Workshops

There will be six workshops offered on Tuesday 6th August (1730-2000 h). You are requested to indicate your participation in a workshop at the Registration site. If you wish to add, change or remove a workshop selection in your existing registration, you may edit your registration by opening the email you received when you first registered and following the personal link to your registration details.

1. **Visualizing and analysis of individual-level data within large group systems**

Rapid advances in technology are allowing for a greater understanding of animal behaviour at the level of the individual. However, with these advances and the often relatively large datasets that result, novel methods are required to visualize and statistically analyse the generated data. This workshop, co-organized by Dr. Michael Toscano (University of Bern) and Dr. Janice Siegford (Michigan State University), will focus on innovative techniques to process these individual-level data and make sense of underlying patterns. Following an initial slate of short presentations, breakout groups will be formed to discuss methods and apply the techniques using selected open access datasets. To conclude the workshop, each group will present a brief summary of their discussion.

**Presentations:**

- *Assessing individual movement & location patterns of laying hens* – Michael Toscano
- *Comparison of patterns of substrate occupancy by individuals versus flocks of 4 strains of laying hens in an aviary* – Janice Siegford
- *Using synthetic video for automated individual animal behavior analysis* – Joshua Peschel
- *Some cows don’t like to get wet: individual variability in voluntary soaker use in heat stressed dairy cows* – Magnus R. Campler
- *Visualizing behaviour of individual laying hens in groups* – Elske N. De Haas

Location: Kongesal 2-3

Any questions should be directed to Dr. Michael Toscano (Michael.Toscano@vetsuisse.unibe.ch).

2. **Future trends in the prevention of damaging behaviour**

This workshop is organised by members of the EU-COST Action “Synergy for preventing damaging behaviour in group housed pigs and chickens (GroupHouseNet)”. The workshop will focus on dissemination of both scientific and practical information about how to prevent tail biting in pigs and feather pecking/cannibalism in laying hens without resorting to tail docking and beak trimming. The workshop will start with short presentations followed by discussion.
Using experimental data to evaluate the effectiveness of tail biting outbreak intervention protocols - Jen-Yun Chou

Factors influencing farmer willingness to reduce aggression between pigs - Rachel Peden

Reduce damaging behaviour in laying hens & pigs by developing sensor technologies to inform breeding programs - Lisette Van Der Zande

Experience with laying hens that are not beak trimmed - Margrethe Brantsæter

Experience with pigs that are not tail docked - Kristine Hov Martinsen

Films demonstrating production without tail docking of pigs or beak trimming of laying hens – Andrew Janczak

Location: Dræggen 3

Please direct questions about this workshop to Professor Andrew Janczak (Andrew.Janczak@nmbu.no).

3. Novel indicators of fish welfare

Fish are a widely used research model and common farm animal, as well as being exhibited in zoological collections and kept as pets. Like mammalian and avian species, fish appear capable of experiencing a variety of affective states, but, unlike mammals and birds, there is a comparative paucity of reliable welfare indicators with which to assess these states. It is therefore of great importance to identify novel indicators to allow better measurement of, and so improve, fish welfare – although this represents a considerable challenge to researchers. This workshop, organised by Prof. Oliver Burman, Dr. Tom Pike and Dr. Tanja Kleinhappel, brings together researchers working in this area to share their novel technologies/approaches in this field, as well as discuss their application and promotion in day to day ‘real-world’ settings. Following a series of presentations (each c.10 min duration) encompassing a wide range of novel methodological approaches to assessing fish welfare, there will be a group discussion addressing contemporary achievements, future directions and the identification of ways to promote the translation of academic research to practical application. Presentations will include:

Using thermal choices as indicators for fish welfare - Felicity Huntingford

The role of the serotonergic system as a welfare indicator - Marco A Vindas

Developing measures of positive welfare for fish - Becca Franks

Using social behaviour as a welfare indicator in fish – Tanja Kleinhappel, Tom Pike & Oliver Burman

Location: Dræggen 4

Please contact Prof. Oliver Burman (oburman@lincoln.ac.uk) with any questions.
4. **Engaging students in learning about production animal welfare assessment**

Veterinary and animal science students need education about production animal welfare but some students tend to be more focused on companion animals, and stimulating their interest in farm animals can be challenging. Also, exercises aimed at giving students introductory classroom experience in the use of different welfare assessment protocols are not widely available. Discussion will focus on ways to increase motivation and awareness about the importance of practical, science based assessment of animal welfare among students and future professionals that will work in farm animal production. The following short presentations will be used to initiate exchange of ideas in the workshop.

*Melissa Elischer* will present a “hands-on” approach involving interactive demonstrations and activities that encourage students to experience the world from a farm animal’s perspective, and discuss student reactions to the activities.

*Xavier Averós* will explain how he uses the transect method for poultry welfare assessment at the farm level to minimize time requirements and bird disturbance, while at the same time making the method easy and practical to apply during routine flock inspections.

*Alejandra Feld* will explain methodology that allows students to develop their own checklist of welfare indicators and use it in real field experiences.

*Marta Alonso* will share her interactive tool that combines written information and descriptive YouTube videos to help to fill in the checklist used by her students to assess sheep and cattle welfare on farm practical lectures.

Location: Bugaarden

Please direct questions about this workshop to Dr. Marta E. Alonso de la Varga (University of León; [marta.alonso@unileon.es](mailto:marta.alonso@unileon.es)).

5. **Managing the dairy cow around the time of calving – can we do better?**

Dairy cows are typically group housed, give birth in close proximity of other cows and have their calf removed shortly after birth. This workshop asks whether there are benefits to dairy cows of being able to calve undisturbed by herd mates and whether we can provide dairy cows with an opportunity to seek isolation prior to calving. It also addresses whether there are benefits of keeping dam and calf together for some time, and, if so, how to house and manage the cow and her new-born in the first few days after calving. The workshop aims to summarise the state-of-the-art, to discuss alternative housing and management of periparturient cows as well as to identify novel concepts and to give directions for future research and development. Short presentations addressing these themes will include:

**Question 1**: Benefits and opportunities of seeking isolation prior to calving.

*What can we learn from studying the motivation underlying maternal behaviour of cattle?*  
Maria Vilain Rørvang
Assessing the welfare of dairy cows before & after giving birth - Kathryn L. Proudfoot

Alternative management strategies to help dairy cows achieve successful outcomes during the transition into lactation - Peter D. Krawczel

Survey on calving management: How to determine the right time to move a cow to the maternity pen? Anna Lisa Voß

Question 2: How to manage dam and calf in the first days

Keeping cow & calf together: behaviour & welfare issues - Marie J Haskell

State-of-the-art dam rearing of calves – sector-wide assessment of scientific & practical knowledge on dam-rearing systems - Cynthia Verwer

Location: Dræggen 8

The workshop organiser, Dr. Margit Bak Jensen (MargitBak.Jensen@anis.au.dk) will be happy to answer any questions you may have about this workshop.

6. Animal training – efficacy and welfare

This workshop will address how knowledge of animal training methods can contribute to the refinement of animal use in research studies and enhance animal care provided by veterinarians and producers. The focus will be on the use of positive reinforcement as a tool to improve animal welfare by providing animals opportunities to express choice and control behaviour. A problem-solving approach will be used to develop recommendations on the creation and distribution of a handbook on animal training techniques designed specifically for target audiences (i.e., veterinarians, producers, and researchers). Following two short presentations, an interactive demonstration of how to use positive reinforcement to shape an animal’s behaviour for a desired goal will be presented. The objective for the breakout session will be to outline the elements for the animal training handbooks, as well as troubleshoot ideas for dissemination of this knowledge.

Presentations will include:

Using positive reinforcement to train laboratory pigs: benefits for animal welfare & research models - Dorte Bratbo Sørensen

Creating an animal training handbook for livestock producers, veterinarians & researchers - Kristina Horback

Training animals to co-operate for veterinary procedures – a practical approach and demonstration - Jonas Riise Johansen (with his dog)

Location: Kongesal 4-5

The workshop organizers, Dr. Kristina Horback (kmhorback@ucdavis.edu) and Dr. Dorte Bratbo Sørensen (brat@sund.ku.dk), will be happy to answer questions about this workshop.