi

**P2-13.** Microbiome implications of total replacement of soybean meal in fast growing male broilers

#### **Kirsty Gibbs**

**P2-14.** Energy utilization and jejunal mRNA expression of nutrient transporters in broiler chickens fed for different feeding lengths diets containing resistant starches from raw potato or high amylose corn

#### Oluyinka Olukosi

**P2-15.** Novel sfericase protease improves amino acid digestibility of soybean meal and rapeseed meal in broiler chickens

# Aurelia Seon

**P2-16.** Effect of rearing substrate on amino acid digestibility of back soldier fly larvae fed to broiler chicks

#### **Emily Burton**

**P2-17.** Response of broilers to dietary metabolizable energy levels from 0 to 4 days old

# **Matheus Reis**

P2-18. Nutritional Potential of African Edible insects as food and feed

#### Sekobane Daniel Kolobe

**P2-19.** Alternative protein sources in broiler diets: effects on bird performance, welfare status and development of the gastro-intestinal tract

#### Tom Vingerhoets



**P2-20.** A new fermentation-based L-methionine (L-Met eco) has a better efficacy compared to petro-chemical based DL-methionine (DL-Met)

# Behnam Saremi

**P2-21.** Dietary amino acid profile boosted in arginine and threonine improves growth performance of turkeys fed reduced crude protein diets

# William Lambert

**P2-22.** Effect of solid-state fermentation on nutritional properties of oilseed cakes and in vitro digestibility in poultry

# María Cambra-López

**P2-23.** Methionine requirements of slower growing broilers in the starter (d 0-10), grower 1 (d 10-24), grower 2 (d 24-38) and finisher (d 38-50) phases

# Lotte Stokvis

**P2-24.** The use of an olive by-product as a source of insoluble fibre for pullet feeding

# Eduardo Ruíz Herrero

**P2-25.** Study on Ganoderma lucidum plus phytase to solid-state ferment agricultural by-products producing functional feed

# Tzu Tai Lee

**P2-26.** Development and application of fermented soybean hull by Bacillus velezensis as functional feedstuff

# Tzu Tai Lee

**P2-27.** Effect of incorporating mango (Mangifera indica) feed and boiled mango seed kernel as partial substitutes for maize on the zootechnical performance of broilers

# Hippolyte Mekuiko Watsop



**P2-28.** Effect of including dehydrated Hermetia illucens larvae on the productive performance of Isazul laying hens (27 to 38 week old)

# Ana Montalbán Pérez

**P2-29.** Grape and Apple Pomace Antioxidant Capacity: Potential Inclusion in Poultry Diets

# Gabriela María Cornescu

**P2-30.** Effect of offering low protein diets with with different levels of amino acids on broiler performance

#### Karine Bebin

**P2-31.** Efficacy evaluation of iron amino acid complexes (Fe-Lys-Glu) in laying hens: effects on laying performance, egg iron content and blood biochemical parameters

# **Cibele Torres**

**P2-32.** Amino acid-complexed minerals supplementation improves laying hen performance, egg and bone Quality of 98-week-old hens

# **Cibele Torres**

**P2-33.** Effect of partial or total replacement of soybean oil by Hermetia illucens larvae fat in layers diets on performance and apparent illeal digestibility of nutrients

# Aleksandra Drażbo

**P2-34.** In-ovo feeding by glucose and its effect in improving hatchability of Fayoumi breeder

#### Amira Mahmoud



**P2-35.** The impact of fiber supplementation on energy metabolizability and the production of short-chain organic acids in broilers, depending on their age

## Martina Lichovnikova

**P2-36.** Standardised ileal amino acid digestibility of maize grains dried at two different temperatures and supplemented or not with protease

#### Sebastian Kaczmarek

**P2-37.** Evaluation of dietary supplementation of garlic powder (Allium sativum) on the growth performance, carcass traits and meat quality of Japanese quail (Coturnix coturnix japonica)

#### Hassan Jalal

#### P2-38.

**P2-39.** Protection efficiency of different inactivated AIV-H5 vaccines against challenge with recent H5N1 clade 2.3.4.4 circulating virus

#### Wael Elfeil

**P2-40.** An overview of transmissible viral Proventriculitis in broiler chickens in Poland

#### Marcin Smialek

**P2-41.** Host mi RNA profiling of Vero cells during Avian orthoreovirus infection

#### Deepak Kumar

**P2-42.** Exploring iron scavenging as an under-explored mode for pathogen elimination by Bacillus-based probiotics

# Krithika Venkatasubramanian



**P2-43.** Characterization of Escherichia coli MG1655 resistant variant after extended exposure to essential oils mixture

# **Claire Carlu**

**P2-44.** Antimicrobial resistance among of Gallibacterium anatis biovar haemolytica isolated from chickens in Poland

# Olimpia Kursa

**P2-45.** Positive effect of Euglena gracilis derived paramylon on immunoglobulin Y content of egg yolk

#### Valentine Van Hamme

**P2-46.** Immuno-boosting effects of lysozyme, essential oils, vitamins mixture of additives in response to live E. coli vaccine

#### Jasna Bošnjak-Neumüller

P2-47. Antimicrobial resistance of Escherichia coli isolates from broilers

# Isabel Fabra

**P2-48.** In vitro comparison and evaluation of antimicrobial activity of ammonium and sodium formate combined with short-chain fatty acid salts in different microorganisms

#### Abdelhacib Kihal

**P2-49.** Mucolytic activity of essential oils, lysozyme, and vitamins' premix of additives intended for pigs and poultry

# Jasna Bošnjak-Neumüller

**P2-50.** Probiotic in the control of mortality and lethality in experimentally challenged broiler chickens with avian pathogenic escherichia coli

# **Bruno Milagres**



**P2-51.** Evaluation of the persistence of commercial lactobacillus spp in experimentally contaminated chicken litter with APEC

# **Bruno Milagres**

**P2-52.** Quercetin can mitigate lipopolysaccharide induced apoptosis and oxidative stress in bursal and thymic lymphocytes

#### Vladimir Zmrhal

**P2-53.** Effects of short period of incubation during storage of eggs from different breeder ages on chick characteristics and nutrient transporters

#### Servet Yalcin

**P2-54.** Effects of breeder age on plasma glucose and lactate of newly hatched chicks

#### José Henrique Stringhini

**P2-55.** Use of dimethylacetamide for cryopreserving rooster sperm from an endangered breed: effects on sperm quality and sperm fertilizing ability

# Eva Mocé

**P2-56.** Preliminary investigations on Mulard duck, as sterile recipient in gonadal tissue transplantation

# Kitti Buda

**P2-57.** Research of breeding and improvement immune system in poultry

#### Ekaterina Barkunova

**P2-58.** Effects of stocking density and sex ratio on the reproductive parameters of breeding geese in indoor keeping system

# Barbara Vegi



P2-59. GWAS for FCR and breast meat yield traits in Pekin ducks

# Julien FABLET

**P2-60.** Decoding selective sweeps associated with tropical adaptability in Guinea fowl through whole-genome sequencing

#### Azhaguraja Manokaran

**P2-61.** Molecular characterization of Chicken B cell marker (ChB6) in native chicken of Poonch region from international borders of India and Pakistan

# Mandeep Singh Azad

P2-62. Novel MHC-B haplotypes in Chantecler chickens

#### Jean-Marc Larivière

**P2-63.** Inclusion of eggshell thickness in a genetic improvement program in laying hens

#### Tomasz Szwaczkowski

**P2-64.** Application of impedance spectroscopy for the determination of body condition and pelvic fat content in breeder broiler hen

#### Cristina Guerra

**P2-65.** Semen quality parameters of Italian chicken breeds: characterization at the molecular level by proteomics

# Silvia Cerolini

**P2-66.** Single Nucleotide Polymorphism related to maternal ability trait of Thai and Laos native chickens

#### Amonrat Molee



**P2-67.** Comparison of the nesting behaviour of white and brown pure line laying hens

# Lina Hattendorf

**P2-68.** Key miRNA of chicken seminal plasma extracellular vesicles related with sperm motility regulation

# Jilan Chen

**P2-69.** Genetics of daily feed efficiency in broiler lines divergent for digestive efficiency

# Sandrine Mignon-Grasteau

**P2-70.** A crossbreeding as a proposal in a conservation program of Spanish 'Murciana' chicken breed

# Laura Martínez Martínez

**P2-71.** Detection of male gametes from successful primordial germ cell implantation in a sterile interspecies hybrid

# Eszter Várkonyi

# **POSTER SESSION 3**

# Animal Health

# **MULTIPURPOSE ROOM 1**

*Chairpersons: M. Mateos (University CEU Cardenal Herrera, Spain) & A. Callejo (Universidad Politécnica de Madrid, Spain)* 

18:00-18:30

**P3-01.** Growth performance of male layer-type chickens reared at different stocking density

# Evgeni Petkov



**P3-02.** What emergency killing methods should be used for poultry weighing less than or more than 5kg?

## Marie Bourin

**P3-03.** Weight lifting hens? The impact of sensor weight on the movements of aviary housed hens

#### Maja Makagon

**P3-04.** Development of an automatic device for the administration of mother hen uropygial secretion analogue in hatching eggs and its effect on vocalization at hatch

#### Marta Yerpes

**P3-05.** Differential effect of two different doses of organic selenium on production performance in White Leghorn layers

# Anand Laxmi N

**P3-06.** Assessment of welfare and meat quality parameters of backyard native birds reared under deep litter versus cage rearing system

#### Asawaree Hable

**P3-07.** Stakeholders' attitudes toward painfulness of keel bone damage in laying hens: an empirical study from Serbia

# Vesna Rodic

**P3-08.** Efficacy of alliaceous extracts in modulating cytokine response under heat stress in poultry: insights from in vitro macrophage studies

# María Arántzazu Aguinaga Casañas

**P3-09.** Early characterization of behavioural reactivity in two Italian chicken breeds: a preliminary study

#### Stefano Paolo Marelli



**P3-10.** Measuring the chronic metabolic demands of keel bone fractures in brown-feathered end-of-lay hens

#### Jacob Brost

**P3-11.** Occurrence of feather damage, skin injuries, and keel bone deviations in dual-purpose hens in organic farming

# Philipp Hofmann

**P3-12.** The effect of crossbreeding of local chicken breeds with commercial parental lines on animal welfare

#### Sonja Hillemacher

**P3-13.** Judgement bias test in dual-purpose chickens exposed to different environments

## Josefine Stuff

**P3-14.** Field study on the behaviour, feed consumption and performance of laying hens in an aviary system

## Julie Laclau

**P3-15.** Investigation of the use of different environmental enrichment elements in the case of different hens genotypes (preliminary results)

# Lilla Petò

**P3-16.** Effect of including whole Hermetia illucens larvae in the diet on the stress levels in laying hens

#### Ana Montalbán Pérez

**P3-17.** Investigation of the use of different environmental enrichment elements for various waterfowl genotypes (a preliminary study)

Sándor Szász



P3-18. Welfare of spent hens in Flemish slaughterhouses: current situation

## Anneleen Watteyn

**P3-19.** Gene expression of two egg proteins, VMO1 and AvBD11, in the laying hen

#### Magali Chessé

**P3-20.** Herbal adaptogen feed-additive modulates the hypothalamic expression of feeding-related neuropeptides in heat-stressed broilers

#### Sami Dridi

**P3-21.** Bone quality and incidence of urolithiasis in male broiler breeders fed a female or male ration

#### Nicola Tyler

**P3-22.** Role of novel natural nutritional emulsifier in optimizing fat utilization and energy saving in poultry diets

#### Shivi Maini

**P3-23.** Broiler chickens fed a low digestible diet improved intestinal health and growth performance when supplemented with a multi-component solution alone or combined with a protected blend of organic acids and essential oils

# **Heitor Vieira Rios**

**P3-24.** Butyric and valeric glycerides alleviate sub-clinical necrotic enteritis effect on performance in broiler

#### Sm Mostafizur Rahaman Sumon

**P3-25.** Medium chain fatty acids reduce oxidative stress in intestinal Caco-2 cells

Laura Parro



**P3-26.** Effect of dietary enrichment with n-3 fatty acids by using lipid-based nanoparticles on growth performance, carcass composition, meat quality and fatty acid profile of breast meat in slow-growing Korat chickens

#### Wittawat Molee

**P3-27.** Optimizing the utilization of n-3 fatty acids for enhanced functional meat production in slow-growing Korat chickens involves evaluating the characteristics of glucose transporter-targeted lipid nanoparticles

#### Piyaradtana Homyok

**P3-28.** Effect of double buffered sodium butyrate associated with low energy-protein diets on small intestinal morphology and microbiota in broilers in a context of coccidiosis challenge

#### **Xavier Roulleau**

**P3-29.** Supplementation of a combination of lysolecithins, a synthetic emulsifier and monoglycerides on broiler performance and profitability during heat stress

# David González Sánchez

**P3-30.** Supplementation of a combination of lysolecithins, a synthetic emulsifier and monoglycerides to diets of broilers containing phytase in super dosing, on performance and profitability

# David González Sánchez

**P3-31.** In feeding line application of organic acids improved feed hygiene and growth performance in broiler chickens

## Sandra Van Kuijk

**P3-32.** The effect of a selected blend of organic acids on controlling Salmonella Infantis in broiler chickens

#### Sandra Van Kuijk



**P3-33.** Effects of medium-chain fatty acids rich diets on intestinal morphology, microbiology and volatile fatty acids in young broiler chickens

# Mateo Espinosa De Los Monteros Peñafiel

**P3-34.** Protected sodium butyrate improves productive performance and carcass characteristics in broiler chickens

# Beatriz Saldaña Mancebo

**P3-35.** PAdaptation of Avian Orthoreovirus strain DVB 04 in Vero cells and its titration

#### R. Prarthana

**P3-36.** Genetic variability of infectious bursal disease virus (IBDV) in the Iberian peninsula

#### José Luis Arnal

P3-37. First report of Marek's disease virus in commercial turkeys in Slovenia

# Zoran Žlabravec

**P3-38.** Efficacy of Probiotic via Drinking Water on Growth Performance of Broiler Chickens during Fowl Adenovirus Infection in UAE

# Merghani Adam

**P3-39.** Epidemiology of infectious bursal disease virus in portugal: replacement of local strains by Northwestern European reassortants as dominant field type

#### Matteo Legnardi

**P3-40.** Disease diagnosis through analysis of chicken mycoplasma antigens in 9th Industrialization and preservation-maintenance line of Korean Native Chickens(KNC)

#### Are-Sun You



P3-41. Immune status and reproductive performance in Broiler breeders

# Joaquim Tarres

**P3-42.** Hyperpigmentation of laying hens at slaughterhouse associated with lesions in the reproductive tract.

# Àlex Cobos Arnalot

**P3-43.** Efficacy of different IBD vaccines against the current IBDV circulating strains in the Benelux area

#### Nikolai Ongena

**P3-44.** Efficacy of different infectious bursal disease vaccines administered in the hatchery against a very virulent bursal disease challenge in broiler chickens

#### Luis Augusto Pantoja Millas

P3-45. Evaluation of organ lesions in broiler chickens exposed to mycotoxins

#### **Damien Preveraud**

**P3-46.** Molecular longitudinal surveys reveal circulation of chicken anemia virus genogroups IIIa and IIIb in Greece broiler breeder

# Giulia Quaglia

**P3-47.** Extensive adenovirus molecular survey demonstrates predominant circulation of FAdV-D in Italian broiler flocks

## Gabriele Lizzi

**P3-48.** Cranial osteomyelitis and meningoencephalitis associated with Pasteurella canis in broiler chickens

# Leandro Cádiz Nuñez



## **P3-49.** Foot pad dermatitis survey on three hungarian broiler farms

## Márk Tóth

**P3-50.** Evaluation of haemagglutination Inhibition Assay (using FAdVsensitized tanned chicken RBCs) to determine Humoral response to the challenge of novel Fowl Adenoviruses isolated from Pakistan during 2019-2022

## Iqra Zaheer

**P3-51.** Phylogenetic analysis of partial sigma σA of avian orthoreovirus

## Surabhi Kashyap

**P3-52.** Comparative analysis of a partial fragment of  $\sigma$  and  $\lambda$  gene of avian reovirus

## Laxmi Rathore

**P3-53.** Circulating genotypes of Mycoplasma spp. and their molecular profiles of antimicrobial resistance as a contribution to the diagnosis of avian mycoplasmosis in Colombia

## Sara Forero

**P3-54.** Chemical and fatty acid profile of chicken meat from different housing systems

## Mirjana djukic Stojcic

**P3-55.** Multi-omics analyses of chicken breast with spaghetti meat myopathy

#### Byungwhi Kong

**P3-56.** The impact of sustainable protein sources on meat quality of Redbro broiler chickens

#### Hannah Scott-Cook



**P3-57.** Effects of dietary inclusion of different lentil varieties on broilers' meat quality

## Gabriela María Cornescu

**P3-58.** Nuclear Magnetic Resonance and Dielectric Spectroscopy as valuable tools to detect Wooden Breast abnormality in broiler chickens

## Massimiliano Petracci

**P3-59.** Myopathies in broiler chicken breasts in a slaughterhouse from Argentina: prevalence, severity, and attributes contributing to the occurrence

#### Florencia Graciela Campostrini

**P3-60.** Nutritional value and quality of poultry meat affected by white striping, wooden breast and spaghetti meat myopathies

## Marija Boškovic Cabrol

**P3-61.** Comparison of meat quality traits among the main chicken categories marketed in Italy: 1. Technological properties

#### Mara Antonia Gagliano

**P3-62.** Comparison of meat quality traits among the main chicken categories marketed in Italy: 2. lipid and protein oxidative stability

Emilia Luigia Antenucci

**P3-63.** Breast quality of poultry fed with diet supplemented with live black soldier fly larvae

## Niko Gioacchino Zeni

**P3-64.** Effect of the application of pulsed electric fields in combination with salts on the drip water loss, texture and appearance of wooden breast meat in broilers

Tamara Anahí López



18:00-18:30

**P3-65.** Supplementation of olive oil-derived phytocomplexes in broiler chicken diets: effects on breast meat quality and oxidation changes of thigh meat during refrigerated storage

## Emilia Luigia Antenucci

**P3-66.** Effect of the dietary inclusion of Hermetia illucens oil on fatty acid composition and technological properties of chicken meat

## Mara Antonia Gagliano

**P3-67.** Effect of palm kernel fatty acid distillates and Black Soldier fly larvae oil on meat quality of Broiler Chickens

Laura Parro

## **POSTER SESSION 4**

#### **MULTIPURPOSE ROOM 1**



*Chairpersons: M. Mateos (University CEU Cardenal Herrera, Spain) & A. Callejo (Universidad Politécnica de Madrid, Spain)* 

18:30-19:00

**P4-01.** The positive impact of two Bacillus-based products on broiler performance and lesion scoring during necrotic enteritis-induced challenge

## Florence Barbe

**P4-02.** Effect of yest cell wall supplementation on broiler performance: analysis of 3 trials

## Florence Barbe

**P4-03.** Reality of feed intake in layers related to zootechnical performances and improvement of feed intake quality with an innovative hydrolyzed yeast

## Florence Barbe



**P4-04.** A global cross-study analysis in broilers of a multi-enzyme combination and Bacillus probiotic

## Sasha Van Der Klein

**P4-05.** Relationships between microbiota and zootechnical parameters in laying hens after supplementation with probiotic Pediococcus acidilactici CNCM I-4622

## Florence Barbe

**P4-06.** Efficacy of manganese sources for broilers: impact on performance and manganese accumulation

## Ian Cockshott

P4-07. Probiotics in broiler chicks' diet fed with different sources of protein

#### Ciurescu Georgeta

**P4-08.** Effects of microencapsulated Lactobacillus spp. and cowpea seeds in broiler chickens' diets on production parameters, health status, and intestinal microbial population

#### Aurelia Nicoleta Lefter

**P4-09.** Effect of Lactobacillus plantarum on performance and gut microflora populations of broiler fed with alternative protein source

## Mihaela Dumitru

**P4-10.** Elemental selenium limits the utilization of supplemented selenium in broilers

## Amine Hachemi

**P4-11.** Reducing feed costs with phytase and NSP enzymes for rearing male layer chickens to potentially avoid day old culling

## Saad Gilani



**P4-12.** The effect of synbiotic and probiotic preparations on the concentration of ochratoxin in meat, blood, liver and kidney of turkeys

## Krzysztof Lipinski

**P4-13.** Effects on growth performance of enzyme feed addition for coccidiosis vaccinated Ross 308 broilers

## Nadine Cariou

**P4-14.** Broiler chickens undergoing an intestinal challenge and supplemented with a bacterial xylanase demonstrated better nutrient digestibility, intestinal health and growth performance

## Heitor Vieira Rios

**P4-15.** Effect of am/pm diet on laying performance and egg quality of laying hens

## Nasima Akter

**P4-16.** Does the latest NASEM vitamin A requirement estimate support optimal growth in broiler chickens?

## Yauheni Shastak

**P4-17.** Effect of the age and duration of the trial in the evaluation of the adequate mineral content and phytase dose in broilers

## Mehran Javadi

**P4-18.** Evaluation of postbiotics on production performance in broiler chicken as an alternative to Antibiotic Growth Promoters

## Monika M

**P4-19.** A novel phytase allows for higher level of inorganic phosphate substitution with no detrimental effect in hens during the late laying period

## Cristiano Bortoluzzi



**P4-20.** The effect of muramidase in broiler feed on broiler performance in semi-field conditions

## Necmettin Ceylan

**P4-21.** Muramidase supplementation enhances laying hen performance: a comprehensive analysis of three trials

## Irene Eising

**P4-22.** The production benefits of full matrix application for a consensus bacterial 6-phytase variant alone or in combination with an enzyme mix of xylanase, amylase, and protease: review of two studies

## Rachael Hardy

**P4-23.** The use of fibre-degrading enzymes in broiler feed containing wheat distiller's dried grains with solubles

## Eunjoo Kim

**P4-24.** Source of limestone affects growth performance and bone mineralization of broilers

## Cristiano Bortoluzzi

**P4-25.** Increasing the dose of a novel consensus bacterial 6-phytase variant improved ileal digestibility of Na and Mg in broilers

## Yueming Dersjant-Li

**P4-26.** A novel phytase improves the responses of laying hens fed an inorganic phosphorus-free diet from 25 to 45 wk of age

## Anna Maria Pérez-Vendrell

**P4-27.** Impact of added phytase and dietary InsP6 on the structure and the core microbiota of the digestive tract of broilers

#### Ismael Rubio-Cervantes



**P4-28.** Dietary synbiotics improve feed utilization, eggshell quality, and fecal ammonia emission of laying hens under tropical conditions

## Yuwares Ruangpanit

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## Petra Thobe



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