

TALKS

Time	Description	Presenter
9:00	Opening remarks	Georgia Mason
9:05	Wecome and Land Acknowledgment	Malcolm Campbell
9:10	CCSAW update and overview of the day	Georgia Mason
9:20	What comes up must come down: Incline exercise and flight kinematics in laying hens Laying hens use their main flight muscles in wing-assisted incline running (WAIR) to help ascend inclines such as the ramps provided in commercial housing systems, and we find that WAIR exercise during rearing can have lasting welfare benefits by boosting birds' abilities to make safer landings in adulthood.	Grace Hong
9:40	Investigating mineral-based pecking stones for laying hens Because mineral-based 'pecking stones' can act as foraging enrichments for laying hens, we investigated wether birds prefer harder or softer ones, and how much previous experience with pecking stones influences their use, along the way finding evidence that hens' use of stones relates to specific appetites for calcium.	Madeleine McAuley
10:00	Daily energy expenditure in laying hens with keel bone fractures We use doubly labelled water methods, which are relatively new to poultry metabolism research, to investigate how keel bone fractures (a highly prevalent injury in laying hens) influence a bird's energy expenditure, with potential downstream consequences for productivity and welfare.	Jacob Brost
10:20	Is maternal omega-3 fatty acid deficiency in chickens altering offspring behaviour? Commercial poultry diets are deficient in the omega-3 fatty acids essential for embryonic brain development, but we find that supplementing maternal diets can yield some unexpected behavioural changes.	Rosemary Whittle
10:40	Break & Posters	
11:10	Using a One Welfare lens to see a new potential of agroecology in the laying hen industry Going beyond mere "net-zero" farming, we argue that agroecology with food sovereignty can lead to egg farming systems that can repair the landscape while also providing good animal and farmer welfare.	Sebastian Nicholson
11:30	Evaluating associations between the environmental conditions and lying and standing behaviour of dairy cows housed on a compost-bedded pack Because compost packs offer potentially welfare benefits to dairy cattle, but are still a fairly new system, we explore how environmental factors (e.g. windspeed) affect both pack management and cattle behaviour during the summer months.	Taylor Gordon
11:50	Dairy cow personality affects feeding and milking behaviour Dairy cow personality affects feeding behaviours (e.g. eating rate; supplemental feed intake) and milking behaviours (e.g. equipment kickoffs, milk yield, and voluntary milking), and understanding the effect of personality will enable better individual management to account for each animal's unique behavioural requirements.	Anna Schwanke



14TH ANNUAL CCSAW RESEARCH SYMPOSIUM

TALKS

Time	Description	Presenter
12:10	Effects of pre-mowed pastures on dairy cow production and behaviour We investigate whether mowing pastures, and leaving the grass clippings for dairy cows to graze on, improves grazing efficiency and milk production, because cows are highly motivated to graze, yet pasture systems can reduce productivity.	Jessica St John
12:30	Producers' barriers to biosecurity in the Ontario Dairy Industry To reduce the negative affects from disease on cattle, we investigate dairy producers' barriers to biosecurity, in order help the dairy industry improve practice implementation.	Gillian Power
12:50	Lunch & Posters	
14:10	Presentations on CCSAW activities and from other UoG Centres	Various
14:35	Keynote: Understanding One Wellbeing through cultural and justice lenses Dr. Van Patter will discuss how transdisciplinary approaches that bring cultural and ethical considerations into conversation with explorations of animal experiences can help us to more holistically consider One Wellbeing, or what it means to live well together in multispecies communities.	Lauren Von Patter
15:05	Depressed, dysphoric or merely stressed: Do conventional laboratory cages induce affective disorders in mice? By testing for diagnostic criteria, we show evidence that conventional laboratory cages elevate risks of sub-clinical depression in mice: a finding with serious welfare implications given the negative impacts of depression on human wellbeing.	Aileen MacLellan
15:25	Rodent welfare as a 'biological variable' that influences biomedical research results Using meta-analyses to explore the effects of rodent housing on research results, we show that animal welfare is a key biological variable that can change research conclusions, with implications for the replicability and validity of biomedical research.	Jessica Cait
15:45	Break & Posters	
16:15	Compliance or confusion? The impact of blindfolding on ease of handling in horses We explore how blindfolding horses -- commonly suggested to make them more tractable during stressful scenarios (e.g., barn fire evacuation, loading onto trailers) -- impacts equine stress as well as safety for horse and handler, with significant implications for large animal rescue.	Caleigh Copelin
16:35	The effect of touch on human-horse interactions We investigate how human touch -- a feature common in almost all human-horse interactions, yet little studied -- influences horses' welfare.	Katrina Merkies
16:55	Resource management practices of dog breeders in Canada and the United States and associations with competitive behaviours in puppies: A cross-sectional survey We study how dog breeder manage resources like food, and use punishment with puppies during their early sensitive periods, finding effects on puppy competitive behaviours, with possible implications for adult behaviour and the human-animal relationship.	Quinn Rausch
17:15	Closing remarks and prize-giving	Georgia Mason
17:30	Drinks & treats: Please join us at The Delta	Georgia Mason



14TH ANNUAL CCSAW RESEARCH SYMPOSIUM

RESEARCH POSTERS

Description	Presenter
<p>The development of perching behaviour in commercial laying hen pullets This research looks at how perching behaviour develops in laying hen pullets, with the aim of improving welfare on commercial farms.</p>	Josiah Mullet Koop
<p>Quantifying pecking block preference in laying hens housed in floor pens We give hens the choice between three different commercially available pecking blocks (a foraging enrichment), to investigate their preferences.</p>	Violet Hipkin
<p>Characterizing aggressive and sexual behaviours in low and high boar taint boars If low boar taint boars perform fewer aggressive and sexual behaviours, this would promote the genetic selection for low boar taint as a welfare friendly alternative to surgical castration.</p>	Lydia Conrad
<p>Interobserver reliability of animal-based measures: Cow welfare assessment This poster will review the role of animal-based measures in the assessment of animal welfare in auditing protocols, including interobserver reliability and their practical use.</p>	Kendra Gillett
<p>Social stress and synbiotic self-administration in laying hens We investigate the effects of chronic, unpredictable social stressors on voluntary synbiotic drinking in laying hens, to help understand how the feather pecking behaviour is impacted by such stressors.</p>	Anna Naim
<p>Effect of pecking blocks on the beak shape of laying hens housed in enriched cages We investigate whether pecking blocks in enriched cages are effective at blunting birds' beaks, which may reduce the damage hens can cause each other during feather pecking.</p>	Alvaro Arroyave
<p>Pecking block location preferences of laying hens housed in enriched cages. To reduce feather pecking in enriched cages, we investigated the best pecking block location to allow for optimal foraging behaviours and sensory stimulation.</p>	Nithucha Chandran
<p>Preference for pecking blocks with different nutrient compositions in two strains of laying hens housed in enriched cages To promote pecking block use by hens, a form of foraging which positively impacts welfare, we investigate how two strains use pecking blocks of different nutrient compositions, and how use changes across the day.</p>	Tunmise Faith Ehigbor
<p>Using Chronic Unpredictable Stress to investigate 'inactive-but-awake' behaviour as a welfare indicator in laboratory rats We show that chromodacryorrhea ("bloody tears") is a sensitive, easy-to-score cage-side indicator of rat negative affect, and provide the first evidence that 'inactive-but-awake' behaviour in laboratory rats indicates poor welfare too.</p>	Lauren Young
<p>Development and validation of a behavioral assessment tool to monitor shelter dog coping behavior We report on a behavioral assessment for shelter dogs that culminates in a coping score, to help identify struggling individuals who may need tailored management to improve their welfare.</p>	Anna Breithaupt
<p>Creating simulated deep learning training datasets for vision-based animal monitoring This project explores the use of digital simulation tools to generate sufficiently large datasets needed for training deep learning models for automated animal health and welfare monitoring.</p>	Kristina Kacmarova
<p>Do housing induced changes in brain activity cause stereotypic behaviours in mice? We show how staining can reveal neurological activity post mortem, so enabling the study of how housing effects on brain development, and individual differences, cause abnormal behaviour.</p>	Lindsey Kitchenham



14TH ANNUAL CCSAW RESEARCH SYMPOSIUM

UNIVERSITY CENTRES



Bench to Bedside Institute for Translational Health Research and Innovation

As a component of One Health, Translational Health Research unites basic science, veterinary health research, and human health research. Translational health research brings scientific discoveries out of the lab and into the clinic through the development of new treatments that benefit animal and human health.



Dairy at Guelph

Dairy at Guelph is a network of over 60 faculty and 120 graduate students and postdocs at the University of Guelph from many subjects. As a research centre, Dairy at Guelph creates collaborative opportunities to discover, develop and implement new best practices in dairy production and foods, with support from industry leaders and government.



Equine Guelph

Equine Guelph is the horse owner's Centre at the University of Guelph, supported and overseen by equine industry groups, and dedicated to improving the health and well-being of horses.



Kim and Stu Lang Community Healthcare Partnership Program

The Community Healthcare Partnership Program (CHPP) identifies, understands and removes barriers to healthcare for companion animals in underserved communities.



One Health Institute

The mission of the One Health Institute is to enhance and promote academic, research and outreach programs to propel the University of Guelph to the forefront of One Health scholarship internationally.

SESSION CHAIRS



Dr. Emily Leishman (Session 1)

Emily's MSc, PhD and postdoc have all been at Guelph, but on a wide range of species and topics: starting with polar bears for her MSc, she then did a PhD on the genetics of turkey welfare, and now works on nutritional models for equines, while also helping manage the Resilient Dairy Genome Project.



Dr. Angela Wilson (Session 2)

Angie grew up in Ontario, and after a PhD here on cow comfort in free stalls for dairy cows, is now working on another dairy cow project, developing best management practices for compost-bedded pack systems.



Dr. Ana Rentsch (Session 3)

Originally from Switzerland, where she did also her MSc, Ana did her PhD here on the behavioural development of laying hens raised with different environmental complexities, and now studies calcium metabolism and appetite in hens differing in skeletal health.



Dr Rosemary Whittle (Session 4)

Originally from the UK. Rosie did an MSc in Sweden, before doing her PhD here on the effect of omega-3 fatty acid-rich hens on the behaviour and welfare of their offspring, a topic she will build on in her future post-doctoral work.



14TH ANNUAL CCSAW RESEARCH SYMPOSIUM

If you have questions or need help, our staff will be available throughout the day!



Dr. Georgia Mason
Director



Laura Harper
Events Coordinator



Quinn Rausch
Tech Support

Many thanks to our sponsor, **Charles River Laboratories**



Thank you to to our **CCSAW Student Chapter** volunteers, and our student award judges, including:

Dr. Jeff Rau
Ruminant Field Services, OVC

Dr. Derek Haley
Department of Population Medicine, OVC

Karen Daynard
Outreach Coordinator, CCSAW