



SCIENTIFIC PROGRAM

XIVth EUROPEAN POULTRY CONFERENCE 2014,
STAVANGER, NORWAY

TUESDAY, JUNE 24th

Hall/Time	LINDESNES A + C
9:00 - 9:30	Opening session
9:30 - 10:30	<p><i>Plenary session 1: The future of poultry production</i> – Chair: Zehava Uni (Israel)</p> <p>L1 Sustainable development perspectives of poultry production <u>Mette Vaarst</u>, Department of Animal Science, Aarhus University, POBox 50, DK-8830 Tjele</p> <p>L2 Challenges in poultry production during the 21st century <u>Shlomo Yahav</u>, Department of Poultry and Aquaculture Sciences, ARO the Volcani Center, P.O. Box 6, Bet-Dagan, Israel 50250</p>
10:30-10:45	Short coffee break
10:45-11:45	<p><i>Plenary session 1: The future of poultry production</i> – Chair: Zehava Uni (Israel)</p> <p>L3 The future of poultry production: Meeting the challenges of food safety and food security with declining resources <u>J.Fink-Gremmels</u>, Utrecht University, Faculty of Veterinary Medicine, Institute of Risk Assessment Sciences, Yalelaan 104, 3584 GD Utrecht, The Netherlands.</p> <p>L4 Future trends in feed ingredients availability <u>Osler Desouzart</u>, OD Consultin, Brazils</p>
11:45-12:00	Plenary discussion
12:00-13:00	Lunch (Forum plaza/vestibule)

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	LINDESNES A: Macro Minerals PS1 Chair: Rosalina Angel (USA)
13:00	S1 Efficacy of phytase in enhancing nutrient utilisation in broilers is dependent on dietary ions content <u>O. Olukosi</u> ¹ , R. Goncalves ¹ , I. Kuhn ² . ¹ <i>Avian Science Research Centre, Scotland's Rural College, Auchincruive, Ayr, KA6 5HW, United Kingdom.</i> ² <i>AB Vista, D-64293 Darmstadt, Germany</i>
13:12	S2 Evaluation of exogenous multi-glycanases plus phytase and phytase alone on growth performance, carcass yield and bone mineralisation in broilers <u>D.Wu</u> , S. Wu, R.A. Swick. <i>University of New England, Armidale, Australia</i>
13:24	S3 Limits to the reductions in dietary Ca and AvPP, when held at a 2: ratio, with us of phytase at normal or superdosing levels <u>M. Bedford</u> ¹ , S.V. R. Rao ² . ¹ <i>AB Vista Feed Ingredients Ltd.</i> ² <i>Directorate of Poultry Research, Indian Council of Agricultural Research, Rajendranagar, Hyderabad, India 500 030</i>
13:36	S4 Retainable phosphorus requirement in layers <u>L. Star</u> ¹ , M.M. van Krimpen ² . ¹ <i>Schothorst Feed Research, Lelystad, The Netherlands.</i> ² <i>Wageningen University & Research – Livestock Research, Lelystad, The Netherlands</i>
13:48	S5 Interrelationship of dietary cation and anion with growth, leg health and carcass traits of broiler chickens <u>M.M.H. Mushtaq</u> . <i>University of Veterinary and Animal Sciences, Lahore, Pakistan</i>
14:00-14:30	Coffee break and viewing posters/visiting stands

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	LINDESNES B: Meat Quality PS2 Chair: Achille Franchini (Italy)
13:00	Lecture (30 min): L5 Oxidative damage to poultry: from farm to fork <u>Mario Estévez</u> . <i>Animal Production and Food Science Department, Food Technology, University of Extremadura, 10003, Cáceres, Spain</i>
13:30	S6 Use of grape extract as antioxidant in chicken diets: effect on α-tocopherol status and meat lipid oxidation <u>S. Chamorro</u> ¹ , <u>A. Rebolé</u> ² , <u>A. Viveros</u> ² , <u>I. Arija</u> ² , <u>A. Brenes</u> ¹ . ¹ <i>Instituto de Ciencia y Tecnología de Alimentos y Nutrición (ICTAN-CSIC), Madrid, Spain.</i> ² <i>Facultad de Veterinaria, UCM, Madrid, Spain</i>
13:40	S7 Duck breast meat quality affected by strain, sex, and marination <u>D. Smith</u> ¹ , <u>J.K. Northcutt</u> ² . ¹ <i>North Carolina State University, Raleigh, NC, USA.</i> ² <i>Clemson University, Clemson, SC, USA</i>
13:50	S8 The effect of nutritional restriction on the myogenic satellite cell proliferation and adipocyte formation <u>D. Powell</u> ¹ , <u>D. McFarland</u> ² , <u>W. Muir</u> ³ , <u>A. Cowieson</u> ¹ , <u>S. Velleman</u> ⁴ . ¹ <i>Faculty of Veterinary Science, The University of Sydney, Camden, NSW 2750, Australia.</i> ² <i>Poultry CRC, PO Box U242, University of New England, Armidale, NSW 2351, Australia.</i> ³ <i>Department of Animal Science, South Dakota State University, Brookings 57007.</i> ⁴ <i>Department of Animal Sciences, The Ohio State University/Ohio Agricultural Research and Development Center, Wooster 44691</i>
14:00-14:30	Coffee break and viewing posters/visiting stands

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	RUNDE: Reproduction PS3 Chair: Barbara Tzschentke (Germany)
13:00	<p>S9 Effects of different dietary protein levels during rearing on body composition and laying performance in broiler breeder females <u>R. Van Emous</u>¹, R. Kwakkel², M. van Krimpen¹. ¹Wageningen UR Livestock Research, Lelystad, The Netherlands. ²Animal Nutrition Group, Department of Animal Sciences, Wageningen University, Wageningen, The Netherlands</p>
13:12	<p>S10 Strategy of avian germ plasm cryobanking in France and scientific advances in reproductive phenotype <u>E. Blesbois</u>¹, M. Govoroun¹, F. Seigneurin², B. Pain³, M. T. Boichard⁴. ¹INRA, Nouzilly, France. ²SYSAAF, Nouzilly, France. ³INSERM, Lyon, France. ⁴INRA, Jouy en Josas, France</p>
13:24	<p>S11 Effects of eggshell temperature (EST) on embryonic development and residual yolk (RSY) of hatching eggs originating from young and old flock <u>A. Nangsuay</u>¹, R. Meijerhof², B. Kemp¹, H. van den Brand¹. ¹Wageningen University, Wageningen, The Netherlands. ²Poultry Performance Plus, Voorst, The Netherlands</p>
13:36	<p>S12 Effects of the AMP-Kinase modulators AICAR, Metformin and compound C on chicken spermatozoa viability, motility and acrosome reaction <u>T.M.D. Nguyen</u>¹, S. Alves¹, S. Metayer², P. Froment¹, E. Blesbois¹. ¹INRA-UMR-PRC, 37380, Nouzilly, France. ²INRA-URA, 37380 Nouzilly, France</p>
13:48	<p>S13 Effect of Canthaxanthin (Carophyll® Red 10%) supplementation on duck breeder performance fed diets containing 25-Hydroxycholecalciferol (HyD®) <u>S. Davies</u>¹, B. Kenyon², C. Hamelin³, F. Cisneros⁴. ¹DSM Nutritional Products UK, Heanor Gate Ind. Est. Heanor, Derbyshire DE75 7SG United Kingdom. ²Cherry Valley Farms Ltd. Sandbraes Plant. North Kelsey Road. Cailstor Market Rasen. LN76SF, United Kingdom. ³DSM Nutritional Products Europe, 19 avenue Dubonnet, 92400 Courbevoie, France. ⁴DSM Nutritional Products, Animal Nutrition & Health, P.O. Box 2676, 4002 Basel Switzerland</p>
14:00-14:30	Coffee break and viewing posters/visiting stands

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	GRIP: Poultry and Environment PS4 Chair: Michael Grashorn (Germany)
13:00	<p>S14 Intervention to reduce environmental pollution for poultry production clusters in Thailand <u>W. Aengwanich</u>¹, T. Tawinwaang², P. Srikot², K. Thammasar³, T. Boonsorn⁴. ¹<i>Faculty of Veterinary Sciences, Mahasarakham University, Maha Sarakham, 44000, Thailand.</i> ²<i>Nakhon Phanom Provincial Livestock Office, Department of Livestock Development, Nakhon Phanom 48000, Thailand.</i> ³<i>Nong Khai Provincial Livestock Office, Department of Livestock Development, Nong Khai 43000, Thailand.</i> ⁴<i>Stress and Oxidative Stress in Animal Research Unit, Faculty of Veterinary Sciences, Mahasarakham University, Maha Sarakham 44000, Thailand</i></p>
13:12	<p>S15 Investigation of broiler farm's size and its relation with economic performance in Khorassan of Razavi <u>R. Vakili</u>. <i>Department of Animal Science, College of Agriculture, Islamic Azad University, Kashmar, Branch, Kashmar, Iran</i></p>
13:24	<p>S16 Bio-security in Poultry Production Clusters (PPCs) in southeast Asia <u>L. Wang</u>. <i>College of Humanities and Development Studies, China Agricultural University, Beijing, China</i></p>
13:36	<p>S17 Air quality in poultry hatcheries <u>S. Le Bouquin</u>¹, S. Yauschew-Raguenes², C. Audren³, E. Wavelet⁴, J. -D. Dewitte², J. Puterflam³. ¹<i>UEB-Anses, Ploufragan - Plouzane Laboratory, Ploufragan, France.</i> ²<i>CHRU, 29609 Brest, France.</i> ³<i>ITAVI, 22400 Ploufragan, France.</i> ⁴<i>MSA, 22000 Saint Brieuc, France</i></p>
13:48	<p>S18 Effects of temperature and relative humidity on broilers fed high, moderate and low energy diets <u>M. Afolayan</u>, D. Istifanus, O. James. <i>Ahmadu Bello University, Zaria, Nigeria.</i></p>
14:00-14:30	Coffee break and viewing posters/visiting stands

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	LINDESNES A: Embryo Nutrition PS5 Chair: Mike Bedford (UK)
14:30-15:00	Lecture: L6 The nutritional limitations and requirement of the breeder progeny <u>Zehava Uni</u> , Liran Yadgary, Roni Yair. <i>Department of Animal Science, Robert H. Smith Faculty of Agriculture, Food and Environment, Hebrew University, Israel</i>
15:00	S19 The effect of minerals and vitamins supplementation on leg bone strength, structure and mineralization, from hatch to marketing <u>R. Yair</u> , R. Shahar, Z. Uni. <i>Faculty of Agriculture, Hebrew University of Jerusalem, Rehovot, Israel</i>
15:15	S20 Transgenerational and long-term effects induced by reduced protein availability by albumen removal during embryonic development in laying hens <u>E. Willems</u> ¹ , A. Koppenol ^{1,2} , L. Franssens ¹ , Y. Wang ¹ , E. Decuyper ¹ , J. Buyse ¹ , N. Everaert ³ . ¹ <i>KU Leuven, Leuven, Belgium.</i> ² <i>ILVO, Melle, Belgium.</i> ³ <i>University of Liège, Liège, Belgium</i>
15:30	S21 In ovo overnutrition induces longlasting central nervous malprogramming in chicken <u>S. Bogatyrev</u> ¹ , A. Plagemann ² , K. Schellong ² , R.C. Rancourt ² , B. Tzschentke ¹ . ¹ <i>Humboldt-University of Berlin, Institute of Biology, Workgroup Perinatal Adaptation, Philippstr.13, 10115 Berlin, Germany.</i> ² <i>Clinic of Obstetrics, Charit é- University Medicine Berlin, Augustenburger Platz 1,13353 Berlin, Germany</i>
15:45	S22 Administration of bitter tastants to broilers: gastrointestinal-tract genes expression and taste tests <u>S. Cheled - Shoval</u> ¹ , M. Niv ² , Z. Uni ¹ . ¹ <i>Department of Animal Science, The Robert H. Smith, Faculty of Agriculture, Food and Environment, the Hebrew University of Jerusalem.</i> ² <i>Institute of Biochemistry, Food Science and Nutrition, The Robert H. Smith, Faculty of Agriculture, Food and Environment, the Hebrew University of Jerusalem, Rehovot, Israel</i>
16:00-16:30	Coffee break and viewing posters/visiting stands

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	LINDESNES B: Egg Quality PS6 Chair: Ian Dunn (UK)
14:30-15:00	Lecture: L7 Egg antimicrobial protection in domestic birds M. Rose-Martel ¹ , C.M.M. Cordeiro ¹ , N. Guyot ² , S. Rehaalt-Godbert ² and <u>M.T. Hincke</u> ^{1*} ¹ <i>Department of Cellular and Molecular Medicine, University of Ottawa, Ottawa, Canada K1H8M5</i> ² <i>INRA, UR83 Recherches Avicoles, F-37380 Nouzilly, France</i>
15:00	S24 Insights into the structure-function relationship of egg defensins N. Guyot ¹ , V. Herve ^{1,2} , H. Meudal ³ , J.B. Madinier ³ , V. Labas ⁴ , M. Chesse ¹ , J. Gautron ¹ , S. Rehaalt-Godbert ¹ , A. Delmas ³ , C. Landon ³ , <u>Y. Nys</u> ¹ . ¹ <i>INRA, UR83 Recherches Avicoles, F-37380 Nouzilly, France</i> ² <i>INSERM - Université Française Rabelais, UMR 1100 Pathologies Respiratoires: protéolyse et aérosothérapie, F-37032 Tours, France.</i> ³ <i>CNRS, UPR 4301 Centre de Biophysique Moléculaire, F-45071 Orléans, France.</i> ⁴ <i>INRA - CNRS - Université Française Rabelais - IFCE, UMR Physiologie de la Reproduction et des Comportements, Plate-forme d'Analyse Intégrative des Biomolécules, F-37380 Nouzilly, France</i>
15:12	S25 The expansion and characterisation of the Ovodefensin family <u>N. Whenham</u> , P.W. Wilson, M.P. Stevens, I.C. Dunn. <i>The Roslin Institute</i>
15:24	S26 Application of NIR spectroscopy to study egg albumen gelling properties <u>C. Alamprese</u> , E. Casiraghi, M. Rossi. <i>Department of Food, Environmental and Nutritional Sciences (DeFENS), Università degli Studi di Milano, Milano, Italy.</i>
15:36	S27 Ovalbumin-related protein X is a heparin-binding glycoprotein exhibiting antimicrobial activities S. Rehaalt-Godbert ¹ , S. Beaclercq ¹ , M. Berges ¹ , <u>J. Gautron</u> ¹ , F. Coste ² , N. Guyot ¹ , Y. Nys ¹ . ¹ <i>INRA, UR83 Recherches Avicoles, Fonction et Régulation des Protéines de l'Œuf, F-37380 Nouzilly, France.</i> ² <i>CNRS, UPR4301 Centre de biophysique moléculaire, Réparation de l'ADN : approches structurales et fonctionnelles, F-45071 Orléans, France</i>
15:48	S28 Effects of dietary juniper volatile oil on performance, egg quality and oxidative stability of eggs in laying quails <u>S.S. Cengiz</u> , D. Yesilbag, Y. Meral, İ. Çetin, H. Biricik. <i>Uludag University, Faculty of Veterinary Medicine, Department of Animal Nutrition and Nutritional Diseases, Bursa, Turkey</i>
16:00-16:30	Coffee break and viewing posters/visiting stands

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	RUNDE: Red Mite and Poultry Health PS7 Chair: Magne K. Hansen (Norway)
14:30	Lecture: L8 <i>Dermanyssus gallinae</i> and poultry production: Impact, management, and a predicted compatibility matrix for integrated approaches O.A.E Sparagano ^{1*} , D.R. George ^{1*} , R.D. Finn ¹ , A. Giangaspero ² , M. Mul ³ , E. Papadopoulos ⁴ , F. Tomley ⁵ , and J. Pritchard ⁵ <i>¹Faculty of Health and Life Sciences, Northumbria University, Newcastle upon Tyne, NE1 8ST, UK. ²Department of Science of Agriculture, Food and Environment, University of Foggia, 71121, Italy. ³Wageningen UR Livestock Research, The Netherlands. ⁴School of Veterinary Medicine, Aristotle University of Thessaloniki, GR-541 24 Thessaloniki, Greece. ⁵Royal Veterinary College, Hertfordshire, AL9 7TA, UK</i>
15:00	S29 Treatment efficacy against <i>Dermanyssus Gallinae</i> is affected by flock age and housing system M.F. Mul, J.W. van Riel, B.G. Meerburg, J. Zoons, P.W.G. Groot Koerkamp. <i>Ir.</i>
15:12	S30 Tape-traps as an easy-to-use tool for monitoring and surveillance of the poultry red mite in cage and free-range layer farms D. Bicout ¹ , <u>L. Roy</u> ² , G. Chiron ³ , S. Lubac ³ . <i>¹Biomathematics and Epidemiology, EPSP, Labo TIMC, UMR 5525 CNRS Univ. J. Fourier, VetAgro Sup, Lyon - France. ²Université Montpellier 3, Montpellier – France. ³ITAVI (Institut Technique de l'AViculture), Lyon - France</i>
15:24	S31 Assessing spatial distribution and population growth dynamics of the poultry red mite <i>Dermanyssus gallinae</i> to improve control in new layer cage system G. Chiron ¹ , A. Varescon ¹ , S. Lubac ¹ , D.J. Bicout ² , <u>L. Roy</u> ³ . <i>¹ITAVI (Institut Technique de l'AViculture), 23 rue Baldassini, F-69 364 LYON Cedex 07, France. ²Biomathématiques et Epidémiologie, EPSP, Labo TIMC, UMR 5525 CNRS Univ. J. Fourier, VetAgro Sup Campus Vétérinaire de Lyon, 1 Avenue Bourgelat, 69280 Marcy l'Etoile, France. ³UMR 5175 CEFE Centre d'Ecologie Fonctionnelle et évolutive, Equipe EACG, Université Paul Valéry Montpellier III route de Mende 34199 Montpellier cedex 5, France</i>
15:36	S32 Poultry red mite detoxifying enzymes: glutathione S transferase <u>K. Bartley</u> , R. Bull, J. Huntley, H. Wright, A. Nisbet. <i>Moredun Research Institute, Penicuik, UK</i>
15:48	S33 Investigations of the poultry red mite <i>Dermanyssus gallinae</i> from layer farms in Norway Ø. Øines. <i>National Veterinary Institute, Post box 750 Sentrum, N-0106, Oslo, Norway</i>
16:00-16:30	Coffee break and viewing posters/visiting stands

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	GRIP: Broiler Welfare PS8 Chair: Andrew Janczak (Norway)
14:30	<p>Lecture: L9 A review of different stunning methods for poultry – animal welfare aspects Berg, C.¹, Raj, A.B.M.². ¹<i>Department of Animal Environment and Health, Swedish university of Agricultural Sciences, POB 234, SE-532 23 Skara, Sweden.</i> ²<i>Visiting Fellow, School of Veterinary Sciences, University of Bristol, Langford BS40 5DU, United Kingdom</i></p>
15:00	<p>S34 The impact of early incubation conditions on bone development in Cobb 500 broiler chicks W. Muir, P. Groves. <i>University of Sydney, Sydney, Australia</i></p>
15:12	<p>S35 Wet litter not only induces footpad dermatitis but also reduces overall welfare, technical performance and carcass yields in broiler chickens J. Van Harn, H. Gunnink, I.C. de Jong. <i>Wageningen UR Livestock Research, Lelystad, The Netherlands</i></p>
15:24	<p>S36 Animal Welfare Label in Germany – Which improvements arise therefrom for broilers? E. Rauch¹, S. Bergmann¹, K. Wilutzky¹, C. Westermaier¹, S. Brandl¹, M. Hausleitner², J. Bachmeier², M.H. Erhard¹. ¹<i>Department of Veterinary Sciences, Chair of Animal Welfare, Ethology, Animal Hygiene and Animal Husbandry, Faculty of Veterinary Medicine, Ludwig-Maximilians-University Munich, Germany.</i> ²<i>Brütere i Süd ZN der BWE-Brütere i Weser-Ems GmbH & Co KG, Regenstauf, Germany</i></p>
15:36	<p>S37 A study of high-mortality broiler transportations in Norway in 2013 K.E. Kittelsen¹, E. Granquist², M.F. Bagly, R.O. Moe². ¹<i>Norwegian Meat and Poultry Research Centre, Oslo, Norway.</i> ²<i>Norwegian University of Life Sciences, Faculty of Veterinary Medicine and Biosciences, Oslo, Norway</i></p>
15:48	<p>S38 Effects of genetics and incubation temperature profiles on broiler footpad dermatitis E.O. Oviedo-Rondón, M.J. Da Costa, A.B. Sarsour, M.C.D. Ramirez, M.J. Wineland. <i>Prestage Department of Poultry Science, North Carolina State University, Raleigh, NC, USA</i></p>
16:00-16:30	Coffee break and viewing posters/visiting stands

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	LINDESNES A: Digestion and Physiology PS9 Chair: Bernard Carré (France)
16:30	<p>S39 Performances, carcass traits and meat quality of genetically fat and lean broilers are unaffected by dietary energy source E. Baéza¹, P. Chartrin¹, C. Berri¹, I. Gabriel¹, M. Lessire¹, M. Jegou², E. Le Bihan - Duval¹, S. Lagarrigue³, F. Gondret², <u>M.J. Duclos</u>¹. ¹INRA UR83 Recherches Avicoles, F-37380, Nouzilly, France. ²INRA, UMR 1348 PEGASE, F-35590 Saint-Gilles, France. ³Agrocampus Ouest, UMR 1348 PEGASE, F-35000 Rennes, France</p>
16:45	<p>S40 Can plasma metabolites predict fat deposition in peripheral tissues of chicken? <u>M. Jegou</u>¹, I. Louveau¹, F. Gondret¹, J. Lalande-Martin², I. Tea², E. Le Bihan-Duval³, C. Berri³, S. Lagarrigue⁴, M. Duclos³, E. Baéza³. ¹INRA UMR1348 Pegase, Saint-Gilles, France. ²UMR CNRS 6230 CEISAM, Nantes, France. ³INRA UR83 Recherches Avicoles, Nouzilly, France. ⁴Agrocampus Ouest UMR1348 Pegase, Rennes, France</p>
17:00	<p>S42 The Relevance of Starch and Protein Digestive Dynamics in Sorghum-Based Broiler Diets <u>S.Y. Liu</u>, A.J. Cowieson, P.H. Selle. <i>Poultry Research Foundation, University of Sydney</i></p>
17:15	<p>S43 Novel insights on interactions between bile and (lyso)lecithin during the first stage of lipid digestion in broilers <u>M. Jansen</u>¹, F. Nuyens², L. Van Campenhout³, J. Buyse^{1,4}. ¹Laboratory of Livestock Physiology, Nutrition and Health, Department of Biosystems, Catholic university Leuven, Heverlee, Belgium. ²Kemin Europa NV, Herentals, Belgium. ³KU Leuven, Faculty of Engineering Technology, Department of Microbial and Molecular Systems, Leuven Food Science and Nutrition Research Centre (LFoRCe), Lab4Food, Kleinhoefstraat 4, 2440 Geel, Belgium. ⁴Leuven Food Science and Nutrition Research Centre (LFoRCe)</p>
17:30	<p>S44 Maize starch digestion in broilers <u>S. Lee</u>¹, J. Wiseman¹, H.M. O'Neill², Sandra Hill¹. ¹The University of Nottingham, Nottingham, UK. ²AB Vista, Marlborough, UK.</p>
17:45	<p>S45 Are fast growing broilers more efficient when fed the same daily feed quantity as a slower growing strain? <u>L. Maertens</u>¹, A.D. Zotte², E. Delezie¹, S.D. Smet³. ¹ILVO (Institute for Agriculture and Fisheries Research), Melle, Belgium. ²Department of Animal Medicine, Production and Health, University of Padova, Agripolis, Legnaro, Italy. ³LANUPRO (Laboratory for Animal Nutrition and Animal Product Quality), Department of Animal Production, Ghent University, Melle, Belgium.</p>
18:00	<p>End of the scientific program for the day</p>

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	LINDESNES B: Physiology PS10 Chair: H. V. Brand (The Netherlands)
16:30	<p>Lecture (30 min): L10 Hormone mediated maternal effects in birds and its relevance for the poultry industry <u>Ton G.G. Groothuis</u> . <i>Behavioural Biology Centre for Behaviour and Neurosciences Nijenborgh 7, 9747 AG, Groningen, The Netherlands</i></p>
17:00	<p>S46 Hen uterine gene expression profiling during eggshell formation reveals putative proteins involved in the shell mineralization process A. Brionne, Y. Nys, C. Hennequet-Antier, <u>J. Gautron</u>. <i>INRA, UR83 Recherches Avicoles, F-37380 Nouzilly</i></p>
17:12	<p>S47 Effects of temperature and CO2 during the hatching phase on chicken embryo physiology <u>C.M. Maatjens</u>^{1,2}, I.A.M. Reijrink¹, I. van den Anker², R. Molenaar¹, C. W. van der Pol^{1,2}, B. Kemp², H. van den Brand². ¹<i>HatchTech BV, Veenendaal, the Netherlands.</i> ²<i>Adaptation Physiology Group, Wageningen University, Wageningen, the Netherlands</i></p>
17:24	<p>S48 Hypothalamic AMPKα1 and neuropeptides are involved in neonatal performance of broiler chicks hatched at different times <u>Y. Wang</u>¹, A. Koppenol^{1,2}, J. Lesuisse¹, E. Willems¹, L. Franssens¹, E. Decuyper¹, J. Buyse¹, N. Everaert^{1,3}. ¹<i>KU Leuven, Department of Biosystems, Laboratory of Livestock Physiology, Belgium.</i> ²<i>ILVO, Animal Sciences Unit, Scheldeweg 68, 9090 Melle, Belgium.</i> ³<i>University of Liège, Gembloux Agro-Bio Tech, Animal Science Unit, Passage des D éport é 2, 5030, Gembloux, Belgium</i></p>
17:36	<p>S49 Reduced O2 concentration during embryo development affect oxygen balance and the energy available for post-hatch growth <u>S. Druyan</u>¹, A. Haron^{1,2}. ¹<i>Institute of Animal Science, ARO the Volcani center, Bet-Dagan 6, Israel 50250.</i> ²<i>Dept. of Animal Sciences, Faculty of Agriculture, the Hebrew University of Jerusalem, Rehovot 76100, Israel</i></p>
17:48	<p>S50 Ontogenesis and pattern of expression of glucose transporters GLUT-1, -8 and -12 in different chicken muscles E. Coudert, Sabine Crochet, E. Cailleau-Audouin, T. Bordeau, A. Collin, C. Berri, S. Tesseraud, <u>S. M édayer-Coustard</u>. <i>INRA, UR83 Recherches Avicoles, F-37380 Nouzilly, France</i></p>
18:00	<p>End of the scientific program for the day</p>

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	RUNDE: Selection and Genetic Diversity PS11 Chair: M. Tixier-Boichard (France)
16:30-17:00	<p>Lecture (30 min): L11 Genome-wide analyses of genetic diversity and phylogenetic relationships in the synbreed chicken diversity panel Weigend^{1*} S., Ulrike Janßen-Tapken¹, Malena Erbe², U. Baulain¹, Annett Weigend¹, J. Sölkner³, H. Simianer^{2,1} Institute of Farm Animal Genetics, Friedrich-Loeffler-Institut, 31535 Neustadt-Mariensee, Höltystraße 10, Germany ²Faculty of Animal Breeding and Genetics, Georg-August-Universität Göttingen, 37075 Göttingen, Albrecht-Thaer-Weg 3, Germany ³Department of Sustainable Agricultural Systems, University of Natural Resources and Life Science Vienna, 1180 Vienna, Gregor-Mendel-Straße 33, Austria</p>
17:00	<p>S51 Insight in the genetic diversity of wild and domestic Gallus M. Mariadassou¹, B. Bed'Hom¹, P. Nicolas¹, J.-L.Coville¹, F. Lahalle-Faucon², C.-F. Chen³, M.H. Pham⁴, T. Zerjal¹, <u>M. Tixer-Boichard</u>¹. ¹INRA, Jouy-en-Josas, France. ²LABOGENA-DNA, Jouy-en-Josas, France. ³NCHU, Taichung, Taiwan. ⁴Institute of Animal Sciences for Southern Vietnam, Di An Town, Vietnam</p>
17:12	<p>S52 Genetic variations and regional genetic contributions in chicken populations from Europe, Asia and Africa <u>C.M. Lyimo</u>^{1,2,3}, A. Weigend¹, H. Eding⁴, P.L. Msoffe³, H. Simianer⁵, S. Weigend¹. ¹Institute of Farm Animal Genetics, Friedrich-Loeffler-Institute, Neustadt-Mariensee, Germany. ²Georg-August-Universität Göttingen, Göttingen, Germany. ³Sokoine University of Agriculture, Morogoro, Tanzania. ⁴Animal Evaluations Unit, CRV, Arnhem, The Netherlands. ⁵Animal Breeding and Genetics Group, Georg-August-Universität Göttingen, Göttingen, Germany</p>
17:24	<p>S53 Genetic linkage map of chromosome 1 in duck (Anas platyrhynchos) <u>T. Szwaczkowski</u>¹, S. Mucha¹, B. Grajewski², E. Gornowicz², M. Lisowski², J. Radziszewska³. ¹Department of Genetics and Animal Breeding, Poznan University of Life Sciences, Poznan, Poland. ²Waterfowl Genetic Resource Station, Koluda Wielka Experimental Unit Station of National Institute of Animal Production, Dworzyska, Poland. ³Division of Poultry Performance tests and Breeding, National Poultry Council – Chamber of Commerce, Poznan, Poland</p>
17:36	<p>S54 Local and small poultry population sustainable management <u>H. Chapuis</u>¹, J.-J. Colleau², M. Boulay¹, B. Denoues¹, W. Zecchin³, D. Guemene¹. ¹SYSAAF, Nouzilly, France. ²INRA-SAGA, Castanet-Tolosan, France. ³Centre de Sélection de Bêcherne, Saint-Etienne du Bois, France</p>
17:48	<p>S55 Genetic potential of Lohmann Selected Leghorn and Lohmann Brown layers <u>W. Icken</u>, M. Schmutz, D. Cavero, R. Preisinger. Lohmann Tierzucht GmbH, Cuxhaven, Germany</p>
18:00	End of the scientific program for the day

TUESDAY, JUNE 24th

Hall/Time PARALLEL SESSIONS	Grip: Layer Production System. PS12 Chair: Ragnar Tauson (Sweden)
16:30	S56 Changes in microbial contamination and penetration during storage in eggs from enriched cages and free range <i>J. Svobodová, E. Tůmová. Czech University of Live Sciences, Faculty of Agrobiolgy, Food and Natural Resources. Prague, Czech Republic</i>
16:42	S57 The effect of housing system and calcium on egg shell and tibia characteristics of Lohmann LSL and Czech Hen <i>E. Tůmová, V. Charvátová Czech University of Life Sciences Prague, Prague 6-Suchdol, Czech Republic</i>
16:54	S58 Longer table egg production cycles for laying hens from a practical point of view <i>E. Beitler, Aeres group, representing Poultry expertise Centre and CAHVilentum, University of applied science, Dronten, The Netherlands</i>
17:06	S59 Effect of variation of lighting regime on performance of laying Pullets in humid tropics <i>D.M. Ogah¹, S.I. Daikwo², M. M. Ari¹. 1Nasarawa State University keffi -Nigeria. 2Federal University Wukari, Nigera.</i>
17:18	S60 Are the layer performances, bone strength and eggshell characteristics affected by the housing system? <i>M. Rossi¹, A. Hidalgo¹, V. Ferrante², S. Lolli², C. Alamprese¹. ¹Department of Food, Environmental and Nutritional Sciences (DeFENS), Università degli Studi di Milano, Milano, Italy. ²Department of Veterinary Science and Public Health (DIVET), Università degli Studi di Milano, Milano, Italy</i>
17:30	S61 Experiences in fattening egg-type cockerels in a mobile stable system <i>F. Kaufmann, R. Andersson. Animal Husbandry and Poultry Sciences, University of Applied Sciences Osnabrück, Osnabrück, Germany</i>
17:42	S62 Alternative and organic farming systems influence on hen table eggs chemical composition and nutritional energetic value <i>R.M. Radu-Rusu¹, A. Usturoi¹, M.G. Usturoi¹, C.G. Radu-Rusu¹, M. Bologna¹, I. Vacaru-Opris². ¹University of Agricultural Sciences and Veterinary Medicine, Iasi, Romania. ²Academy of Agricultural and Forestry Sciences, Bucharest, Romania</i>
18:00	End of the scientific program for the day

WEDNESDAY, JUNE 25th

Hall/Time	LINDESNES A + C
9:00 - 10:00	Plenary session 2: Limits to growth in broilers – Chair: Markus Rodehutscord (Germany) L12 Welfare and breeding in broilers <u>Marian Stamp Dawkins</u> , <i>Department of Zoology, University of Oxford, South Parks Road, Oxford OX2 8PW, United Kingdom</i> L13 Progress in broiler selection: benefits, limitations as assessed by the digestive function, and consequence on dietary lysine concentration <u>B. Carr</u> ¹ , <u>B. M. ěla</u> ¹ and <u>H. Juin</u> ² . ¹ <i>Avian Research Unit, INRA, 37380 Nouzilly, France;</i> ² <i>EASM Unit, INRA, Le Magneraud, 17700 Surgères, France</i>
10:00 -10:30	Coffee break
10:30-11:30	Plenary session 2: Limits to growth in broilers – Chair: Markus Rodehutscord (Germany) L14 Skeletal developments in fast-growing broilers <u>Roselina Angel</u> , Wenting Li, Seon-Woo Kim, Monika Proszkowiec-Weglarz, Encarna Jimenez-Moreno. <i>14131 Animal and Avian Sciences, Department of Animal and Avian Sciences, University of Maryland, College Park, MD 20742</i> L15 Meat quality in fast-growing broiler chickens <u>M. Petracci</u> [*] , S. Mudalal, and C. Cavani. <i>Department of Agricultural and Food Sciences, Alma Mater Studiorum - University of Bologna, Piazza Goidanich 60, 47521 Cesena, Italy</i>
11:30-12:00	Plenary discussion
12:00-13:00	Lunch (Forum plaza/vestibule)

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	LINDESNES A: Fibres PS13 Chair: Jose Sorbara (Brazil)
13:00	<p>S63 Effects of enzymatic degradation of wheat grain cell walls on the digestive health of poultry <u>N. Yacoubi</u>^{1,2}, L. Saulnier¹, E. Bonnin¹, R. Ducatelle², E. Devillard³, F. Van Immerseel². ¹INRA Nantes, France. ²Faculty of Veterinary Medicine, Ghent University, Ghent, Belgium. ³Adisseo France SAS, Commeny, France</p>
13:12	<p>S64 Enhancement of xylanase efficacy in the presence of other polysaccharidases and protease <u>N. Smeets</u>^{1,2}, F. Nuyens³, L. Van Campenhout^{2,4,5,6}, T. Niewold^{1,2}. ¹Nutrition and Health, Department of Biosystems, KU Leuven, Heverlee, Belgium. ²Leuven Food Science and Nutrition Research Centre (LForCe). ³Kemin Europa NV, Herentals, Belgium. ⁴KU Leuven, Geel, Belgium. ⁵Faculty of Engineering Technology, Department of Microbial and Molecular Systems, Geel, Belgium. ⁶Lab4Food, Geel, Belgium</p>
13:24	<p>S65 Factors affecting the efficacy of exogenous enzymes used to supplement wheat-based diets for poultry <u>T. Ribeiro</u>, E. Augusto, M. Lordelo, H. Santos, L. Ferreira, C. Fontes. <i>CIISA, Faculty of Veterinary Medicine, Lisbon, Portugal</i></p>
13:36	<p>S66 Xylanase and β-glucanase gave better performance and digestibility compared to xylanase alone in broilers fed corn/DDGS/soy/rapeseed meal-based diets <u>A.M. Amerah</u>¹, V. Ravindran². ¹Danisco Animal Nutrition, Marlborough, SN8 1XN, UK. ²Institute of Veterinary, Animal and Biomedical Sciences, Massey University, Palmerston North, New Zealand</p>
13:48	<p>S67 The effect of supplementing a blend of fungal NSP-enzymes or a purified bacterial endo-xylanase in the diet of laying hens on production and egg shell <u>E. Delezie</u>¹, R. Mombaerts², J. Vervloesem², A. Goderis³. ¹Institute for Agricultural and Fisheries Research (ILVO), Melle, Belgium. ²Nutrex nv, Lille, Belgium. ³Agrimex nv, Lille, Belgium</p>
14:00-14:30	<p>Coffee break and viewing posters/visiting stands</p>

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	LINDESNES B: Reproduction PS14 Chair: M. Boerjan (The Netherlands)
13:00	Lecture (30 min): L16 Photostimulation effects on reproductive activities of domestic birds <u>Rozenboim I.</u> ¹ , Mobarkey N. ¹ , Avital-Cohen N. ¹ , Kashash-Hanin Y ¹ , Medina ^{D.} and M.E. El Halawani ² . ¹ <i>Hebrew University of Jerusalem, Robert H. Smith Faculty of Agriculture, Food and Environment, Rehovot Israel.</i> ² <i>University of Minnesota, College of Agriculture, St. Paul MN USA.</i>
13:30	S68 The use of an insulin sensitizer has delayed the spermatogenesis P. Froment ¹ , <u>M. Faure</u> ¹ , E. Guibert ¹ , J.P. Brillard ² . ¹ <i>INRA-UMR-PRC, 37380, Nouzilly, France.</i> ² <i>FERTIL'AVI, 37360 Rouziers de Touraine, France</i>
13:45	S69 Effect of the warming profile at the start of incubation on hatchability and chick quality in short stored eggs <u>I. van Roovert-Reijrink</u> ¹ , C. van der Pol ^{1,2} , C. Maatjens ² . ¹ <i>HatchTech B.V., Veenendaal, the Netherlands.</i> ² <i>Adaptation Physiology Group, Wageningen University, Wageningen, the Netherlands</i>
14:00-14:30	Coffee break and viewing posters/visiting stands

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	RUNDE: Mycotoxins and Health PS15 Chair: Franco Calini (Italy)
13:00	<p>S70 Ochratoxin A (OTA) induced effects on antioxidant potential or oxidative stress markers in broiler chicks <u>M.R. Hameed</u>¹, M.Z. Khan², M.K. Saleemi², A. Khan², M. Younus¹. ¹College of Veterinary and Animal Sciences Jhang, (Subcampus of University of Veterinary and Animal Sciences, Lahore), Pakistan. ²Department of Pathology, University of Agriculture Faisalabad, Pakistan.</p>
13:12	<p>S71 Comparison of the in vitro sensitivity of chicken and porcine peripheral blood mononuclear cells to deoxynivalenol <u>B. Novak</u>, E. Mayer, S. Hessenberger, G. Schatzmayr. <i>Biomim Research Center, Tulln, Austria</i></p>
13:24	<p>S72 Modulation of intestinal transport of nutrients following dietary exposure to Fusarium mycotoxins in broiler chickens <u>G. Antonissen</u>¹, F. Van Immerseel², F. Pasmans², R. Ducatelle², F. Haesebrouck², M. Verlinden², S. Hessenberger³, S. Su⁴, E.A. Wong⁴, A. Martel², S. Croubels⁵. ¹Dept of Pharmacology, Toxicology and Biochemistry and Dept of Pathology, Bacteriology and Avian Diseases, Faculty of Veterinary Medicine, Ghent University, Salisburylaan 133, 9820 Merelbeke, Belgium. ²Dept of Pathology, Bacteriology and Avian Diseases, Faculty of Veterinary Medicine, Ghent University, Salisburylaan 133, 9820 Merelbeke, Belgium. ³Biomim Research Center, Technopark 1, 3430 Tulln, Austria. ⁴Dept of Animal and Poultry Sciences, Virginia Tech, 3150 Litton Reaves Hall, Blacksburg 24061, Virginia, USA. ⁵Dept of Pharmacology, Toxicology and Biochemistry, Faculty of Veterinary Medicine, Ghent University, Salisburylaan 133, 9820 Merelbeke</p>
13:36	<p>S73 Influence of deoxynivalenol on growth and health performance for broiler chickens and the efficacy of a mycotoxin counteracting feed additive <u>S. Schaumberger</u>¹, Ursula Hofstetter¹, K. Ghareeb², W.A. Awad², J. Böhmer². ¹BIOMIN Holding GmbH, Herzogenburg, Austria. ²University of Veterinary Medicine, Vienna, Austria</p>
13:48	<p>S74 Current knowledge in poultry of the interaction: Fusarium mycotoxins – gut epithelium <u>B. Grenier</u>¹, G. Schatzmayr², T.Applegate¹. ¹Purdue University, W. Lafayette, IN, USA. ²BIOMIN Research Center, Tulln, Austria.</p>
14:00-14:30	Coffee break and viewing posters/visiting stands

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	GRIP: Layer Welfare PS16 Chair: Randi O. Moe (Norway)
13:00	Lecture (30 min): L17 Poultry welfare in different production systems <u>H. A. Elson</u> . <i>ADAS Gleadthorpe, Meden Vale, Mansfield, Nottingham NG20 9PF. UK</i>
13:30	S75 Selection for bone strength affects prevalence of keel bone fractures and egg parameters in laying hens <u>A. Stratmann</u> ¹ , A. Harlander-Matauschek ² , Ernst K.F. Fröhlich ³ , J.F. Tarlton ⁴ , H. Würbel ⁵ , S. Gebhardt-Henrich ¹ . ¹ <i>Division of Animal Welfare, VPH Institute, University of Bern, Zollikofen, Switzerland.</i> ² <i>Department of Animal & Poultry Science, Animal Behaviour & Welfare, Guelph, ON Canada.</i> ³ <i>Federal Veterinary Office, Research centre for proper housing: poultry and rabbits, Zollikofen, Switzerland.</i> ⁴ <i>Matrix Biology Research Group, University of Bristol, Bristol, UK.</i> ⁵ <i>Division of Animal Welfare, VPH Institute, University of Bern, Bern, Switzerland</i>
13:40	S76 Correlation between keel bone deformities and bone parameters in Swiss laying hens <u>S.G. Gebhardt-Henrich</u> ¹ , A. Pfulg ¹ , S. K äppeli ¹ , M. Stoffel ² , A. Liesegang ³ . ¹ <i>ZTHZ, Division of Animal Welfare, University of Bern, Zollikofen, Switzerland.</i> ² <i>Division of Veterinary Anatomy, University of Bern, Bern, Switzerland.</i> ³ <i>Institute of Animal Nutrition, University of Zurich, Zurich, Switzerland</i>
13:50	S77 Prevalence of keel bone injuries in young laying hens housed in aviaries <u>I. Kempen</u> ¹ , J.L.T. Heerkens ² , E. Delezie ² , F.A.M. Tuytens ³ , J. Zoons ¹ . ¹ <i>Provincial Centre for Applied Poultry Research, Geel, Belgium.</i> ² <i>Institute for Agricultural and Fisheries Research, Animal Sciences Unit, Melle, Belgium.</i> ³ <i>Ghent University, Faculty of Veterinary Medicine, Merelbeke, Belgium</i>
14:00-14:30	Coffee break and viewing posters/visiting stands

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	LINDESNES A: Ingredients & Energy PS17 Chair: Walle Lövgren (Norway)
14:30	<p>Lecture (30 min): L18 Energy systems for broilers – Recent developments and relevance for feed formulation Robert A. Swick^{1,2}, Shubiao Wu¹, Nicholas Rodgers¹, <u>Mingan Choct</u>². ¹<i>School of Environmental and Rural Science, University of New England</i>²<i>Poultry CRC, University of New England, Armidale, Australia</i></p>
15:00	<p>S78 A meta-analysis on the potential utilization of millet, sorghum and cottonseed meal in broiler feeding <u>D.I. Batonon</u>¹, P. Lescoat², D. Bastianelli³, G. Weber⁴, M.U. Faruk⁵. ¹<i>INRA, UR83 Recherches Avicoles, F-37380 Nouzilly; Research Centre for Animal Nutrition and Health, DSM Nutritional Products France, Saint Louis, France.</i> ²<i>AgroParisTech, Département Sciences de la Vie et Santé - UFR Développement des Filières Animales, 16, rue Claude Bernard, 75231 Paris, France.</i> ³<i>CIRAD-SELMET, Systèmes d'élevage méditerranéens et tropicaux, Baillarguet TA C-112/A, 34398 Montpellier, France.</i> ⁴<i>DSM Nutritional Products Ltd, Nutrition Innovation Center, Basel, Switzerland.</i> ⁵<i>Research Centre for Animal Nutrition and Health, DSM Nutritional Products France, Saint Louis, France</i></p>
15:15	<p>S79 Manipulating energy density and dietary electrolyte balance in diets of free range broilers <u>M. Singh</u>¹, A.J. Cowieson². ¹<i>Poultry Research Foundation, University of Sydney, Sydney, Australia.</i> ²<i>DSM Nutritional Products, Orkney, KW17 2QT, United Kingdom</i></p>
15:30	<p>S80 Contribution of feeds from range in organic broiler production <u>S. Steinfeldt</u>, K. Horsted, P. Sørensen. <i>Aarhus University, 8830 Tjele, Denmark.</i></p>
15:45	<p>S81 Feeding quality of wheat distillers dried grains with solubles (DDGS) for laying hens <u>I. Whiting</u>¹, V. Pirgozliev¹, P. Rose¹, S. Mackenzie¹, A. Amerah². ¹<i>Harper Adams University, Newport, England.</i> ²<i>Danisco Animal Nutrition, Wiltshire, England</i></p>
16:00-16:30	<p>Coffee break and viewing posters/visiting stands</p>

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	LINDESNES B: Egg Quality PS18 Chair: Yves Nys (France)
14:30	<p>Lecture (30 min): L19 Structure, composition and biomineralization of the eggshell <u>J. Gautron</u>^{1*}, M.T. Hincke², Y. Nys¹. ¹INRA, UR83 Recherches Avicoles, F-37380 Nouzilly, France, ²Department of Cellular and Molecular Medicine, University of Ottawa, 451 Smyth Road, Ottawa, K1H 8M5, Canada</p>
15:00	<p>S82 Eggshell color is independent of eggshell structure attributes in brown eggs <u>Z. Duan</u>, S. Chen, G. Li, L. Qu, G. Xu, N. Yang. <i>Department of Animal Genetics and Breeding, National Engineering Laboratory for Animal Breeding, MOA Key Laboratory of Animal Genetics and Breeding, China Agricultural University, Beijing 100193, China</i></p>
15:12	<p>S83 Egg shell colour in free range laying hens <u>J. Roberts</u>, P. Scott², S. Samiullah¹, N. Fernando², A. Anwar². ¹University of New England, Armidale, NSW 2351, Australia. ²Scolexia, 16 Learmonth St., Moonee Ponds, VIC 3039, Australia.</p>
15:24	<p>S84 The potential of extending the production cycle of white and brown hens in furnished cages <u>I. Kempen</u>. <i>Provincial Centre for Applied Poultry Research of the province of Antwerp, Geel, Belgium</i></p>
15:36	<p>S85 Egg quality of free-range laying hens grazing in pasture enriched with aromatic plants <u>M. Kosmidou</u>, E. Sossidou, D. Fletouris, A. Theodoridis, A. Tserveni-Goussi, G. Arsenos, P. Fortomaris. <i>Faculty of Veterinary Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece</i></p>
15:48	<p>S86 Effect of starting body fat content of laying hens on the changes in their body fat content and egg composition during the first egg laying period E. Szentirmai¹, <u>G. Milisits</u>¹, Tamás Donkó¹, Z. Budai², J. Ujvári¹, S. Áprily¹, T. Fülöp¹, I. Repa¹, Z. Sütő¹. ¹Kaposvár University, Faculty of Agricultural and Environmental Sciences, Kaposvár, Hungary. ²Bábolna TETRA Ltd., Uraiújfalu, Hungary</p>
16:00-16:30	<p>Coffee break and viewing posters/visiting stands</p>

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	RUNDE: Poultry Health PS19 Chair: Magne Kaldhusdal (Norway)
14:30	<p>S87 Effect of acylated starch on broiler performance and gut health <u>S.M.Sadeq</u>, S. Wu, R. Swick, N. Rodgers, M. Choct. <i>School of Environmental and Rural Sciences, University of New England, Armidale, NSW, Australia.</i></p>
14:42	<p>S88 A resin acid -based product improved performance of broiler chicks in a necrotic enteritis model using a commercial-type dietary formula <u>H. Kettunen</u>¹, J. Vuorenmäa², E. Valkonen², J. Apajalahti¹. ¹<i>Alimetrix Ltd., Espoo, Finland.</i> ²<i>Hankkija Ltd., Hyvinkää, Finland</i></p>
14:54	<p>S89 The effect of high stocking density on the pathogenesis of necrotic enteritis in broiler chicks <u>V. Tsiouris</u>¹, G. Ioanna¹, B.Christos², P. Nikolaos³, F. Paschalis⁴. ¹<i>Unit of Avian Medicine, Clinic of Farm Animals, School of Veterinary Medicine, Aristotle University of Thessaloniki, Greece.</i> ²<i>Laboratory of Animal Production Economics, School of Veterinary Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece.</i> ³<i>Laboratory of Pathology, School of Veterinary Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece</i> ⁴<i>Department of Animal Husbandry, School of Veterinary Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece.</i></p>
15:06	<p>S90 Virulence and ability of Canadian “variant” infectious Bursal Disease Virus crossing the maternal antibody barrier in commercial broilers <u>S. Gomis</u>¹, S. Kurukulsuriya¹, D. Ojic², S. Popowich¹, T. Gunawardana¹, S. Tikoo³, P. Willson⁴, N. Ambrose⁵. ¹<i>Department of Veterinary Pathology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK, Canada S7N 5B4.</i> ²<i>Animal Health Laboratory, University of Guelph, P.O. Box 3612, Guelph ON, Canada N1H 6R8.</i> ³<i>Vaccinology and Immunotherapeutic program, School of Public Health, University of Saskatchewan, Saskatoon, SK, Canada S7N 5E3.</i> ⁴<i>University of Saskatchewan, Saskatoon, SK.</i> ⁵<i>Canadian Centre for Health and Safety in Agriculture, University of Saskatchewan, Saskatoon, SK. S7N 5E3, Canada.</i> ⁵<i>526862 Ferguson Ave. Maple Ridge, B.C. Canada, V2W 1R9</i></p>
15:18	<p>S91 An update of infectious bronchitis virus strains circulating in Europe between 2011- 2013 <u>V. Valastro</u>¹, I. Monne¹, R. Koopman², R.J.W. Currie³, G. Cattoli¹. ¹<i>Istituto Zooprofilattico Sperimentale delle Venezie, Research & Innovation Department, Viale dell'Università 10, 35020, Legnaro, Padova, Italy.</i> ²<i>MSD Animal Health, Boxmeer, The Netherlands.</i> ³<i>x-Ovo Limited, 3 Castle Court, Carnegie Campus, Dunfermline, KY11 8PB, UK</i></p>

15:30	<p>S92 Avian Influenza in North-West Germany: industrial monitoring concepts in a complex situation <u>K.-P. Behr</u>, S. Roenchen, W. Bielenberg, J. Block, M. Liman. <i>AniCon Labor GmbH, Hoeltinghausen, Germany</i></p>
15:42	<p>S93 Low pathogenic avian influenza H9N2 acts as donor for internal gene segments of highly pathogenic avian influenza subtype in South Asia <u>R. Parvin</u>¹, K. Heenemann¹, M.Y. Halami¹, E.H. Chowdhury², M. R. Islam², T.W. Vahlenkamp¹. ¹<i>Institute of Virology, Center for Infectious Diseases, Faculty of Veterinary Medicine, University of Leipzig, Germany.</i> ²<i>Department of Pathology, Faculty of Veterinary Science, Bangladesh Agricultural University, Mymensingh, Bangladesh</i></p>
16:00-16:30	<p>Coffee break and viewing posters/visiting stands</p>

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	GRIP: Broiler Production Systems PS20 Chair: Ren éKwakkel (The Netherlands)
14:30	<p>S94 Broilers with taste; interactive design of more sustainable broiler production systems <u>I. Vermeij</u>, A. Janssen, B. Bos. <i>Wageningen Livestock Research, Wageningen University and Research Centre, Lelystad, The Netherlands</i></p>
14:41	<p>S95 Comparison of broiler production systems in the Netherlands <u>H. Ellen</u>, I. de Jong, F. Leenstra, J. van Harn. <i>Wageningen UR Livestock Research, Lelystad, The Netherlands</i></p>
14:52	<p>S96 Floor temperature in broiler houses: effect of providing litter before or during heating K. De Baere, J. Löffel, J. Zoons, <u>I. Kempen</u>, E. Vervaeet, J. Nys. <i>Provincial Centre for Applied Poultry Research of the province of Antwerp, Geel, Belgium</i></p>
15:03	<p>S97 The effect of ambient temperature on the mortality during the production cycle of light and heavy day-old chicks K. De Baere, J. Löffel, <u>J. Zoons</u>, I. Kempen, E. Vervaeet, J. Nys. <i>Provincial Centre for Applied Poultry Research of the province of Antwerp, Geel, Belgium</i></p>
15:14	<p>S98 Alternative farm systems for intermediate “certified” meat-type chicken: animal behaviour and quality products <u>M. Bourin</u>¹, S. Guardia¹, L. Bignon¹, F. Mercierand², C. Berri². ¹<i>ITAVI, Tours, France.</i> ²<i>INRA, Tours, France</i></p>
15:25	<p>S99 Effect of free-range raising system on growth performance and carcass traits of “Korat Meat Chickens” <u>W. Molee</u>, S. Khempaka, P. Mernkrathoke, A. Molee. <i>Suranaree University of Technology, Nakhon Ratchasima, Thailand</i></p>
15:36	<p>S100 Effect of environmental and management variables on residual feed intake of adult broiler breeder hens <u>S. Honarbakhsh</u>¹, M. Zaghari¹, A.-A. Haghdoost². ¹<i>Department of Animal Science, University College of Agriculture and Natural Resources, University of Tehran, Karaj, Iran.</i> ²<i>Research Center for Modeling in Health, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran</i></p>
15:47	<p>S101 Application of wireless technologies to improve quality assurance in the poultry production chain <u>P. Jackman</u>, S. Ward, L. Brennan, G. Corkery, U. McCarthy. <i>Smart Sensors Unit, University College Dublin, Agriculture Building, Belfield, Dublin 4, Ireland</i></p>
16:00-16:30	<p>Coffee break and viewing posters/visiting stands</p>

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	LINDESNES A: Protein-rich Ingredients PS21 Chair: S. Steinfeldt (Denmark)
16:30	S102 The nutritive value of yellow-seeded <i>B. napus</i> canola (low-glucosinolate rapeseed) and canola-type <i>B. juncea</i> mustard for growing turkeys D. Mikulski ¹ , K. Kozłowski ¹ , A. Rogiewicz ² , H. Jeroch ¹ , J. Jankowski ¹ , Z. Zdunczyk ³ , B.A. Slominski ² . ¹ Department of Poultry Science, University of Warmia and Mazury, Olsztyn, Poland. ² Department of Animal Science, University of Manitoba, Winnipeg, Canada. ³ Institute of Animal Reproduction and Food Research, Polish Academy of Sciences, Olsztyn, Poland
16:42	S103 Partially substituting soybean meal in broiler diets by a special soybean product or rapeseed meal: performance, litter composition, foot pad health M. Kölln ¹ , T. Jackisch ² , M. Köpping ³ , J. Kamphues ¹ . ¹ Institute of Animal Nutrition, University of Veterinary Medicine Hannover, Hanover, Germany. ² KMP, Hamburg, Germany. ³ Hamburger Leistungsfutter, Hamburg, Germany
16:54	S104 Raffinose can affect narrow-leaved lupine metabolisable energy for broiler chickens S. Kaczmarek, M. Hejdysz, A. Rutkowski. <i>Poznan University of Life Sciences, Poland</i>
17:06	S105 Digestibility of soybean meal as a key criteria in sustainable soy processing R. Uusitalo. <i>Finnprotein Oy, Uusikaupunki, Finland</i>
17:18	S106 Protein digestion along the gastrointestinal tract in broiler chickens fed different protein sources H. Sabboh-Jourdan ¹ , H. Sabboh-Jourdan ¹ , B. Chauveau-Duriot ¹ , S. R �hault-Godbert ¹ , M. Lessire ¹ , J. Gueguen ² , A. Narcy ¹ , M.J. Duclos ¹ . ¹ INRA UR83 Recherches Avicoles F-37380 Nouzilly France. ² INRA UR1268 BIA Biopolym �res, Interactions Assemblages F-44316 Nantes France
17:30	End of the scientific program for the day

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	LINDESNES B: Antibiotic resistance PS22 Chair: To be announced
16:30-17:30	Lecture (15-20 min): Dik Mevius on the use of antibiotics in poultry and effect on human health Lecture (15-20 min): Johanna Fink-Gremmels on the use of antibiotics in poultry and effect on human health Round table discussion
17:30	End of the scientific program for the day

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	RUNDE: Functional Genetics PS23 Chair: Steffen Weigend (Germany)
16:30	S107 Leptin evolution in Aves <u>M. Friedman-Einat</u> , S. Yosefi, D. Shinder, G. Hen, A. Shirak, E. Seroussi. <i>Agricultural Research Organization, Volcani Center, P.O. Box 6, Bet Dagan 50-250, Israel.</i>
16:42	S108 Transcriptional regulation of chicken Perilipin 1 gene W. Zhou, <u>Y. Wang</u> , N. Wang, H. Li. <i>College of Animal Science and Technology, Northeast Agricultural University, Harbin, 150030, P. R. China.</i>
16:54	S109 Functional Study of Histone Deacetylase-2 (HDAC2) Gene for Chicken Skeletal Muscle Development <u>M. Shahjahan</u> , F. Wang, G. Zhao, R. Liu, M. Zheng, Y. Sun, J. Wen. <i>Chinese Academy of Agricultural Sciences, Beijing, China</i>
17:06	S110 Expression of the cholecystokinin A receptor (CCKAR) is responsible for differences in growth rate in poultry <u>I.C. Dunn</u> , S.L. Meddle, P.W. Wilson, C.A. Wardle, A.S. Law, V.R. Bishop, C. Hindar, G.W. Robertson, D.W. Burt, S.J.H. Ellison, P.M. Hocking. <i>University of Edinburgh, Roslin Institute and Royal (Dick) School of Veterinary Studies, Easter Bush, United Kingdom</i>
17:18	S111 Genome-wide gene expression analysis among two layer lines elucidates differentially expressed genes involved in bone remodeling and immune response <u>O. Distl</u> ¹ , C. Habig ¹ , R. Geffers ² . ¹ <i>University of Veterinary Medicine Hannover, Hannover, Germany.</i> ² <i>Department of Cell Biology, Helmholtz Centre for Infection Research, Braunschweig, Germany</i>
17:30	End of the scientific program for the day

WEDNESDAY, JUNE 25th

Hall/Time PARALLEL SESSIONS	GRIP: Education PS24 Chair: Maureen Bain (UK)
16:30	<p>Lecture (30 min): L20 The role of WPSA in poultry education and information: WG11 of WPSA <u>E. N. Sossidou</u>^{1*}, S. Yalçın², N. Dagher³, J. Roberts⁴, M. Cassandro⁵, S. P. Rose⁶, F. Leenstra⁷, A. Barroeta⁸ and D. Flock⁹. ¹Hellenic Agricultural Organization-DEMETER, Veterinary Research Institute, 57001 Themi-Thessaloniki, Greece. ²Ege University, Department of Animal Sciences, Izmir-Turkey. ³Faculty of Agriculture & Food Sciences, AUB, Beirut, Lebanon. ⁴School of Rural Sciences and Natural Resources, Armidale, NSW 2351, Australia. ⁵Department of Animal Science, viale dell'Università 16, 35020, Agripolis, Legnaro, Padova, University of Padova, Italy. ⁶National Institute of Poultry Husbandry, Harper Adams University College, Edgmond, Newport, Shropshire, TF10 8NB, UK. ⁷Wageningen UR Livestock Research, Postbus 65, 8200 AB Lelystad. ⁸Department of Animal and Food Science, Universitat Autònoma de Barcelona, 08193 Barcelona, Spain. ⁹Akazienweg 5, 27478 Cuxhaven, Germany</p>
17:00	<p>S112 Bridging the gap between veterinary student interest and demand in poultry industry <u>X. Malher</u>, C. Belloc. Nantes Atlantic National College of Veterinary Medicine, Food Science and Engineering, Nantes, France.</p>
17:10	<p>S113 Development of a poultry scholarship internship programme for undergraduate students in Turkey <u>F. Karadas</u>¹, S. Erdogan¹, S. Yalcin², S. Ozkan², S.P. Rose³, V. Pirgozliev³. ¹Yüzüncü Yil University, Turkey. ²Ege University, Turkey. ³Harper Adams University, UK</p>
17:20	<p>S114 Poultry education in Poland <u>T. Szwaczkowski</u>¹, A. Rutkowski², M. Hejdysz². ¹Department of Genetics and Animal Breeding, Poznan University of Life Sciences, Poznan, Poland. ²Department of Animal Nutrition and Feed Management, Poznan University of Life Sciences, Poznan, Poland</p>
17:30	<p>End of the scientific program for the day</p>

THURSDAY, JUNE 26th

Hall/Time	LINDESNES A + C
9:00 - 10:00	<p>Plenary session 3: Trends in egg production – Chair: Mingan Choct (Australia)</p> <p>L21 New selection methods for layer performance and potential impacts on behavior and management <u>W.M. Muir</u>¹, H.W. Cheng², and C. Croney³. ¹<i>Department of Animal Sciences, Purdue University, West Lafayette, Indiana 47906, USA</i> ²<i>Livestock Behavior Research Unit, West Lafayette, IN 47907, USA</i> ³<i>Department of Comparative Pathobiology and Department of Animal Sciences, Purdue University, West Lafayette, IN 47907, USA</i></p> <p>L22 A new challenge: sustaining egg quality in longer production cycles <u>M. M. Bain</u>¹, I.C Dunn² and Y. Nys³. ¹<i>College of MVLS, University of Glasgow, Glasgow, Scotland, UK</i> ²<i>Roslin Institute and Royal (Dick) School of Veterinary Studies, Roslin, Scotland, UK</i> ³<i>INRA, UR83 Recherches Avicoles, F-37380 Nouzilly, France</i></p>
10:00-10:30	Coffee break
10:30-11:30	<p>Plenary session 3: Trends in egg production – Chair: Mingan Choct (Australia)</p> <p>L23 Rearing effects on laying hen productivity and welfare <u>Andrew M. Janczak</u>. <i>Animal Welfare Research Group, Department of Production Animal Clinical Sciences, The Norwegian School of Veterinary Science, Ullevålsveien 72, N-0033 Oslo</i></p> <p>L24 A scientific opinion on a ‘zero Salmonella’ approach for eggs and egg products R. Raspoet, S. Kilroy, F. Haesebrouck, DUCAtelle, <u>F. Van Immerseel</u>. <i>Department of Pathology, Bacteriology and Avian Diseases, Faculty of Veterinary Medicine, Ghent University, Salisburylaan 133, B9820 Merelbeke, Belgium</i></p>
11:30-12:00	Plenary discussion
12:00-13:00	Lunch (Forum plaza/vestibule)

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	LINDESNES A: Amino Acids PS25 Chair: Ravi Ravindran (N. Zealand)
13:00	<p>S115 Effects of amino acid supplementation with reduced crude protein diets fed to broilers from 29 to 40 days of age <u>W. Dozier</u>¹, M. Kidd². ¹<i>Auburn University, Auburn, USA.</i> ²<i>University of Arkansas, Fayetteville, USA</i></p>
13:12	<p>S116 Estimating requirements for apparent faecal and standardised ileal digestible amino acids in laying hens by a meta-analysis approach <u>M. Van Krimpen</u>¹, J.W. van Riel¹, V. Khaksar², H. Hashemipour², T. Veldkamp¹. ¹<i>Wageningen UR Livestock Research, Lelystad, The Netherlands.</i> ²<i>Ferdowsi University, PO Box 91775-1163, Mashad, Iran</i></p>
13:24	<p>S117 Effect of Glutamic Acid, Threonine and Arginine Supplementation on the Intestinal Mucosa Regeneration from Broilers Submitted to Experimental Challenge J.I.M. Fernandes¹, E.T. Gottardo¹, T. C. dos Santos², <u>K. Prokoski</u>¹, R. Perini¹, A. Rorig¹, J. P. Contini¹, D. Horn¹, D. Faust¹, J.P. Contini¹, R. Pioneiro².¹<i>Universidade Federal do Parana, Palotina - Parana - Brazil.</i> ²<i>Universidade Estadual de Maringa, Maringa - Parana - Brazil</i></p>
13:36	<p>S118 Efficacy of dietary glycine and the glycine+serine requirement in laying hens fed a nutritionally marginal basal diet <u>D.O. Akinde</u>¹, S.C. Etop². ¹<i>Nutritional Biotech Group, Fusion Biosystems, Lohne, NS, Germany.</i> ²<i>Department of Animal Science, University of Ibadan, Ibadan, Nigeria.</i></p>
13:48	<p>S119 Effect of different tryptophan to lysine ratios to laying performance and phenotypical stress parameters in laying hens under two stocking densities <u>A. Helmbrecht</u>¹, C. Elwert². ¹<i>Evonik, Health and Nutrition, Rodenbacher Chaussee 4, 64357 Hanau, Germany.</i> ²<i>Feedtest, Löbejüner Str. 32, 06193 Wettin-Löbejün, Germany</i></p>
14:00-14:30	Coffee break and viewing posters/visiting stands

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	LINDESNES B: Microbial product Safety PS26 Chair: Filip Van Immerseel (Belgium)
13:00	<p>S120 Influences of feed structure (grinding intensity, further compaction) on the incidence of Campylobacter in the cecal digesta of broilers? <u>S.J. Sander</u>¹, B. Üffing¹, M. Witte¹, J. Verspohl², J. Kamphues¹. ¹Institute for Animal Nutrition, University of Veterinary Medicine Hannover, Germany. ²Institute of Microbiology, University of Veterinary Medicine Hannover, Germany</p>
13:12	<p>S121 The Danish action plan against Campylobacter in broiler, food and the surrounding environment 2013-2016 <u>M. Sandberg</u>, L. L. Sørensen, J. Dahl. <i>The Danish Agriculture and Food Council</i></p>
13:24	<p>S122 Campylobacter in closed poultry integrations <u>E. Schonewille</u>. <i>Lohmann Animal Health GmbH, Cuxhaven, Germany</i></p>
13:36	<p>S123 Polyphasic characterization of Salmonella Enteritidis isolates on persistently contaminated layer farms: a longitudinal study <u>K. De Reu</u>¹, G. Rasschaert¹, C. Wildemauwe², H. Van Meirhaeghe³, Mia Vanrobaeys⁴, E. De Graef⁵, Lieve Herman¹, R. Ducatelle⁶, M. Heyndrickx¹, I. Dewaele⁷. ¹Institute for Agricultural and Fisheries Research (ILVO), Technology and Food Science Unit, Brusselssesteenweg 370, 9090 Melle, Belgium. ²National Reference Centre for Salmonella and Shigella, Bacterial Diseases Division, Scientific Institute of Public Health (IPH), Juliette Wytsmanstraat 14, 1050 Brussels, Belgium. ³Vetworks BVBA, Knokstraat 38, 9880 Poeke, Belgium. ⁴Animal Health Care Flanders (DGZ), Industrielaan 29, 8820 Torhout, Belgium. ⁵AMCRA vzw, Salisburylaan 133, 9820 Merelbeke, Belgium. ⁶Ghent University, Faculty of Veterinary Medicine, Department of Pathology, Bacteriology and Poultry Diseases, Salisburylaan 133, 9820 Merelbeke, Belgium. ⁷Poulpharm, Prins Albertlaan 111, 8870 Izegem, Belgium.</p>
13:48	<p>S124 Protection of newly-hatched broilers against infection by several Salmonella serotypes using colonization-inhibition <u>W. De Cort</u>, F. Haesebrouck, R. Ducatelle, F.V. Immerseel. <i>Ghent University, Ghent, Belgium</i></p>
14:00-14:30	Coffee break and viewing posters/visiting stands

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	RUNDE: Meat Quality PS27 Chair: Michel Duclos (France)
13:00	Lecture (30 min): L25 Genetic and nutritional strategies to control glycogen metabolism and meat quality in chickens C. Berri ¹ , E. Ba éza ¹ , S. M éayer-Coustard ¹ , M. Lessire ¹ , I. Bouvarel ² , M.J. Duclos ¹ , S. Tesseraud ¹ , E. Le Bihan-Duval ¹ ¹ INRA, UR83 Recherches Avicoles, F-37380 Nouzilly, FRANCE. ² ITAVI, URA - BP, F-37380 Nouzilly, France
13:30	S125 The genetic basis of Pectoralis major myopathies in modern broiler chicken lines K. Watson ¹ , R. Bailey ¹ , S. Bilgili ² , S. Avendano ¹ . ¹ Aviagen Ltd, Midlothian, UK. ² Auburn University, Alabama, USA.
13:40	S126 Effects of genetic strain, sex, and dietary amino acid density on myopathies of the Pectoralis major in broiler chickens at 28, 42, and 56 days of age K. Meloche, S.F. Bilgili, W.A. Dozier, III. Auburn University, Auburn, USA
13:50	S127 Changes in protein fractions of chicken breast meat affected by white striping S. Mudalal, E. Babini, C. Cavani, M. Petracci. Department of Agricultural and Food Sciences, University of Bologna, Cesena, Italy
14:00-14:30	Coffee break and viewing posters/visiting stands

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	GRIP: Structure and Economics of Poultry PS28 Chair: Roel Mulder (The Netherlands)
13:00	Lecture (30 min): L26 Competitiveness of the EU egg and poultry meat sector <i>P.L.M van Horne. LEI Wageningen UR. P.O. Box 35, 6700AA Wageningen, the Netherlands.</i>
13:30	S128 Structures and organization of the poultry meat sectors in Europe Compared analysis of the German, British, Spanish, Dutch, French, Belgian sectors <i>P. Magdelaine, G. Coutelet, R. Chenu. Institut Technique de l'Aviculture, Paris, France</i>
13:40	S129 Economic efficiency of small group housing and aviaries for laying hens in Germany <i>P. Thobe. Thünen Institute of Farm Economics, Bundesallee 50, 38116 Braunschweig, Germany</i>
13:50	S130 Broiler production systems in the Netherlands; an economic comparison <i>I. Vermeij¹, P. van Horne², H. Ellen¹. ¹Wageningen Livestock Research, Wageningen University and Research Centre, Lelystad, The Netherlands. ²LEI, Wageningen University and Research Centre, Wageningen, The Netherlands</i>
14:00-14:30	Coffee break and viewing posters/visiting stands

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	LINDESNES A: Diet Structure PS29 Chair: Lotta Waldenstedt (Sweden)
14:30	<p>Lecture (30 min): L27 The perfect pellet: issues and challenges <u>M.R. Abdollahi</u>, V. Ravindran. <i>Institute of Veterinary, Animal and Biomedical Sciences, Massey University, Palmerston North 4442, New Zealand.</i></p>
15:00	<p>S131 Influence of pre-pelleting inclusion of whole corn on performance, nutrient utilisation and digestive tract measurements of broilers <u>V. Ravindran</u>, Y. Singh. <i>Institute of Veterinary, Animal and Biomedical Sciences, Massey University, Palmerston North 4442, New Zealand</i></p>
15:12	<p>S132 Effect of feeding whole wheat and cracked corn on performance and carcass yield of broilers <u>N.K. Sharma</u>¹, D. Creswell², R.A. Swick¹. ¹<i>University of New England, Armidale, Australia.</i> ²<i>Creswell Nutrition, Sydney, Australia</i></p>
15:24	<p>S133 Influences of feed technology (grinding type and intensity, compaction) on performance and health of foot pads in fattening broilers <u>A.A. El-Wahab</u>¹, B. Üffing², M. Witte², C. Ratert², S. Sander², J. Kamphues². ¹<i>Department of Nutrition and Nutritional Deficiency Diseases, Faculty of Veterinary Medicine, Mansoura University, 35516 Mansoura, Egypt.</i> ²<i>Institute of Animal Nutrition, University of Veterinary Medicine Hannover, Foundation, 30173 Germany</i></p>
15:36	<p>S134 Full-fat rapeseed particle size distribution is insignificant when diets are pelleted <u>S. Kaczmarek</u>, M. Hejdysz, A. Rutkowski. <i>Poznan University of Life Sciences, Poland</i></p>
15:48	<p>S135 Dietary structure, butyric acid, and fermentable energy supplementation influence performance, gut morphology and cecal fermentation characteristics <u>S.N. Qaisrani</u>¹, M.M. van Krimpen², R.P. Kwakkel¹, W.H. Hendriks¹. ¹<i>Animal Nutrition Group, Department of Animal Sciences, Wageningen University, PO Box 338, NL-6700 AH Wageningen, The Netherlands.</i> ²<i>Wageningen UR Livestock Research, PO Box 65, NL-8200 AB Lelystad, The Netherlands.</i></p>
16:00-16:15	<p>Coffee break</p>

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	LINDESNES B: Genetic Selection PS30 Chair: Bill Muir (USA)
14:30	Lecture (30 min): L28 Genomic Prediction in Laying Hens M. Erbe ¹ , D. Cavero ² , A. Weigend ³ , S. Weigend ³ , H. Pausch ⁴ , R. Preisinger ² , H. Simianer ¹ . ¹ <i>Animal Breeding and Genetics Group, Department of Animal Sciences, Georg-August-University, 37075 Göttingen, Germany</i> ² <i>Lohmann Tierzucht GmbH, 27472 Cuxhaven, Germany.</i> ³ <i>Institute of Farm Animal Genetics, Friedrich-Loeffler-Institut, 31535 Neustadt-Mariensee, Germany.</i> ⁴ <i>Chair of Animal Breeding, Technische Universität München, 85354 Freising, German</i>
15:00	S136 Selection for robustness and gut Health in turkeys M. Swalander ¹ , P. Glover ² , V. Kremer ¹ , R. Bailey ³ . ¹ <i>Aviagen Turkeys Ltd, Tattenhall, UK.</i> ² <i>Aviagen Turkeys Inc, Lewisburg, UK.</i> ³ <i>Aviagen Ltd, Newbridge, UK</i>
15:12	S137 Differences in early bone development between contemporary and 1980's broiler lines: the effect of the selection for rapid growth R. Yair, A. Cahaner, R. Shahar, Z. Uni. <i>Faculty of Agriculture, Hebrew University of Jerusalem, Rehovot, Israel</i>
15:24	S138 Genetic parameters and QTL detection of social behaviors, fear behaviors and production traits in Japanese quail J. Recoquillay ¹ , C. Leterrier ^{1,2,3} , F. Pitel ⁴ , L. Calandreau ^{1,2,3} , A. Bertin ^{1,2,3} , D. Gourichon ⁵ , Alain Vigna ¹ , Catherine Beaumont ¹ , Carole Moréno ⁶ , C. Arnould ³ , E. Le Bihan-Duva ¹ . ¹ <i>INRA, Nouzilly, France.</i> ² <i>CNRS, Nouzilly, France.</i> ³ <i>Université François Rabelais de Tours, Tours, France.</i> ⁴ <i>IFCE, Nouzilly, France.</i> ⁵ <i>INRA-ENVT, Castanet-Tolosan, France.</i> ⁶ <i>INRA, Castanet-Tolosan, France</i>
15:36	S139 Heritability of body surface temperature measured by infrared thermography in laying hens exposed to high temperature conditions S. Mignon-Grasteau ¹ , U. Moreri ^{1,2,3} , J. Fablet ⁴ , M. Tixier-Boichard ⁵ , J. David ¹ , M.-H. Pinard-van der Laan ⁵ , T. Bas Rodenburg ² , Tatiana Zerjal ⁵ . ¹ <i>UR83 Recherches Avicoles, INRA, 37380 Nouzilly, France.</i> ² <i>WUR Animal Breeding and Genomics Group, P.O. Box 338, 6700 AH, Wageningen, The Netherlands</i> ³ <i>AgroParisTech UFR Génétique Elevage et Reproduction.</i> ⁴ <i>ISA, 1 Rue Jean Rostand, BP 23, 22440 Zoopôle, Ploufragan, France.</i> ⁵ <i>UMR1313 GABI, INRA, Domaine de Vilvert, 78352 Jouy-en-Josas cedex, France.</i>
15:48	S140 Breeding dual-purpose chicken opposed to specialised hybrids R. Preisinger, W. Icken, M. Schmutz. <i>Lohmann Tierzucht GmbH, Cuxhaven, Germany</i>
16:00-16:15	Coffee break

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	RUNDE: Poultry Health. PS31 PS31 Chair: Bruce David (Norway)
14:30	<p>S141 Epigenetic effects of Omega-3 FA on the immune response of broiler breeder offspring <u>A. Koppenol</u>^{1,2}, N. Everaert¹, L. Franssens¹, E. Willems¹, Y. Wang¹, J. Buyse¹, E. Delezie². ¹<i>KU Leuven, Leuven, Belgium.</i> ²<i>ILVO, Melle, Belgium</i></p>
14:42	<p>S142 Influence of manipulations in humidity and ventilation on chicken embryonic development <u>R. Noiva</u>, A. Menezes, C. Peleteiro. <i>Interdisciplinary Research Centre on Animal Health, Faculty of Veterinary Medicine, University of Lisbon (CIISA/FMV/ULisboa), Lisbon, Portugal</i></p>
14:54	<p>S143 Environmental conditions in commercial hatcheries: consequences for broiler chicken health <u>P. de Gouw</u>^{1,2}, L. van de Ven¹, M. Heetkamp², B. Kemp², H. van den Brand². ¹<i>Vencomatic Group, Eersel, the Netherlands.</i> ²<i>Adaptation Physiology Group, Wageningen University, Wageningen, the Netherlands</i></p>
15:06	<p>S144 Effect of light schedule during the brooding period on leg bone development and growth at slaughter age <u>C. van der Pol</u>^{1,2}, R. Molenaar³, C. Maatjens^{1,2}, I. van Roovert-Reijrink¹, H. van den Brand⁴. ¹<i>HatchTech B.V., Veenendaal, the Netherlands.</i> ²<i>Adaptation Physiology Group, Wageningen University, Wageningen, the Netherlands.</i> ³<i>Turi Foods, Devon Meadows, Australia.</i> ⁴<i>Adaptation Physiology Group, Wageningen University, Wageningen, the Netherlands</i></p>
15:18	<p>S145 Pathology and serum chemistry of layers affected with fatty liver hemorrhagic syndrome <u>A.J. Sabir</u>¹, A. Aslam¹, K. Mehmood², M.Y. Tipu¹, M. Ijaz¹. ¹<i>University of Veterinary and Animal Sciences, Lahore, Pakistan.</i> ²<i>University College of Veterinary and Animal Sciences, the Islamia University of Bahawalpur (IUB) Punjab, Pakistan</i></p>
15:30	<p>S146 Effect of two housing systems on Ghrelin secretion in adult laying hens (<i>Gallus gallus domesticus</i>) at different times of life <u>A. Hühne</u>¹, S. Petow¹, S. Weigend^{1,2}, L. Schrader¹. ¹<i>Institute of Animal Welfare and Animal Husbandry, Friedrich-Loeffler-Institut, 29223 Celle, Germany.</i> ²<i>Institute of Farm Animal Genetics, Friedrich Loeffler Institut, 31535 Neustadt-Mariensee; Germany.</i></p>
15:42	<p>S147 European perspectives on the control and Eradication of some poultry diseases <u>H.M. Hafez</u>. <i>Institute of Poultry Diseases, Faculty of Veterinary Medicine, Free University Berlin, Germany</i></p>
16:00-16:15	Coffee break

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	GRIP: Turkey PS32 Chair: Harald Hetland (Norway)
14:30	<p>Lecture (30 min): L29 Turkey Production and Health: Current challenges Hafez Mohamed Hafez. <i>Institute of Poultry Diseases, Faculty of Veterinary Medicine, Free University Berlin, Germany</i></p>
15:00	<p>S148 The effect of strain, sex and age on pH and colour of turkey meat <u>D. Chodov</u> & E. Tůmová. <i>Faculty of Agrobiology, Food and Natural Resources, Czech University of Life Sciences Prague, Prague, Czech Republic</i></p>
15:12	<p>S149 Efficacy of a single bolus administration of gamithromicin against <i>Ornithobacterium rhinotracheale</i> infection in turkeys <u>A. Watteyn</u>¹, E. Plessers¹, H. Wyns¹, V. Reddy², F. Pasmans³, A. Martel³, F. Haesebrouck³, P. De Backer¹, S. Croubels¹. ¹<i>Dep. Pharmacology, Toxicology and Biochemistry - Faculty Veterinary Medicine - Ghent University, Merelbeke, Belgium.</i> ²<i>Dep. Virology, Parasitology and Immunology- Faculty Veterinary Medicine - Ghent University, Merelbeke, Belgium.</i> ³<i>Dep. Pathology, Bacteriology and Avian Diseases - Faculty Veterinary Medicine - Ghent University, Merelbeke, Belgium</i></p>
15:24	<p>S151 Reduction in the use of antibiotics - Better feed conversion in turkeys through the use of secondary plant compounds <u>R.M. Aschenbroich</u>, H. Gerstenkorn, I. Heinzl. <i>EW Nutrition, Visbek, Germany</i></p>
15:36	<p>S150 Influence of environmental enrichment on the prevalence of injurious pecking in non-debeaked turkeys <u>J. Berk</u>, E. Stehle, T. Bartels. <i>Institute of Animal Welfare and Animal Husbandry, Friedrich-Loeffler-Institut, Dörnbergstr. 25/27, D-29223 Celle, Germany</i></p>
15:48	<p>S152 Management factors influencing incidence of pendulous crops in turkeys <u>RM. Hulet</u>¹, C.Steimling¹, B. Wood², N. Buddiger². ¹<i>Penn State University, University Park, USA.</i> ²<i>Hybrid Turkeys, Kitchener, Canada</i></p>
16:00-16:15	Coffee break

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	LINDESNES A: Additives PS33 Chair: Pierre-A. Geraert (France)
16:15	S153 Dose response to betaine dietary inclusion in broiler chicks up to 40 day of age. <u>D. Scholey</u> ¹ , M. Bedford ² , E. Burton ¹ . ¹ <i>Nottingham Trent University, Nottingham, UK.</i> ² <i>AB Vista, Marlborough, UK</i>
16:30	S154 Dietary fat source and vitamin E supplementation as factors modulating chicken immune system <u>P. Konieczka</u> , M. Barszcz, Ł. Staśkiewicz, N. Chmielewska, M. Cieślak, M. Szlis, S. Smulikowska. <i>The Kielanowski Institute of Animal Physiology and Nutrition PAS, Jablonna, Poland</i>
16:45	S155 Oleuropein, one of polyphenols in olive oil, attenuates heat stress-induced overproduction of mitochondrial ROS in skeletal muscle of birds <u>M. Kikusato</u> ¹ , Y. Uwabe ² , M. Toyomizu ² . ¹ <i>Graduate School of Agricultural Science, Tohoku University, Sendai, Japan.</i> ² <i>Tohoku University, Sendai, Japan</i>
17:00	S156 Effect of dietary sodium diformate on growth performance and nutrient utilization in broilers <u>C. Lückstädt</u> . <i>ADDCON, Bonn, Germany</i>
17:15-17:30	Closing ceremony

THURSDAY, JUNE 26th

Hall/Time	LINDESNES B: Egg Quality
PARALLEL SESSIONS	PS34 Chair: Max Hincke (Canada)
16:15	S157 Egg yolk colour preference in Romania and importance in the perception of egg quality <i>C. Hamelin¹, T. Stefanescu². ¹DSM Nutritional Products Europe, 19 avenue Dubonnet, 92400 Courbevoie, France. ²DSM Nutritional Products Romania, Str. Linia de Centura no.2, 077175, Stefanestii de Jos, Ilfov</i>
16:30	S158 Krill meal enhanced yolk color, vitamin A and Omega 3 fatty acid content of laying hen fed low pigment diet <i>Y. Ruangpanit, S. Attamangkune, S. Rattanatubtimtong, A. Nakpan. Department of Animal Science, Kasetsart University, Kamphaeng Saen Campus, Nakhon Pathom, 73140 Thailand</i>
16:45	S159 TMA induced fishy flavour- the major reason behind Off-odour of duck eggs <i>S.K. Mishra¹, R. Rajashree², B. Panigrahy³, A. Mishra⁴, A. Maity³, A.K Sarkar⁵, C.R Pradhan³. ¹CARI Regional Centre, Bhubaneswar India. ²College of Veterinary sciences OUAT Bhubaneswar India. ³OUAT Bhubaneswar India. ⁴MVSc scholar College of Veterinary sciences OUAT Bhubaneswar India. ⁵DRWA bhubaneswar India</i>
17:00	S160 Effects of physical feed form and feed particle size on the performance and egg quality of laying hens <i>S.N. Mousavi. Department of Animal Science, Varamin-Pishva Branch, Islamic Azad University, Varamin, Iran.</i>
17:15-17:30	Closing ceremony

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	RUNDE: Product safety PS35 Chair: Hafez M. Hafez (Germany)
16:15	<p>Lecture (30 min): L30 EFSA Scientific Opinion on poultry meat inspection: revision of current practices and identification of main pathogens to be controlled through inspection at the slaughterhouse <u>Antonia Ricci</u>^{1*}, Pablo Romero-Barrios², Rob Davies³, Milen Georgiev⁴, Arie Havelaar⁵, Coralie Lupo⁶, Simon More⁷, Birgit Noerrung⁸, Tine Hald⁹. ¹<i>Food Safety Department, Istituto Zooprofilattico Sperimentale delle Venezie, Viale dell'Università, 10, 35020 Legnaro (PD), Italy.</i> ²<i>Unit on Biological Hazards and Contaminants European Food Safety Authority - EFSA Via Carlo Magno 1A, 43126, Parma, Italy.</i> ³<i>Animal Health and Veterinary Laboratories Agency (AHVLA) Bacteriology Department, Field Epidemiology Team New Haw Addlestone Surrey KT15 3NB, United Kingdom.</i> ⁴<i>The Royal Veterinary College, Hawkshead Lane, North Mymms, Hatfield, Hertfordshire, AL9 7TA, United Kingdom and Food Standards Agency, Aviation House, 125 Kingsway, London WC2B 6NH, United Kingdom</i> ⁵<i>National Institute for Public Health and the Environment Centre for Infectious Disease Control Netherlands P.O. Box 1, 3720 BA Bilthoven, the Netherlands and Utrecht University Faculty of Veterinary Medicine Institute for Risk Assessment Sciences Division Veterinary Public Health P.O. Box 80 175, 3508 TD Utrecht, the Netherlands.</i> ⁶<i>IFREMER-French Research Institute for Exploitation of the Sea Genetics and Pathology of Marine Molluscs Laboratory Avenue de Mus de loup, 17390 La Tremblade, France.</i> ⁷<i>UCD School of Veterinary Medicine, University College Dublin, Belfield, Dublin 4, Ireland.</i> ⁸<i>Faculty of Health and Medical Sciences University of Copenhagen Grønnegårdsvej 15 1870 Frederiksberg C Denmark.</i> ⁹<i>Epidemiology and Risk Modeling, Division of Epidemiology and Microbial Genomics Technical University of Denmark National Food Institute Mørkhøj Bygade 28 Building H 2860 Søborg, Denmark</i></p>
16:45	<p>S161 Salmonella and Campylobacter challenges in poultry processing plants <u>M. Singh</u>¹, N. Wideman², S. Bilgili². ¹<i>Purdue University, West Lafayette, IN 47907 USA.</i> ²<i>Auburn University, Auburn, AL 36849, USA</i></p>
16:55	<p>S162 Bird flu outbreak and its implications on supply chain of poultry meat in china <u>S. Khokhar</u>, Q.-F. Min. <i>Dalian University of Technology, Dalian, China</i></p>
17:05	<p>S163 Workers' exposures to dust in duck hatcheries and its impact on respiratory health <u>A. Huneau-Salaün</u>¹, J. Puterflam², A. Raimbault¹, Nathalie Rousset², S. Le Bouquin¹. ¹<i>Anses Ploufragan-Plouzan é BP 53, 22440 Ploufragan, France.</i> ²<i>ITAVI, 41 rue de Beaucemaine, 22440 Ploufragan, France</i></p>
17:15-17:30	<p>Closing ceremony</p>

THURSDAY, JUNE 26th

Hall/Time PARALLEL SESSIONS	GRIP: Layer Welfare PS36 Chair: Arnold Elson (UK)
16:15	S164 Comparative behavioral observations of dust bathing and sham dust bathing in laying hens housed in small group systems <i>H. Louton, S. Bergmann, E. Rauch, S. Mayr, C. Schweizer, S. Reese, M. Erhard. Chair of Animal Welfare, Ethology, Animal Hygiene and Animal Husbandry, Faculty of Veterinary Medicine, Munich, Germany</i>
16:30	S165 Chicken idol – which breed wins the dual purpose challenge? <i>I. Tiemann^{1,2}, M. Fellmin^{1,2}, W. Icken³, R. Preisinger³. ¹Bruno-Dürigen-Institute, Poultry Research Center, Rommerskirchen, Germany. ²Institute of Animal Science, University of Bonn, Germany. ³Lohmann Tierzucht, Cuxhaven, Germany</i>
16:45	S166 Overview of studies to monitor the effect of non-beak trimming in laying hen, broiler breeder and turkey flocks in The Netherlands <i>I.C. de Jong, T. van Niekerk. Wageningen UR Livestock Research, Lelystad, The Netherlands</i>
17:00	S167 Dietary Behavior Supplements for Raising Non-Break Trimmed Pullets <i>P. Patterson, A. Mayer, H. Burely, K. Caswell. The Pennsylvania State University, University Park, USA</i>
17:15-17:30	Closing ceremony