Advancing animal welfare science: How do we get there? – Who is it good for?

UFAW International Symposium 2019
3rd–4th July 2019
Site Oud Sint-Jan, Bruges, Belgium

Programme – poster presentations:
The following poster presentations have been confirmed for the symposium:

- Armstrong E, JH Guy, T Boswell and TV Smulders (Newcastle University, UK)
  Comparing effects of housing system and physical condition on adult neurogenesis in the hippocampus of commercial laying hens

- Ayoola MO, AO Oguntunji and AT Babalola ( Bowen University and University of Ibadan, Nigeria)
  Physiological response of cockerel strains and transportation density in a hot humid ecological zone of Nigeria

- Bakony M, G Kiss and V Jurkovich (University of Veterinary Medicine, Budapest, Hungary)
  The effect of hutch orientation on primary heat stress responses of dairy calves

- Bamford LA and D Iveson (University Centre Myerscough College, UK)
  Is infrared thermography a reliable indicator of lameness and foot disease in sheep?

- Bell L and S Holmes (University Centre Myerscough College, UK)
  Using vocalisations to interpret behavioural responses to environmental enrichment of African grey parrots (Psittacus erithacus)

- Bill J, C Kirschbaum, SL Rauterberg, N Kemper and M Fels (University of Veterinary Medicine Hannover and Technical University of Dresden, Germany)
  Limits to the usage of hair glucocorticoids to detect stress in rabbits

- Binding S, H Farmer, L Krusin and KA Cronin (European Association of Zoos and Aquaria, The Netherlands; Whitley Wildlife Conservation Trust / Paignton Zoo, UK; Lincoln Park Zoo, USA)
  The challenges, opportunities and status of animal welfare research in zoos and aquaria

- Bobadilla PE, SM Huertas, E Akkermans, H Bueno and FJCM van Eerdenburg (Universidad de la República, Uruguay; OIE Collaboration Center on Animal Welfare and Livestock Production Systems (Chile-Uruguay-México); University of Utrecht, The Netherlands)
  Silvopastoral system in subtropical region: A tool to improve beef cattle welfare

- Campos-Luna I, A Miller, M Leach and F Wemelsfelder (Newcastle University and SRUC, UK)
  Qualitative Behavioural Assessment: Free Choice Profiling as an initial stage in assessing laboratory mice emotional expressions

- Chan M and TV Smulders (Newcastle University, UK)
  A review of the use and husbandry of chickens used in scientific research

- Chincarini M, F Biscarini, S Cannas, S Mazzola, R Piccinni, C Palestrini, M Minero, E Dalla Costa, G Vignola and G Minozzi (Università degli Studi di Teramo and Milano, CNR-IBBA, Milan, Italy)
  How different husbandry conditions influence gut microbiome, cortisol level and behaviour in lambs?

- Crouch K, B Evans and VT Montrose (Hartpury University Centre, UK)
  The effects of auditory stimulation on the behaviour of dairy cows

- Dietz L, AK Arnold, VC Georlisch-Jansson and CM Vinke (Utrecht University, The Netherlands)
  The importance of early life experiences for the development of behavioural disorders in domestic dogs

- Ferreira VHB, EP Fonseca, ACCSD Chagas, LGM Pinheiro, HPAD Silva, NL Galvão-Coelho and RG Ferreira (Federal University of Rio Grande do Norte, Brazil)
  I need a friend: Changes in capuchin monkeys’ grooming network and their physiological reactions after relocation

- Gowda HK, S Subramaniyam, P Khangal, S Ramasamy and P D’Souza (Karnataka Veterinary, Animal and Fisheries Sciences University and Natural Remedies Private Limited, Karnataka, India)
  Do the stress oral supplement upshots positive affective states?

- Haverbeke A, S Uccheddu and A Sannen (Vet Ethology, Overijse and Odisee University College, Belgium)
  The effect of olfactory enrichment with Lavandula angustifolia on dogs in a novel environment

- Heimbürges S, E Kanitz, A Tuchscherer and W Otten (Leibniz Institute for Farm Animal Biology, Germany)
  Evaluation of hair cortisol concentrations as a retrospective indicator for long-term stress in pigs and cattle

- Heppenstall R, R Austin, K Collier, P Flecknell, M Bloomsmith and CE Bergmann (Oxford and Newcastle Universities, UK; Yorkes National Primate Research Center, USA)
  From bench to cage-side: Integration of novel semi- automated methods for welfare assessment of group-housed rhesus macaques used in biomedical research

- Herzog AC, S Hörtkenhuber, C Winkler and W Zollitsch (University of Natural Resources and Life Sciences Vienna and Research Institute of Organic Agriculture, Vienna, Austria)
  Effects of animal welfare improvement measures on the environmental impact of dairy farming – a case study for Austria

- Iyasure OS, JO Daramola, M Wheto, D Adeuyi, RA Alade, S Emmanuel and AV Falana (Federal University of Agriculture, Nigeria)
  How mating ratio compromises the welfare of Nigerian indigenous chickens

- Jung L, H Dirks and U Knerer (University of Kassel and CLK GmbH, Altenberge, Germany)
  Keel bone damage in laying hens – automatic measurement for long term monitoring at the slaughter line
• Jurkovich V, F Tóth, D Varga, OK Tóth and Á Végh (University of Veterinary Medicine, Budapest and Alpha-Vet Ltd, Székesfehérvár, Hungary)
  Assessment of horse welfare in a travelling circus in Hungary

• Kaurivi YB, R Laven, R Hickson, T Parkinson, K Stafford (Massey University, New Zealand)
  Identification of suitable animal welfare assessment measures for extensive beef systems in Namibia

• Knowles L, M Farrell and VT Montrose (Hartpury University Centre and ZSL London Zoo, UK)
  The effects of personality upon breeding success in Humboldt penguins (Spheniscus humboldti)

• Kopplin RI and AT Rutberg (Tufts University, USA)
  Chew on this: Creation of a saliva collection protocol for giraffe to evaluate welfare

• La Cauza GF, G Ottolini, B Regaiolli, M Possenti, C Sandri and C Spiezio (Parco Natura Viva - Garda Zoological Park, Arca ambulatorio veterinario, Cassano D’Adda and University of Bologna, Italy)
  How to live together: A mixed-species exhibit of Ara parrots

• Lange A, L Bauer, V Wisenöcker, S Lürzel, A Futschik and S Waiblinger (University of Veterinary Medicine, Vienna and JK University Linz, Austria)
  Differences in ear positions during gentle human-cattle interactions

• Lidster K, K Owen and MJ Prescott (National Centre for the Replacement, Refinement and Reduction of Animals in Research, UK)
  An international crowdsourcing data project to investigate aggression in group-housed laboratory male mice

• Lloyd K, A P Wills and S Taylor (Hartpury University Centre, UK)
  The anxiolytic effects of valerian (Valeriana officinalis) on the domestic dog (Canis familiaris)

• Louton H, A Piller, S Bergmann, A Schwarzner, J Stracke, B Spindler, N Kemper, P Schmidt, J Bachmeier, B Schade, B Boehm, E Kappe and M Erhard (Ludwig-Maximilians-University Munich, Stiftung Tierärztliche Hochschule Hannover, Paul Schmidt Consult, Brüterei, Süd ZN of the BWE-Brüterei Weser-Em Gmbh and Co. KG and Bavarian Animal Health Service, Germany)
  Histological validation of a macroscopic visual scheme for the assessment of contact dermatitis of the hock (Hock Burn) of broilers

• Louton H, E Rauch, S Klein, J Mönch, I Wolff, J Bachmeier, P Schmidt and M Erhard (Ludwig-Maximilians-University Munich, Brüterei Süd ZN of the BWE-Brüterei Weser-Em Gmbh and Co. KG and Paul Schmidt Consulting, Germany)
  A comparison of two harvesting methods (mechanical and manual) of broilers with respect to animal health

• S Lürzel, K Spiesberger, M Patzl, A Futschik and S Waiblinger (University of Veterinary Medicine, Vienna and JK University Linz, Austria)
  Effect of play behaviour on salivary immunoglobulin A in calves

• Mcloughlin M, ZX Xie, ZQ Xie, Y Gao, B McCarthy, J Theobald, D Bhatta, G Wei, R Stewart and AG McElligott (Queen Mary University, BMCE Networks, Parc House and University of Roehampton, UK; Guangxi Veterinary Research Institute and Talent Cloud, Nanning Zhongguancun Innovation Demonstration Base, China)
  Cloud-based classification of broiler chicken vocalisations

• Nnenna U, E Chinedu and A Micheal (University of Nigeria, Nsukka, Nigeria; University of Bristol, UK)
  Evaluation of spermatic cord as an alternative ligature for surgical castration

• Obzerova S (University of Veterinary Medicine in Kosice, Slovakia)
  Positive reinforcement training in ovine orthopaedic models - Going the extra mile

• O’Hagan DD and TV Smulders (Newcastle University, UK)
  Assessing transient affective state using intracranial recordings of brain oscillations in poultry

• Orr B, J Norris, M Westman and R Malik (The University of Sydney, Australia)
  Welfare implications of hunting pigs with dogs in Australia

• Osorio-Santos Z, R Albernaz-Gonçalves, MJ Martins Leandro, MC Yunes and MJ Hötzel (Universidade Federal de Santa Catarina, Brazil)
  Is a natural system good for the chicken or for the consumer?

• Pereira FC, D Enriquez-Hidalgo, ABA Torres, MF Donoso, DL Teixeira, L Boyle and LCP MachadoFilho (Universidade Federal de Santa Catarina, Brazil; Pontificia Universidad Catolica de Chile, Chile; Teagasc, Ireland)
  Behavioral response of dairy cows to a change in environment

• Pierard M (Belgian Center for Equitation Science, Belgium)
  Developing reference ethograms: A case study on horse behaviour

• C Poirier, CJ Oliver, J Castellano Bueno, P Flecknell and M Bateson (Newcastle University, UK)
  Understanding stereotypic pacing in laboratory macaques: Why is it so difficult?

• Quintavalle Pastorino G, D Niccol, L Moffat, R Pizzi, M Faustini, G Curone and S Mazzola (Università degli Studi di Milano, Italy; Manchester Metropolitan University, UK)
  Do personality traits diverge in different communally housed captive penguin species?

• Quintavalle Pastorino G, M Albertini, S Bianchi, M Faustini, D Vigo and F Ferrucci (Università degli Studi di Milano, Italy; Manchester Metropolitan University and RZSS Edinburgh Zoo, UK)
  Horse behaviour and expected performance in show-jumping

• Regaiolli B, C Spiezio and C Sandri (Parco Natura Viva - Garda Zoological Park and University of Bologna, Italy)
  A practical example of the use of behavioural variety index (BVI) in zoo Northern bald ibis
• **Rose PE and LM Riley** *(Universities of Exeter and Winchester and WWF, UK)*
The application of Qualitative Behavioural Assessment to zoo animal management and individual animal welfare auditing

• **Sangaré A, PL Simmy, AG Soumah, MCM Haba, ZMM Gbollimou and AM Baldé** *(Université de N'Zérékoré, Institut de Recherche Environnementale de Bossou and Centre de Recherche et de Valorisation des Plantes Médicinales, Guinée)*
The opinions of the population of Bossou on the progressive disappearance of their secular neighbours, chimpanzees

• **Sharma A, G Umamathy, V Kumar and CJC Phillips** *(University of Queensland, Australia; Centre for Cellular and Molecular Biology, Hyderabad, India)*
Hair cortisol analysis in sheltered cows and its association with various welfare indicators

• **Smid AMC, S Gulati, E McConnnachie, DM Weary and MAG von Keyserlingk** *(University of British Columbia, Canada)*
Increasing cost to access a mechanical brush causes behavioural rescheduling in cows

• **Smith LM, S Hartmann, AM Munteau, P Dalia Villa, R Quinnell and LM Collins** *(University of Leeds, UK; VIER PFOTEN International, Austria; Istituto Zootrofiliattico Sperimentale dell’Abruzzo del Molise “G. Caporale”, Teramo, Italy)*
The effectiveness, efficiency and welfare impacts of dog population management methods

• **Soriano VS, MS Heidemann and CFM Molento** *(Federal University of Paraná, Brazil)*
Sheep farmers’ perception of sheep welfare in southern Brazil: Preliminary results

• **Sund Hagelberg S** *(Autonomous University of Barcelona, Spain)*
Horses and equitation: “Well-being as a measure for welfare”

• **Teixeira DL, LC Salazar and L Boyle** *(Pontificia Universidad Católica de Chile, Chile; Teagasc, Ireland)*
On-farm risk factors associated with welfare conditions potentially detectable in pigs at ante-mortem inspection

• **Tenório JPL, ECO Sans, MS Heidemann and CFM Molento** *(Federal University of Paraná, Brazil)*
Motivation for chasing behavior displayed by community dogs

• **Tschoner T, M Behrendt-Wippermann, A Rieger, M Metzner, G Knubber-Schweizer, F Reichmann and M Feist** *(Ludwig-Maximilians-Universität Munich, Germany)*
Multimodal approach to pain management during umbilical surgery in calves

• **Valgaeren B, D Maryns, G Meulemans, A Van Nuffel and J Aerts** *(Ghent University College, Ghent University and Flanders Research Institute for Agriculture, Fisheries and Food, Belgium)*
RUMIN_AAI: Optimization of small ruminant welfare in petting zoos and care farms

• **van den Eede, B de Feyter, L Cousyn, A van Nuffel, F Deruyck and F Sierens** *(Ghent University College, Belgium)*
Making virtual a reality in on site animal-related education

• **van der Laan J and CM Vinke** *(Utrecht University, The Netherlands)*
Assessing adaptation to short-term challenges in sheltered dogs (*Canis familiaris*) as predictor of long-term adaptation to a shelter environment

• **van der Staay FJ, N Endenburg, VC Goerlich-Jansson and SS Arndt** *(Utrecht University, The Netherlands)*
DAWCon: A dynamic animal welfare concept

• **van Eerdenburg FJCM, T Hof, B Doeve, L Ravesloot, R Nordquist and FJ van der Staay** *(Utrecht University, The Netherlands)*
The relation between hair-cortisol concentration and various welfare assessment protocols in Dutch dairy farms

• **Vervaecke H, M Debille and P Verbeke** *(Odisee University College and BioForum Vlaanderen Antwerp, Belgium)*
Breeders’ opinions about mobile-slaughter of cattle in Flanders

• **Vervaecke H, A Verlent, CI Moons, M Eens and E Van Tilburg** *(Odisee University College, Universities of Ghent and Antwerp and Department of the Environment, Belgium)*
The animal welfare concept among students of animal-oriented studies in Flanders

• **Vidal M, JP Durieux and A Viera** *(Montpellier SupAgro, France; Federal Agency for Médecines and Health Products, Belgium; University of Lisboa, Portugal)*
Educate for animal welfare by promoting learner empowerment

• **Waley D** *(Eurogroup for Animals, Belgium)*
Perceptions of fish welfare in Europe

• **Watteyn A, M Thys, L Stadig, G Vandepoel, B Sonck and F Tuytens** *(Flemish Research Institute for Agriculture, Fisheries and Food and Boerenbond, Belgium)*
Animal welfare assessment tool for poultry, pig and cattle farmers via mobile application

• **Witham CL, F Peters and DA Farningham** *(Newcastle University and MRC Harwell, UK)*
Fighting injury and productivity in Rhesus macaques