

Program ICEEP 2022, Uppsala, Sweden

MONDAY				
Chair		NAME	Time slot	Title
			08:00-08:15	Welcome address
Session 1. Muscle				
Erica McKenzie & Samantha Franklin		Keynote: Birgitta Essén-Gustavsson	08:15-08:55	Muscle metabolic responses to exercise – 40 years of research
		Henry, M.L.	08:55-09:10	Impact of Coenzyme Q10 and N-acetyl cysteine on muscle proteome and antioxidants
		Davis, M.	09:10-09:25	Hyperthermia decreases mitochondrial ATP synthesis in equine skeletal muscle
		Smit, I.H.	09:25-09:40	Electrode positioning in the horse: towards standardisation of surface EMG measurements
		Borer-Matsui, A.	09:40-09:55	Effect of body position on a 3-dimensional scanning assessment of muscle mass
		Jobst, I.D.	09:55-10:00	Forelimb muscle activation pattern during movement initiation of walk versus single limb lift
		Buckley, P.	10:00-10:05	Pre-race and race management impacts serum muscle enzyme activity in Australian endurance horses
10:05-10:35 Swedish Fika (coffee and snacks break)				
Session 2. Physiotherapy and rehabilitation				
Anna Bergh & Renaud Léguillette		Nankervis, K.	10:35-10:50	The effect of walking speed during water treadmill exercise on pelvic kinematics in racehorses.
		Pasman, Z.C.	10:50-11:05	Water and speed affect upper body kinematics and limb timing in horses walking on a water treadmill
		De Geer, H.C.	11:05-11:20	The effect of water and speed on limb kinematics in horses walking on a water treadmill
		Walker, V.	11:20-11:35	Effect of walking over ground and raised poles versus no poles on equine limb and back kinematics
		Adair, H.S.	11:35-11:50	Multifidus muscle activation in response to therapeutic exercises in horses
		Bergh, A.	11:50-11:55	Acute Effect of an Elastic Resistance Band System on Vertical Movement Symmetry in Riding Horses
		Walker, V.	11:55-12:00	Effect of water depth on limb and back kinematics in the horse whilst walking on a water treadmill
		Grossi, I.	12:00-12:10	Characteristics of the horses' gait during swimming exercise in a circular swimming pool.
		Crevier-Denoix, N.	12:10-12:15	Speed of Sound and Attenuation measurements: a quantitative method for assessing tendon recovery
		Tabor, G.	12:15-12:20	Movement strategies and thoracic range of motion during dynamic mobilisation exercises
		te Moller, N.C.R.	12:20-12:25	Walking and trotting through a water track affects limb sagittal angles and stride timing in horses
		Tischmacher, A.	12:25-12:30	Effect of exercise on blood perfusion of healing superficial digital flexor tendons in horses
	Brassington, R.	12:30-12:35	Effect of treatment type on return to work in horses with impinging dorsal spinous processes	

12:35-13:40 Lunch**Session 3. Biomechanics: Lameness**

René van Weeren & Lars Roepstorff	Wong, A.S.M.	13:40-13:55	Changes in racehorse stride characteristics over time and their association with injury
	Weishaupt, M.A.	13:55-14:10	Determining average weight-bearing asymmetries in relation to clinical lameness scores in horses
	St. George, L.	14:10-14:25	Adaptive changes in equine muscle activation timings occur during induced fore and hindlimb lameness
	Rhodin, M.	14:25-14:40	Adaptation strategies of the Icelandic horse with Induced hindlimb lameness at walk, trot and tölt.
	Hernlund, E.	14:40-14:45	Changes in pelvic axial rotation following diagnostic analgesia in hindlimb lame horses
	MacAire, C.	14:45-14:50	Exploration of asymmetry thresholds to characterise hindlimb lameness on the circle
	Logan, A.A.	14:50-14:55	Impacts of circular exercise to juvenile bone and joint health
	Rhodin, M.	14:55-15:00	Analgesic testing with meloxicam did not eliminate pain in many clinically lame horses

15:00-15:45 Fika + Poster mingle

Elin Hernlund & Marie Rhodin	Shaffer, S.K.	15:45-16:00	Local bone volume fraction changes in racehorse proximal sesamoid bones are associated with training
	Pagliari, E.	16:00-16:15	Recording fetlock joint range of motion using wearable inertial sensors in sound and lame horses
	Hitchens, P.	16:15-16:30	Relationship between Thoroughbred racing workloads and the fatigue life of equine subchondral bone
	Bragança, F.M.	16:30-16:45	Adaptation strategies of horses with induced hindlimb lameness walking on a treadmill
	Bragança, F.M.	16:45-17:00	Interpretation of objective gait analysis data of single limb lame horses
	Leclercq, A.	17:00-17:15	Trainer detection of hindlimb lameness in horses-evaluation of feed back during web based training
	De Mira, M.	17:15-17:20	Trot-up style affects subjective gait assessment scoring in endurance horses
	Davidson, E.J.	17:20-17:25	Ultrasound-guided caudal cervical joint injection accuracy in horses with and without arthropathy

17:30- Evening activity: Sponsor talk The Swedish Horse Industry Foundation (HNS) & Horses made in Sweden

Demo: Horses made in Sweden
Midsummer festivities at Campus

TUESDAY				
Session chairs		NAME	Time slot	Title
Session 4. New technology and analysis methods				
Renaud Léguillette & Lars Roepstorff	Sponsored by Arioneo	Keynote: Hedvig Kjelström	08:20-09:00	AI and Machine Learning methods in equine research
		Parmentier, J.I.M.	09:00-09:15	Prediction of kinetic parameters from body mounted IMU data using recurrent neural networks
		Darbandi, H.	09:15-09:30	Estimation of hoof-on/off moments using inertial sensors and deep learning
		Hernlund, E.	09:30-09:45	Comparison of a computer vision application to optical motion capture for lameness quantification
		Scharf, J.	09:45-10:00	Fast Fourier transform and major peaks analysis of electrocardiograms to assess MLSS in horses
		Schrurs, C.	10:00-10:15	Cardiovascular and locomotory parameters during training in Thoroughbreds: a multi-national study
		Darbandi, H.	10:15-10:20	Quantitative detection of fatigue in sport horses using inertial sensors and machine learning
		Marlin, D.J.	10:20-10:25	A novel 4-dimensional imaging technique to track back shape changes in exercising horses
		Witkowska-Pilaszewicz, O.	10:25-10:30	Evaluation of novel promising biomarkers in exercise horse monitoring
		Brounts, S.H.	10:30-10:35	Use of novel computed tomography system to aid in distal limb lameness evaluation in standing horse
		Sponsor presentation	10:35-10:40	Arioneo
10:40-11:25 Fika + Poster mingle				
Session 5. Equitation science, Rider and Sports equipment				
Marie Rhodin & Elin Hernlund		Tabor, G.	11:25-11:40	Saddle related equine back pain, muscle condition and behaviour
		Munjizun, A.	11:40-11:55	Effect of weight carriage on work effort in horses
		Marlin, D.J.	11:55-12:10	Stirrup and rein forces do not show left-right differences in advanced dressage riders and horses
		Williams, J.M.	12:10-12:25	Are faults in International Showjumping associated with fence design?
		Murray, R.C.	12:25-12:40	Could saddle knee-block design influence limb and thoracolumbar spine kinematics in sport horses?
		Foreman, J.H.	12:40-12:45	Assessment of Tokyo 2020 Modern Pentathlon Results for Paris 2024 Modifications
		Clark, R.L.	12:45-12:50	Lumbar spine kinematics of experienced and inexperienced horse riders on a riding simulator
		Deckers, I.D.	12:50-12:55	The effect of a saddle on the kinematics of the thoracolumbosacral spine at walk and trot in-hand
		MacKechnie-Guire, R.	12:55-13:00	Does Gluteus Medius Activation in Riders Affect Rider Pelvic Function, Saddle Movement and Gait?
		Sponsor presentation	13:00-13:05	Agria
13:05-14:00 Lunch				
Session 6: Biochemistry, Haematology, Endocrinology and Thermoregulation in Exercise				
		Keynote: Mike Davis	14:00-14:40	Fatigue in Equine Exercise: Multiple Answers to a Simple Question

Erica McKenzie & Kenneth McKeever	Lindinger, M.I.	14:40-14:55	Physicochemical analysis of venous and arterial blood acid-base state during and after exercise
	Constable, P.D.	14:55-15:10	Predictors of blood pH and plasma bicarbonate concentration in healthy trained Standardbreds
	Kang, H.	15:10-15:25	Wireless tracking method to monitor body temperature changes in the exercising horse
	Verdegaal, E.	15:25-15:30	Skin surface temperature is not a reliable proxy for thermoregulatory response in endurance horses
	Manfredi, J.M.	15:30-15:35	Correlations between insulin dysregulation, metabolic phenotype, and equine lameness
	Constable, P.D.	15:35-15:40	Buffer value and improved estimates for Atot and Ka of non-bicarbonate buffers in equine plasma
	Sloet, M.M.	15:40-15:45	Effect of heat acclimation on horses using heated indoor arenas towards Tokyo Olympic games
	Waller, A.P.	15:45-15:50	Pre-loading large volume oral electrolytes: tracing acid-base variables in exercising horses
	Foreman, J.H.	15:50-15:55	Mitigation of Effects of Heat and Humidity at Tokyo 2020 Olympic Summer Games Equestrian Events
	Schott, H.C.	15:55-16:00	Exercise effects on symmetric dimethylarginine, creatinine, and urea concentrations in horses
Sponsor presentation		16:00-16:05	Televet
16:05-16:25 Fika			
Session 7. Biomechanics: Hoof, Shoe, Surface			
Lars Roepstorff & René van Weeren	Peder Fredricson, equestrian olympic medalist	16:25-16:30	A rider's view on the bare foot horse
	Malone, S.	16:30-16:45	Bone proportions of the equine distal forelimb and correlations with hoof angle
	Crevier-Denoix, N.	16:45-17:00	Comparison of vertical forces in trotter horses exercising on a hard and a soft track surface
	Northrop, A.J.	17:00-17:05	The relationship between the mechanical response of cross-country tracks and edaphic factors
	Dahl, V.E.	17:05-17:10	Effect of horseshoe length on hoof deformations and fetlock extension
	Rohlf, C.M.	17:10-17:15	The Effect of Fiber in Equine Arena Surfaces on Shear Ground Reaction Forces
	Horan, K.	17:15-17:20	Hoof impact and foot-off accelerations in galloping horses testing eight shoe-surface combinations
	Hartmann, M.C.	17:20-17:25	The effects of novel tailormade 3D-printed shoes on equine kinetic parameters
	Trachsel, D.	17:25-17:30	Comparison of the grip of different hoof boots and a bare hoof on different surfaces
	Rohlf, C.M.	17:30-17:35	Vertical Ground Reaction Forces of Equine Arena Surfaces Vary with Surface Compaction
Sponsor presentation		17:35-17:45	HästSverige
<p>Free evening activity + Pub night in Uppsala Lameness Tools Workshop for pre-registered delegates at the University Animal Hospital at Campus</p>			

THURSDAY				
Session chairs		NAME	Time slot	Title
Session 8. Biomechanics: Kinematics of the equine athlete				
Toshiyuki Takahashi & René van Weeren	Sponsored by Boehringer Ingelheim	Keynote: Alan Wilson	08:00-08:40	From equine anatomy to cheetah biomechanics: taking the gait lab into the wild
		Sponsor presentation	08:40-08:45	Boehringer Ingelheim
		Clayton, H.M.	08:45-09:00	Vertical head and pelvic movement asymmetries in dressage horses trotting in-hand and under a rider
		Persson-Sjodin, E.	09:00-09:15	Prevalence of vertical movement asymmetries of head and pelvis in young unriden Warmblood horses
		Lundblad, J.	09:15-09:30	Significance of motor laterality in relation to vertical movement asymmetries in young riding horses
		Zetterberg, E.	09:30-09:45	Prevalence of vertical movement asymmetries in trot among Icelandic horses in training
		Gunnarsson, V.	09:45-10:00	Effect of low and high head and neck position on stride parameters of slow tölt in Icelandic horses
		Nonnenmacher, S.	10:00-10:05	Comparison of impact accelerations measured at the distal limb and trunk of Thoroughbred horses
		Kallerud, A.S.	10:05-10:10	Movement asymmetry in Standardbred trotters
		Leclerq, A.	10:10-10:15	Prevalence of vertical movement asymmetries in riding and trotter foals
10:10-11:20 Fika + Poster mingle with presenters standing by posters.				
Session 9. Biomechanics and locomotion				
Toshiyuki Takahashi & René van Weeren		Logan, A.A.	11:20-11:35	Characterization of varying circle size and gait on front hoof area and force
		te Moller, N.C.R.	11:35-11:50	Responses of the healthy equine carpal joint to treadmill exercise
		Murray, R.C.	11:50-12:05	Influence of speed and race girth design on girth pressure and force distribution in racehorses
		MacKechnie-Guire, R.	12:05-12:20	Rotational movement of the back in jumping horses, when trotting in-hand and ridden on a 18m circle
		Malone, S.	12:20-12:25	The palmar metric of the equine distal phalanx
		Rankins, E.M.	12:25-12:30	Equine muscle activity with induced stride alterations
		Pagliara, E.	12:30-12:35	Multibody modelling of internal forces causing catastrophic carpal fracture during traditional race
		Cerca, L.	12:35-12:40	Objective quantification of collected gaits' quality: comparing piaffe with trot using IMU sensors
		Zsoldos, R.R.	12:40-12:45	Bilateral activity of the equine splenius muscle during circle work in an automated horse walker
		Giercuskiewicz-Hecold, B.	12:45-12:50	The prevalence of radiographic lesions in distal parts of limbs in endurance horses competing in UAE
		Faramarzi, B.	12:50-12:55	Fore and hind hooves impact phase kinetics: trimming influence
		Bukhari, S.	12:55-13:00	Quantification of Basic Stride Parameters of Walking Donkeys
13:00-14:05 Lunch				
Session 10. Applied physiology: Genetics				

Gabriella Lindgren & Kenneth McKeever		Keynote: Ken Hinchcliff	14.05-14.45	Key publications in equine exercise physiology 2017-2021
		Valberg, S.	14:45-15:00	Lack of association between commercial genetic tests and myopathies in Quarter Horses
		Hill, E.W.	15:00-15:15	Genetic risk markers for dorsal metacarpal disease (sore/bucked shins) in Thoroughbred horses
		Katz, L.M.	15:15-15:30	Genetic risk markers for recurrent laryngeal neuropathy (RLN) in flat racing Thoroughbred horses
		Hill, E.W.	15:30-15:45	Genetic risk markers for exercise-induced pulmonary haemorrhage (EIPH) in Thoroughbred horses
		Hill, E.W.	15:45-15:50	Amygdala and hippocampus gene expression highlights functionally relevant genes for equine behaviour
		Holtby, A.R.	15:50-15:55	Genetic markers for behaviour in yearling Thoroughbred racehorses
		Naboulsi, R.	15:55-16:00	Genetics of Dynamic Laryngeal Collapse in Norwegian-Swedish Coldblooded trotters
16:00-16:45 Afternoon tea + Poster mingle				
Session 11. Applied physiology: Drugs in equestrian sport and exercise				
Kenneth McKeever & Erica McKenzie		Sanz, M.G.	16:45-17:00	Effects of furosemide on systemic cytokine mRNA expression post-racing in 2-year-old Thoroughbred racehorses
		McKeever, K.H.	17:00-17:15	Duration of the effects of a novel Phosphodiesterase Type-5 inhibitor (PDE5-I)
		Manso, Filho, H.	17:15-17:30	Impact of furosemide and exercise on the cytokine response in Standardbreds
		Manso, Filho, H.	17:30-17:35	Glucose and lactate in equine fecal liquor are altered after exercise independent of furosemide
The Racing Victoria Gala Dinner at Uppsala Castle				

FRIDAY				
Session chairs		NAME	Time slot	Title
Session 12. Cardio-Respiratory				
Samantha Franklin & Renaud Léguillette	Sponsored by Racing Victoria	Keynote: Gunther Van Loon	08:00-08:40	Diagnosing cardiac arrhythmias in performance horses
		Sponsor presentation	08:40-08:45	Racing Victoria
		Scott, W.M.	08:45-09:00	Prosthetic laryngoplasty improves peak oxygen consumption in horses with laryngeal neuropathy
		Brassington, R.	09:00-09:15	Does wind surgery improve performance in the thoroughbred racehorse?
		Shoemaker, S.	09:15-09:30	Factors associated with severity of EIPH in 2-year-old Thoroughbred racehorses
		Carstensen, H.	09:30-09:45	Exercise-induced remodeling of the atria in Standardbred racehorses
		Franklin, S.H.	09:45-10:00	Exercise is associated with increased P-wave duration and dispersion in Standardbred horses

		Van Erck Westergren, E.	10:00-10:15	Cardiopulmonary exercise testing in competitive sport horses
		Hövenner, J.H.	10:15-10:30	Cardiac findings in 822 warmblood horses and their association with poor performance
		Franklin, S.	10:30-10:35	Risk factors for exercise-associated sudden cardiac death in Thoroughbred racehorses
		Jago, R.C.	10:35-10:40	Changes to left ventricular mechanics during detraining in National Hunt Thoroughbred racehorses
		Ter Woort, F.	10:40-10:45	Retrospective analysis of upper airway problems in sport horses with lower airway disease
10:45-11:10 Fika				
Samantha Franklin & Emmanuelle van Erck Westergren		Keynote: Warwick Bayly & Renaud Leguillette	11:10-11:50	EIPH – the role of blood volume and left sided cardiac function
		Reed, J.C.	11:50-12:05	Ventricular mechanics in response to furosemide in National-Hunt Thoroughbred racehorses
		Massie, S.L.	12:05-12:20	Training vs racing: a comparison of arrhythmias and their repeatability in chuckwagon horses
		Leguillette, R.	12:20-12:35	Workload associated with untethered swimming in horses
		Hemmerling, K.	12:35-12:50	The relationship of mucus scores to cytokines, environment and performance in 2-yr-old Thoroughbreds
		Lo Feudo, C.M.	12:50-12:55	Thoracic ultrasonography for equine asthma and exercise-induced pulmonary hemorrhage
		Bagshaw, J.	12:55-13:00	Effects and severity of pharyngeal lymphoid hyperplasia vary with age and location in thoroughbreds
13:00-14:00 Lunch				
Session 13: Training				
Renaud Léguillette & Jonathan Foreman		Finding, E.J.T.	14:00-14:15	EXO-cise: investigation into the links between exercise and angiogenesis in Thoroughbred racehorses
		Nissen, S.D.	14:15-14:30	Long-term training induces slowing of the cardiac conduction system in Standardbred racehorses
		Fitzharris, L.E.	14:30-14:45	Does the equine diaphragm respond to training?
		Downer, M.	14:45-15:00	Metabolic effects of endurance training in a field setting
		Massie, S.L.	15:00-15:05	Cardiorespiratory and metabolic effects of 8-weeks of field training in Thoroughbred yearlings
		Jacques, K.L.	15:05-15:10	Identification of Injured Racehorses Using Exercise Histories and XGBoost
		Munsters, C.	15:10-15:15	Relationship between workload and injury risk in Dutch mounted-police horses
		Gluck, C.	15:15-15:20	Performance analysis of show jumping rounds at a national pony competition
		Beccati, F.	15:20-15:25	Effect of environment, horse and type of incremental fSET on blood lactate in endurance horses
		Santosuosso, E.S.	15:25-15:30	Heart rate variability after standardized training in Thoroughbred horses using a controlled trial
		Siegers, E.W.	15:35-15:40	Training response of young Friesian stallions to a 10-week studbook approval test
		Israel, J.	15:45-15:50	Effects of training and exercise on plasma and blood volume in Thoroughbreds and endurance horses
		De Maré, L.	15:50-15:55	Profiling the aerobic window of horses in response to training by means of a modified LMS test
	Patarin, F.	15:55-16:00	Carrier interruption in French jump races during 2021 an overview	

Fika: 16:00-16:25

Session 14: Nutrition

Anna Jansson & Kenneth McKeever	Pratt-Phillips, S.	16:25-16:40	Judges favor adiposity in athletic show ponies
	Boshuizen, B.	16:40-16:55	Effect of aleurone on glucose & insulin dynamics and gut microbiome of trained horses
	Wesolowski, L.T.	16:55-17:10	Nano-Q10 supplementation improves skeletal muscle mitochondrial capacities in equine athletes
	Simons, J.L.	17:10-17:25	Impacts of exercise and DHA/EPA/GLA supplementation on plasma cytokines in Thoroughbreds
	Munjizun, A.	17:25-17:30	Relationship between body condition, cresty neck score and blood variables in competition ponies
Free evening			