

<b>ISAE 2019 Programme</b>		
<b>Monday, 5th August</b>		
09:00		Council Meeting - Bugaarden - 9:00-16:00
15:00	Registration & Placement of Group A Posters at Radisson Blu Royal	
19:00	Hotel - 15:00-21:00	<b>Welcome Reception - Håkonshallen - 19:00-20:00</b>
<b>Tuesday, 6th August</b>		
08:00	Registration & Placement of Group A Posters	
09:00	<b>Opening Ceremony &amp; Presidential Address</b> – Kongesal 2-5	
09:30	<b>Plenary: Wood-Gush Memorial Lecture</b> – Kongesal 2-5 – Chair: Linda Keeling Felicity Huntingford - Synergies between fundamental & applied behavioural science: lessons from a lifetime of fish watching	
10:15	<b>Group A Posters</b> (presenters at odd-numbered posters) Fish Behaviour & Welfare, Pre- & Postnatal Effects, Behaviour & Nutrition, Environmental Enrichment, Human-Animal Interactions	
	<b>Pre- &amp; Postnatal Effects</b> – Kongesal 2-3 – Chair: Andrew Janczak	<b>Fish Behaviour &amp; Welfare</b> – Kongesal 4-5 – Chair: Tore Kristiansen
11:15	Mayumi Fujiwara - Association between maternal social success during late pregnancy & offspring growth & behaviour in dairy cows	Michelle Lavery - Identifying enriched housing conditions for zebrafish ( <i>Danio rerio</i> ) that vary along a scale of preference
11:30	Phoebe Hartnett - The effect of gilt rearing strategy on offspring behaviour	Becca Franks - Knowledge gaps in global aquaculture welfare: scope of the problem, current research & future directions
11:45	Marisol Parada - Lameness in sows during pregnancy impacts welfare outcomes in their offspring	Tanja Kleinhappel - Behavioural predictors of stress in groups of fish
12:00	Carlos E. Hernandez - Oesophageal tube colostrum feeding suppresses oxytocin release & induces vocalizations in healthy newborn dairy calves	Marco Vindas - Increasing welfare through early stress exposure in aquaculture systems
12:15	Louise Hedlund - Stress responses resulting from commercial hatching of laying hen chicks	Jonatan Nilsson - Does sudden exposure to warm water cause pain in Atlantic salmon?
12:30	Lunch	

	<b>Pre- &amp; Postnatal Effects</b> – Kongesal 2-3 – Chair: Cecilie Mejdell	<b>Behaviour &amp; Nutrition</b> – Kongesal 4-5 – Chair: Bas Rodenburg	
13:30	Mikel Delgado - Misdirected oral behaviors in orphaned neonatal kittens	Antonia Patt - Dietary fibre content in the feed & its effect on feather pecking, performance & cecal microbiome composition	
13:45	Courtney Graham - Identification of fear behaviours shown by kittens in response to novel stimuli	Jerine A.J. Eijk - Early life microbiota transplantation affects behaviour & peripheral serotonin in feather pecking selection lines	
14:00	Kim I. Bjørnson - The role of age in the selection of police patrol dogs based on behaviour tests	Claire Mindus - Modulation of kynurenine pathway & behavior by probiotic bacteria in laying hens	
14:15	Edna Hillmann - Calf-cow contact during rearing improves health status in dairy calves – but is not a universal remedy	Else Verbeek - Investigating the gut-brain axis: effects of prebiotics on learning & memory in pigs	
14:30	Kerstin Barth - Effects of a 3-month nursing period on fertility & milk yield of cows in their first lactation	Emily V. Bushby - Can dietary magnesium improve pig welfare & performance?	
14:45	<b>Group A Posters</b> (presenters at even-numbered posters) Fish Behaviour & Welfare, Pre- & Postnatal Effects, Behaviour & Nutrition, Environmental Enrichment, Human-Animal Interactions		
	<b>Cognition &amp; Welfare</b> – Kongesal 2-3 – Chair: Oliver Burman	<b>Behaviour &amp; Nutrition</b> – Kongesal 4-5 – Chair: Marina Von Keyserlingk	
15:45	Elizabeth Paul - Domestic hens: affective impact of long-term preferred & non-preferred living conditions	Jeremy N. Marchant-Forde - Dietary modification of behaviour in pigs	
16:00	Duncan Wilson - Exploring attentional bias towards emotional faces in chimpanzees using the dot probe task	Cecilie Kobek-Kjeldager - Why drink milk replacer when you can suckle the sow? Foraging strategy in sow-reared large litters with milk replacer	
16:15	Michael Mendl - An automated & self-initiated judgement bias task based on natural investigative behaviour	Heather W. Neave - Individual characteristics predict weaning age of dairy calves when weaned automatically based on solid feed intake	
16:30	Vikki Neville - Investigating animal affect & welfare using computational modelling	Rosemary Whittle - The effect of omega-3 enriched maternal diets on social isolation vocalisations in ISA Brown & Shaver White chicks	
16:45	Lu Luo - Effect of early life & current environmental enrichment & personality on attention bias in pigs	Benjamin L. Hart - Characterization of plant eating in cats	
17:00	Break		
17:30-20:00	<b>Workshops</b>	Room	Organisers
	1 Visualizing & analysis of individual-level data within large group systems	Kongesal 2-3	Michael Toscano & Janice Siegford
	2 Future trends in the prevention of damaging behaviour	Dræggen 3	Andrew Janczak
	3 Novel indicators of fish welfare	Dræggen 4	Oliver Burman
	4 Engaging students in learning about production animal welfare assessment	Bugaarden	Marta E. Alonso
	5 Managing the dairy cow around the time of calving – can we do better?	Dræggen 8	Margit Bak Jensen
	6 Animal training – efficacy and welfare	Kongesal 4-5	Dorte Bratbo Sørensen & Kristina Horback

<b>Wednesday, 7th August</b>		
	<b>Cognition &amp; Welfare – Kongesal 2-3 – Chair: Daniel Weary</b>	<b>Environment Enrichment – Kongesal 4-5 – Chair: Inger Lise Andersen</b>
09:00	Katarína Bučková - Half full or half empty? Comparing affective states of dairy calves	Emily Finnegan - The development of stereotypic behaviours by two laboratory mouse strains housed in differentially enriched conditions
09:15	Rebecca Katajamaa - Brain size & cognitive abilities in Red Junglefowl selected for divergent levels of fear of humans	Elin M. Weber - Providing complexity: a way to enrich cages for group housed male mice without increasing aggression?
09:30	Cecilie M. Mejdell - Thermal comfort in horses: their use of shelter & preference for wearing rugs	Lena Skånberg - Environmental controllability & predictability affect the behavioural adaptability of laying hen chicks in novel situations
09:45	Maria Vilain Rørvang - Can horses watch & learn? The good, the bad & the not so ugly evidence of social transmission in horses	Regine Victoria Holt - Environmental enrichment, group size & confinement duration affect play behaviour in goats
10:00	Charlotte Goursot - Visual laterality in pigs & the emotional valence hypothesis	Zhenzhen Liu - Assessing the behaviour of fast-growing broilers reared in pens with or without enrichment
10:15	<b>Group A Posters</b> (all presenters at posters) Fish Behaviour & Welfare, Pre- & Postnatal Effects, Behaviour & Nutrition, Environmental Enrichment, Human-Animal Interactions	
	<b>Cognition &amp; Welfare – Kongesal 2-3 – Chair: Michael Mendl</b>	<b>Environment Enrichment – Kongesal 4-5 – Chair: Heleen van de Weerd</b>
11:15	Lisette M.C. Leliveld - Hemispheric specialisation for processing the communicative & emotional content of vocal signals in young pigs	Sarah Lambton - Differences in laying behaviour associated with nest box design in commercial colony cage units
11:30	Sarah Kappel - Assessing the impact of lameness on the affective state of dairy cows using lateralisation testing	Judit Vas - Long-term effects of peat provision in broiler chicken flocks
11:45	Hannah Salvin - Development of a novel fear test in sheep – the startle response	Marko Ocepek - Which rooting materials make a weaner most happy?
12:00	Alexandra Harlander - Pecking in Go/No-Go task: motor impulsivity in feather pecking birds?	Ellen Marie Rosvold - Nest-building material affects pre-partum sow behaviour & piglet survival in crate-free farrowing pens
12:15	Peta Simone Taylor - Pharmacological intervention of the reward system in the laying hen has an impact on anticipatory behaviour	Jennifer M.C. Van Os - Brush use by dairy heifers
12:30	Lunch	
13:30	Removal of Group A Posters	
14:00	<b>Excursions</b> (check for departure times)	
18:00	<b>Dinner on Mt. Fløyen</b> (meet 18:00-18:15 at Funicular station; dinner starts at 18:30)	

<b>Thursday, 8th August</b>	
08:00	Placement of Group B Posters
09:00	<b>Plenary: ISAE Creativity Award</b> – Kongesal 2-5 – Chair: Birte Nielsen Per Jensen - Genetics & epigenetics of domesticated behaviour - what we can learn from chickens & dogs
09:45	Break
10:00	<b>Plenary: ISAE Creativity Award</b> – Kongesal 2-5 – Chair: Randi Oppermann Moe Françoise Wemelsfelder - Science & sentience: assessing the quality of animal lives
10:45	<b>Group B Posters</b> (presenters at odd-numbered posters) Cognition & Welfare, Behaviour & Genetics, Social Environment, Addressing Future Trends in Animal Production, Free Communications
	<b>Behaviour &amp; Genetics</b> – Kongesal 2-3 – Chair: Tina Widowski
	<b>Human-Animal Interactions</b> – Kongesal 4-5 – Chair: Conor Goold
11:45	Sarah-Lina A. Schild - Parturition in two sow genotypes housed under free-range conditions
12:00	Annie Rayner - Growing slowly with more space: effects on “positive behaviours” in broiler chickens
12:15	Fernanda M. Tahamtani - Range use & plumage condition of two laying hen hybrids in organic egg production
12:30	Lunch – <b>Eating with Ethologists</b> – Organisers: Allison Pullin & Laura Whalin
	<b>Social Environment</b> – Kongesal 2-3 – Chair: Jan Langbein
	<b>Human-Animal Interactions</b> – Kongesal 4-5 – Chair: Hajime Tanida
13:30	Yamenah Gómez - Ranging patterns & social associations in laying hens
13:45	Claire Toinon - Socio-positive interactions in goats: prevalence & social network
14:00	Simon P. Turner - Play fighting social network position does not predict injuries from later aggression between pigs
14:15	Verena Größbacher - Quantifying play contagion: low playing calves may depress play behaviour of pen-mates
14:30	Cathy Dwyer - Salivary oxytocin is associated with ewe-lamb contact but not suckling in lactating ewes

14:45	<b>Group B Posters</b> (presenters at even-numbered posters) Cognition & Welfare, Behaviour & Genetics, Social Environment, Addressing Future Trends in Animal Production, Free Communications	
	<b>Social Environment</b> – Kongesal 2-3 – Chair: Margit Bak Jensen	<b>Human-Animal Interactions</b> – Kongesal 4-5 – Chair: Lynette Hart
15:45	Franciely de Oliveira Costa - Maternal protection behavior in Hereford cows	Inger Lise Andersen - Bit vs. bitless bridle - what does the horse say?
16:00	Katherine Creutzinger - Do stocking density or a barrier affect calving location & labor length in group-housed Holstein dairy cows?	Andi Kerr-Little - Pet ownership among people with substance use disorder: implications for health & use of treatment services
16:15	Laura Whalin - Sociability is associated with pre-weaning feeding behaviour & growth in Norwegian Red calves	Amy Robinson-Junker - Sleeping through anything: the effects of predictability of disruption on laboratory mouse sleep, affect & physiology
16:30	Margret L. Wenker - Effect of cow-calf contact on motivation of dairy cows to access their calf	Megan R. LaFollette - Human beliefs & animal welfare: a cross-sectional survey on rat tickling in the laboratory
16:50	<b>ISAE Annual General Meeting</b> - Kongesal 2-3	
17:50	Break	
19:30-24:00	<b>Banquet</b> – Kongesal 2-5	
<b>Friday, 9th August</b>		
09:00	<b>Plenary: ISAE New Investigator Award</b> – Kongesal 2-5 – Chair: Susanne Waiblinger Irene Camerlink - New perspectives for assessing the valence of social interactions	
09:45	<b>Group B Posters</b> (presenters at odd-numbered posters) Cognition & Welfare, Behaviour & Genetics, Social Environment, Addressing Future Trends in Animal Production, Free Communications	
	<b>Addressing Future Trends in Animal Production</b> – Kongesal 2-3 – Chair: Janice Siegford	<b>Social Environment</b> – Kongesal 4-5 – Chair: Marko Ocepek
10:45	Laura Boyle - Role of animal behaviour in addressing future challenges for animal production	Pietro Asproni - Vomeronasal organ alterations & their effects on social behaviour: results & perspectives after 10 years of research
11:00	Sabine G. Gebhardt-Henrich - Association between locomotion behavior & <i>Campylobacter</i> load in broilers	Amanda Barabas - Sweaty secrets: plantar gland secretions influence male mouse social behavior in the home cage

11:15	Marie J. Haskell - Changes in activity & feeding behaviour as early-warning signs of respiratory disease in dairy calves	Luca Melotti - Can live with 'em, can live without 'em: implications of pair vs. single housing for the welfare of male C57BL/6J mice
11:30	Lena-Mari Tamminen - Using calves' behavioural differences to design future control measures for important zoonotic pathogens	Christina Veit - The effect of LPS & ketoprofen on social behaviour & stress physiology in group-housed pigs
11:45	Mark Rutter - Dairy cows with Johne's disease spend less time lying and increase feed intake around peak lactation	Adroaldo José Zanella - Housing gilts in crates prior to mating compromises welfare & exacerbates sickness behavior in response to LPS challenge
12:00	<b>Lunch - Discussion Topics Tables</b> – Organisers: Allison Pullin & Laura Whalin	
	<b>Addressing Future Trends in Animal Production</b> – Kongesal 2-3 – Chair: Inma Estevez	<b>Free Communications</b> – Kongesal 4-5 – Chair: Lee Niel
13:00	Linda Keeling - Animal welfare: an integral part of the United Nations Sustainable Development Goals?	Lauren Powell - Do human-dog interactions affect oxytocin concentrations in both species?
13:15	Conor Goold - Systems modelling of the UK pig industry: implications for pig health, behaviour & welfare	Cathy Dwyer for Fiona C. Rioja-Lang - Prioritising cat welfare issues using a Delphi method
13:30	Anna Christina Herzog - Environmental impact of animal welfare improvement measures in dairy farming – model calculations for Austria	Naomi D. Harvey - Dogs with canine atopic dermatitis exhibit differing behavioural characteristics compared to healthy controls
13:45	Malou Van Der Sluis - Automated tracking of individual activity of broiler chickens	Maria C. Ceballos - Hinged farrowing crates promote an increase in the behavioral repertoire of lactating sows
14:00	Kaitlin Wurtz - Assessment of open-source programs for automated tracking of individual pigs within a group	Anna C.M. Van Den Oever - Relative preference for wooden nests affects nesting behaviour in broiler breeders
14:15	<b>Group B Posters</b> (presenters at even-numbered posters) Cognition & Welfare, Behaviour & Genetics, Social Environment, Addressing Future Trends in Animal Production, Free Communications	
	<b>Addressing Future Trends in Animal Production</b> - Kongesal 2-3 – Chair: Knut Bøe	<b>Free Communications</b> – Kongesal 4-5 – Chair: Lena Lidfors
15:15	Janicke Nordgreen - What do we know about the link between ill-health & tail biting in pigs?	Guro Vasdal - Associations between qualitative behaviour assessments & measures of leg health, fear & mortality in Norwegian broilers
15:30	Niclas Högberg - Validation of accelerometers to automatically record postures & number of steps in growing lambs	Christina B. Rufener - Individual laying hen mobility in aviary systems is linked with keel bone fracture severity
15:45	Elsa Vasseur - Have the cows hit the wall? Validation of contact mats to monitor dairy cow contact with stall partitions	Amelia Mari MacRae - Vocal changes as indicators of pain in harbour seal pups ( <i>Phoca vitulina</i> )
16:00	Silje Eftang - Welfare aspects related to virtual fences for cattle	Cassandra B. Tucker - Effect of hot-iron disbudding on rest & rumination in dairy calves
16:15	John Scott Church - Evaluating unmanned aerial vehicles for observing cattle in extensive field environments	Emily Miller-Cushon - Effects of disbudding on use of a shelter and activity in group-housed dairy calves

16:30	Break
16:45-17:45	<b>Closing Ceremony</b> (with awards presentation) – Kongesal 2-5
17:45	Removal of Group B Posters
18:15	Break
19:00-23:30	<b>Farewell Party</b> - Ole Bull Scene

## ISAE 2019 Posters – Dræggen 7, Kongesal 1

<b>Group A Posters</b>	<b>Fish Behaviour &amp; Welfare, Pre- &amp; Postnatal Effects, Behaviour &amp; Nutrition, Environmental Enrichment, Human-Animal Interactions (Tuesday 6th August - Wednesday 7th August)</b>
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### Fish Behaviour & Welfare

Isabel Fife-Cook	Identifying potential play behaviors in fish: a study using online video analysis	A1
Cécile Bienboire-Frosini	Impact of sea lice management methods on Atlantic salmon welfare: experimental findings & perspectives	A2
Daniel Santiago Rucinque	Mechanical spiking as a killing method in Nile tilapia ( <i>Oreochromis niloticus</i> ) – A pilot study	A3

### Pre- and Postnatal Effects

Tina Widowski	Behavioural & physiological effects of prenatal stress in different genetic lines of laying hens	A4
Elodie Merlot	Heat exposure of pregnant sows modulates behaviour & corticotrope axis responsiveness of their offspring after weaning	A5
Andrew Janczak	Trends in early life conditions of pigs and laying hens in order to prevent damaging behaviour: a GroupHouseNet update	A6
Friederike Katharina Warns	Identification of dominance in suckling piglets	A7
Eddie Bokkers	Postnatal effects of colostrum quality & management, & hygiene practices, on immunity & mortality in Irish dairy calves	A8
Franziska Hakansson	Prevalence & early life risk factors for tail damage in Danish long-tailed piglets prior to weaning - preliminary results	A9
Julie Føske Johnsen	A cross-sectional study of associations between herd-level calf mortality, welfare & management on Norwegian dairy farms	A10
Janja Sirovnik	The effect of maternal contact on behaviour patterns indicative of emotionality & social competence in young dairy calves	A11
Anna Trevarthen	Associations between the early life husbandry & post-weaning behaviour of lambs	A12
Daniel Asif	Maternal behaviour of Markhors ( <i>Capra falconeri</i> ) – a life worth living <i>ex situ</i>	A13
Allison N. Pullin	Pullet rearing affects long-term perch use by laying hens in enriched colony cages	A14

<b>Behaviour &amp; Nutrition</b>		
Hannah Phillips	The effect of outdoor stocking density & weather on the behavior of broiler chickens raised in mobile shelters on pasture	A15
Terence Zimazile Sibanda	Outdoor feeder increased range usage but not bone quality in commercial free-range laying hens	A16
Karen F. Mancera	Pilot study of grazing strategies of beef cattle in relation to woody elements percentage in a silvopastoral system	A17
Andrew Fisher	The relationship between motion score & reproductive behaviour in dairy cows managed in pasture & feedpad environments	A18
Robin E. Crossley	Do grazing management practices influence the behaviour of dairy cows at pasture?	A19
Guilherme Amorim Franchi	Use of a feed frustration test to assess level of hunger in dairy cows subjected to various dry-off management routines	A20
Margit Bak Jensen	The effect of step-down milk feeding & daily feeding frequency on behavior of male dairy calves	A21
Blair C. Downey	Experience with hay influences the development of oral behaviors in pre-weaned dairy calves	A22
Michal Uhrincat	Influence of water delivery method on dairy calf performance & inter-sucking after weaning	A23
Laura Schneider	Feeding behavior of fattening bulls fed with an automatic feeding system	A24
Laura Webb	The ins & outs of abomasal damage in veal calves	A25
Marjorie Cellier	Individual differences in feeding behaviour of dairy goats	A26
Anouschka Middelkoop	Foraging in the farrowing room to stimulate feeding behaviour	A27
Jaime Figueroa	Effect of flavour variety on productive performance of fattening pigs	A28
Mariia Tokareva	Influence of satiety on the motivation of stall-housed gestating sows to exit their stall	A29
Leandro Costa	Feeding behavior of Iberian pigs in a multi-feeder system under high environmental temperatures	A30
Hajime Tanida	Effect of long-term feeding on home range size & colony growth of free-roaming cats at a popular tourist site in Japan	A31
<b>Environmental Enrichment</b>		
Rachel Park	Impact of environmental enrichment on circadian patterns of feedlot steer behavior	A32
Xandra Christine Meneses	Brush use & displacement behaviors at a brush in Angus crossbred feedlot cattle	A33
Pablo Pinedo	Behavior of recently weaned organic Holstein calves exposed to a mechanical calf brush	A34
Jenny Stracke	Behavioural differences in a Novel Object Test between male & female turkeys – a pilot study	A35
Midian Nascimento Dos Santos	The influence of enrichment on leg parameters in a conventional strain of broiler chicken	A36
Daniel Rothschild	The effect of enrichment on organ growth, cardiac myopathies & bursal atrophy in a conventional strain of broiler chicken	A37
Jennifer Brown	Effects of enrichment objects on piglet growth & behaviour	A38
Benedicte M. Woldsnes	A combination of rooting stimuli reduces fear of novelty & enhances collaboration in groups of weaned pigs	A39
Jen-Yun Chou	Individual variation in enrichment use in finishing pigs & its relationship with damaging behaviour	A40
Emma Fàbrega	Economic impact of an on-farm innovation to enhance novelty of enrichment materials for fattening pigs	A41
Martin Fuchs	Nest-building behaviour in crated sows provided with a jute-bag – an exploratory case study	A42
Hyun-jung Jung	Effects of environmental enrichment on reproductive performance & behavior patterns in gestating sows	A43

Maggie Creamer	Preference for & behavioral response to environmental enrichment in a small population of sexually-mature, commercial boars	A44
Thiago Bernardino	Endotoxin challenge & environmental enrichment changes the behaviour of crated boars	A45
Kate Norman	Experience of ramps at rear is beneficial for commercial laying hens	A46
Anette Wichman	Do laying hens have a preference for “jungle” light?	A47
Oluwaseun Iyasere	Welfare of FUNAAB Alpha chickens as affected by environmental enrichment	A48
Monique Bestman	Role of range use in infections with parasites in laying hens	A49
Arantxa Villagra	Are breeding rabbits motivated for bigger cages?	A50
Miriam Gordon	Effect of environmental enrichment rotation on juvenile farmed mink behaviours	A51
Megumi Fukuzawa	Physiological response of pet dogs to different methods of provision of classical music	A52
Christine Arhant	Effect of different forms of presentation of an interactive dog toy on behaviour of shelter dogs	A53
Marta Elena Alonso	Evaluation of environmental enrichment influence on animal welfare in captive <i>Panthera onca</i> through non-invasive methods	A54
<b>Human-Animal Interactions</b>		
Annika Lange	A comparison of reactions to different stroking styles during gentle human-cattle interactions	A55
Stephanie Lürzel	Improving the cow-human relationship – influence of restraint during gentle interactions	A56
Silvia Ivemeyer	Is cows’ qualitatively assessed behaviour towards humans related to their general stress level?	A57
Amanda Hubbard	Impact of handling frequency on drylot-housed heifer behavior	A58
Sabine A. Meyer	Human-directed behaviour of calves in a Novel Human & an Unsolvable Problem Test	A59
Congcong Li	Artificial mothering during early life could boost the activity, exploration & human affinity of dystocia dairy calves	A60
Susanne Waiblinger	Effects of dam bonded rearing on dairy calves’ reactions towards humans vanish later in life	A61
Asja Ebinghaus	Validity aspects of behavioural measures to assess dairy cows’ responsiveness towards humans	A62
Daisuke Kohari	Reproducibility, similarity & consistency of the flight responses of beef cattle	A63
Kaleiah Schiller	Chute scoring as a potential method for assessing arousal state in ewes	A64
Katrina Rosenberger	Dairy & dwarf goats differ in their preference for familiar & unfamiliar humans	A65
Miriam Marcet-Rius	The provision of toys to pigs could improve the human-animal relationship: the use of an innovative test, the Strange-person	A66
Céline Tallet	Are human voices used by pigs ( <i>Sus scrofa domestica</i> ) when developing their relationship with humans?	A67
Ella Akin	Providing handling tools to move non-ambulatory pigs on-farm	A68
Sofia Wilhelmsson	Animal handling & welfare-related behaviours in finishing pigs during transport loading & unloading	A69
Cristina Santos Sotomaior	Comparison of a behavior test between does & bucks at different Brazilian rabbit farms	A70
Rosaria Santoro	Beekeeper-honeybee interactions to measure personality at colony level: a pilot study of <i>Apis mellifera</i> in central Italy	A71
Tayla Hammond	Tickling does not increase play in young male rats	A72
Carlos Grau Paricio	Light spectrum for illuminating dark periods in reversed light cycles in laboratory rodent facilities	A73

Helena Chaloupkova	Heart rate - the effect of the handler on the dog after a potentially stressful situation	A74
Natalie Solheim Bernales	Small dogs display more aggressive behaviour than large dogs in social media videos	A75
Anastasia Stellato	Efficacy of a 4-week training program for reducing pre-existing veterinary fear in companion dogs	A76
Syamira Zaini	Cat pain & welfare: barriers to having good cat care management in Malaysian veterinary practices	A77
Silvia Michela Mazzola	Does the personality of tigers influence the interaction with their keepers?	A78
Anita Hashmi	The variable effect of visitor number & noise levels on behaviour in three zoo-housed primate species	A79
Sandra Wirth	The influence of human interaction on guinea pigs: behavioural & thermographic changes during animal assisted therapy	A80
Lena Lidfors	The use & well-being of cats in elder care in Sweden	A81
Malin Larsson	Camels in animal-assisted interventions – survey of practical experiences with children, youth & adults	A82
Karen Thodberg	Optimal dog visits for nursing home residents with varying cognitive abilities – an interdisciplinary study	A83
Lynette A. Hart	Geography affects assistance dog availability in United States & Canada	A84
Lina S.V. Roth	Horses & ponies differ in their human-related behaviour	A85
Elske N. De Haas	Practice what you preach - the discrepancy in knowing & doing based on moral values to farm animals	A86
Sarah Ison	North American stakeholder perceptions of the issues affecting the management, performance & well-being of pigs	A87
Huw Nolan	What's in a name? The role of education & rhetoric in improving laying hen welfare	A88
Yuki Koba	A food & agriculture course to raise awareness of animal welfare in university students majoring in pre-school education	A89
<b>Group B Posters</b>	<b>Cognition &amp; Welfare, Behaviour &amp; Genetics, Social Environment, Addressing Future Trends in Animal Production, Free Communications (Thursday 8th August - Friday 9th August)</b>	
<b>Cognition &amp; Welfare</b>		
Jessica E. Monk	Can an attention bias test discriminate positive & negative emotional states in sheep?	B90
Thomas D. Parsons	Judgement bias of group housed gestating sows predicted by personality traits, but not physical measures of welfare	B91
Benjamin Lecorps	Pessimistic dairy calves are more vulnerable to pain-induced anhedonia	B92
Miguel Somarriba	The effects of a composite chronic stress treatment on fear responses & attention bias in beef cattle	B93
Stephanie Buijs	Roll out the green carpet! Dairy cows prefer artificial grass laneways over stonedust-over-gravel ones, especially when lame	B94
Lindsey Robbins	Evaluation of sow thermal preference	B95
Laura Shewbridge Carter	When lying down, would cows rather have a preferable surface or unrestricted space?	B96
Vlatko Ilieski	Spatial distribution & preferable zones for dairy cows in a free stall confined area	B97
Valerie Monckton	The effect of soiling & ammonia reductant application on turkeys' perceived value of wood shavings	B98
Jade Fountain	Operant learning is disrupted when opioid reward pathways are blocked in the laying hen	B99
Thomas Ede	The burning ring of fire: place aversion as evidence of felt pain in calves disbudded using different types of pain control	B100
Tellisa Kearton	Social transmission of learning of a virtual fencing system in sheep	B101

Pawan Singh	Effect of management enrichment on cognitive performance of Murrah buffalo calves	B102
Erica Feuerbacher	Using applied behavior analysis to identify & enhance positive reinforcers for domestic dogs	B103
Yuna Sato	Do pigs understand time interval & adopt optimal foraging behaviour?	B104
Sara Hintze	Doing nothing... Inactivity in fattening cattle	B105
Yoko Sakuraba	Care & rehabilitation activities for a chimpanzee with cerebral palsy: a case study	B106
Cheryl O'Connor	Assessing pasture-based dairy systems from the perspective of cow experiences	B107
Elena Navarro	Intra- & inter- observer reliability of facial expression in sows around farrowing	B108
Emma Tivey	Sex differences in the behavioural response to tickling in juvenile Wistar rats	B109
Ashley Bigge	Heart rate variability patterns as indicators of stress & welfare in Leghorn hens: a comparative housing system study	B110
Jashim Uddin	A sampling strategy for the determination of infra-red temperature of relevant external body surfaces of dairy cows	B111
Anna Juffinger	Effects of injection of clove oil or isoeugenol on mechanical nociceptive threshold & behaviour during injection in calves	B112
<b>Behaviour &amp; Genetics</b>		
Christoph Winckler	Genetic parameters for maternal traits in sows recorded by farmers	B113
Julia Malchow	Space requirements for fast & slow growing chickens on elevated grids	B114
Abdelkareem Ahmed	A comparison of tonic immobility reactions between domesticated <i>Columba livia</i> & <i>Columba guinea</i>	B115
<b>Social Environment</b>		
Nedup Dorji	Behaviour & sociability of yaks among different regions in Bhutan	B116
Julia Johns	Effects of herd, housing & management conditions on horn-induced altercations in cows	B117
Miroslav Radeski	The relations between the individual & social behaviour of dairy cows & their performance, health & medical history	B118
Catherine McVey	Extracting herd dynamics from milking order data: preliminary insights comparing social network & manifold-based approaches	B119
Annika Krause	The effect of coping style on behaviour & autonomic reactions of domestic pigs during dyadic encounters – A pilot study	B120
Kathrin Büttner	Focussing on significant dyads in agonistic interactions & their impact on dominance indices in pigs	B121
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Nicki Cross	Above the minimum: Integrating positive welfare into animal welfare policy	B181
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Kathryn Proudfoot	Impact of frame reflection on veterinary student perspectives toward animal welfare & differing viewpoints	B183

## ISAE 2019 Workshop Presentations - Tuesday 6th August

### 1: Visualizing and analysis of individual-level data within large group systems - Kongesal 2-3

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

<b>2: Future trends in the prevention of damaging behaviour – Dræggen 3</b>	
Jen-Yun Chou	Using experimental data to evaluate the effectiveness of tail biting outbreak intervention protocols
Rachel Peden	Factors influencing farmer willingness to reduce aggression between pigs
Lisette Van Der Zande	Reduce damaging behaviour in laying hens & pigs by developing sensor technologies to inform breeding programs
Margrethe Brantsæter	Experience with laying hens that are not beak trimmed
Kristine Hov Martinsen	Experience with pigs that are not tail docked
Andrew Janczak	Films demonstrating production without tail docking of pigs or beak trimming of laying hens
<b>3: Novel indicators of fish welfare – Dræggen 4</b>	
Felicity Huntingford	Using thermal choices as indicators for fish welfare
Marco A. Vindas	The role of the serotonergic system as a welfare indicator in salmonids
Becca Franks	Developing measures of positive welfare for fish
Tanja Kleinhappel, Tom Pike, Oliver Burman	Using social behaviour as a welfare indicator in fish
<b>4: Engaging students in learning about production animal welfare assessment - Bugaarden</b>	
Marta E. Alonso, Xavier Averós, Alejandra Feld, Melissa Elischer	Engaging students in learning about production animal welfare assessment
<b>5: Managing the dairy cow around the time of calving – can we do better? – Dræggen 8</b>	
Maria Vilain Rørvang	What can we learn from studying the motivation underlying maternal behaviour of cattle?
Kathryn Proudfoot	Assessing the welfare of dairy cows before & after giving birth
Peter D. Krawczel	Alternative management strategies to help dairy cows achieve successful outcomes during the transition into lactation
Marie J. Haskell	Keeping cow & calf together: behaviour & welfare issues
Cynthia Verwer	State-of- the-art dam rearing of calves – sector-wide assessment of scientific & practical knowledge on dam-rearing systems
<b>6: Animal training – efficacy and welfare – Kongesal 4-5</b>	
Dorte Bratbo Sørensen	Using positive reinforcement to train laboratory pigs: benefits for animal welfare & research models
Kristina Horback	Creating an animal training handbook for livestock producers, veterinarians & researchers
Jonas Riise Johansen & his dog	Training animals to co-operate for veterinary procedures – a practical approach and demonstration