

MONDAY			
Session chairs	NAME	Time slot	Title
Session 1: Applied Exercise Physiology - Training			
Ken Hinchcliff	Keynote: Emmanuelle van Erck	08:20-08:55	Field exercise testing
	Jones, S.	08:55-09:10	A study of the gait and respiratory pattern of horses when swimming
	Latham, C.	09:10-09:25	Mitochondrial capacity is impaired in aged versus growing horses during submaximal exercise training
	Boshuizen, B.	09:25-09:40	The effect of treadmill training on equine muscle morphometrics and muscle metabolomics
	Morrice-West, A.	09:40-09:55	Training speeds and distances undertaken by Australian Thoroughbred Racehorses
	McGowan, C.	09:55-10:10	Recovery heart rates as a predictor of race position in National Hunt Racehorses
	Leleu, C.	10:10-10:15	Race-induced weight loss and its recovery time in Trotters: factors of variation
	Munsters, C.	10:15-10:20	Acute and chronic workload; high chronic workload may decrease injury risk in elite eventing horses
Esser, M.	10:20-10:25	Failure to Finish in a United Arab Emirates 160-km Endurance Ride	
Steel, C.	10:25-10:30	Swimming exercise as part of the training regimens for Thoroughbred racehorses in Australia	
Morning Tea			
Emmanuelle van Erck	Keynote: David Lambert	11:00-11:40	Elite Thoroughbred Performance and a Paradigm for Future Consideration
	Tabor, G.	11:40-11:55	Equine endurance race pacing strategy and performance in 160km single-day races
	Bond, S.	11:55-12:10	Relative contribution of the aerobic and anaerobic energy systems to supramaximal equine exercise
	Steel, C.	12:10-12:25	A survey of trainers on the use of swimming exercise for Standardbred racehorses in Australia
	Tabor, G.	12:25-12:30	Can human training load quantification be applied to equine training?
	Rogers, C.	12:30-12:35	An overview of what happens at national level equine endurance competition in New Zealand
	Takahashi, T.	12:35-12:40	Effect of day, age, sex, and trainer ranking on horse training measured with a GPS recorder
	Stefánsdóttir, G.	12:40-12:45	Effects of boots on heart rate and respiratory rate in Icelandic horses at trot on a treadmill
McGeown, P.	12:45-12:50	Injuries and wastage of Australian Polocrosse horses and survey of training and management practices	
Moodie, V.	12:50-12:55	Can an Equine Perceived Exertion scale monitor training loads in young Thoroughbred Racehorses?	
Lunch			
Session 2: Nutrition on the equine athlete			
Brett Tennent-Brown	Keynote: Anna Jansson	14:00-14:40	Nutrition of the equine athlete
	Harris, P.	14:40-14:55	Effects of vitamin E dose and form on blood parameters in exercising horses
	LeLeu, C.	14:55-15:10	Effects of DHA supplementation on cardiac response in trotters: a double-blind controlled study
	Bailey, S.	15:10-15:25	The effects of exercise plus weight loss on insulin sensitivity in obese equids
	Moore, J.	15:25-15:40	A comparison of diet and exercise for weight loss in obese horses
	Ringmark, S.	15:40-15:45	Overfeeding may affect locomotion symmetry
	Jensen, R.	15:45-15:50	The effect of diet composition and exercise on changes in caecal pH and SCFA composition
Huntington, P.	15:50-15:55	A marine-derived calcium supplement increases bone density in Thoroughbred racehorses	
Afternoon tea			
Erica McKenzie	White, S.	16:30-16:45	Effect of Complexed Trace Mineral Supplementation on Joint Health in Young, Exercising Horses
	Jansson, A.	16:45-17:00	Improved performance indices in horses following restricted diet
	Moore, J.	17:00-17:05	The effect of moderate-intensity exercise on voluntary intake and glucose metabolism in horses
	Latham, C.	17:05-17:10	Complexed trace minerals: Antioxidant status and oxidative stress in young exercising horses
Session 3: Muscle			
Erica McKenzie	Valberg, S.	17:10-17:25	Assessment of equine muscle mass by 3-Dimensional scanning
	Davis, M.	17:25-17:40	Effect of hyperthermia on equine skeletal muscle mitochondrial oxygen consumption
	Waller, A.	17:40-17:45	Pre-exercise oral electrolyte supplementation enhances skeletal muscle ion influx during recovery
	Thueson, E.	17:45-17:50	Effect of Dietary Supplementation with Ubiquinol on Muscle Concentrations of CoQ10
	Verdegaal, E.	17:50-17:55	Incidence and description of exertional rhabdomyolysis in endurance horses at Tom Quilty Cup 2017

TUESDAY			
Session chairs	NAME	Time slot	Title
Session 4: Applied physiology: Other			
Lidwien Verdegaal	Keynote: Natasha Hamilton	08:20-09:00	Genetics and equine performance
	Hill, E.	09:00-09:15	Signatures of genetic selection for elite performance in the Australian Thoroughbred
	Farries, G.	09:15-09:30	Identification of expression quantitative trait loci (eQTL) in the skeletal muscle of Thoroughbreds
	Valberg, S.	09:30-09:45	Proteome and transcriptome profiling of equine myofibrillar myopathy
	Katz, L.	09:45-10:00	Myostatin (MSTN) genotype specific gene expression in Thoroughbred skeletal muscle
	Farries, G.	10:00-10:05	Analysis of genetic contributions to speed highlight genomic regions responsive to exercise stimuli
	Beccati, F.	10:05-10:10	Circulating MicroRNAs expression in fit endurance horses during 90 km competition
	Hill, E.	10:10-10:15	Identification of candidate genes for hoof strength in Mongolian horses
	Hedenström, U.	10:15-10:20	Effects of inbreeding on sidebones and performance in a population of Cold-blooded trotters.
Morning Tea			
Session 5: Biomechanics and locomotion			
Wim Back	Keynote: Marcus Pandy	11:00-11:40	Muscle and joint function in human locomotion
	Peham, C.	11:40-11:55	The effects of head-neck position on the muscle activity of the long back muscle
	Foreman, J.	11:55-12:10	Three impulse-momentum models of the equine rotational fall
	St. George, L.	12:10-12:25	Towards standardised use of equine surface EMG: effect of normalisation and filtering on outcome measures
	Martin, C.	12:25-12:30	The role of accurate stride analysis in understanding the contribution of limb loading to injury
	Lopes, M.	12:30-12:35	Objective Detection and Quantification of Irregular Gait in Endurance Competition
	Mouloodi, S.	12:35-12:40	Converging-diverging shape configuration of the diaphysis of equine third metacarpal midshaft bone
	Akbar, Z.	12:40-12:45	Radiographic evaluation of equine tarsus morphometry
	Tsang, A.	12:45-12:50	Effects of tendon injury on uninjured regional tendons in the distal limb
Lunch			
René van Weeren	Thomas, M.	14:00-14:15	Local unloading of subchondral bone results in a focal increase in remodeling in horses in training
	Lopes, M.	14:15-14:30	Objective detection and quantification of compensatory (false) lameness in horses
	Hobbs, S.	14:30-14:45	Sagittal plane fore hoof unevenness is associated with asymmetrical hindlimb frontal plane forces
	Martin, C.	14:45-15:00	Techniques for determining hoof movement during ground impact, using Inertial Measurement Units
	Greco-Otto, P.	15:00-15:05	Assessing limb segmental accelerations during equine water treadmill exercise
	Malone, S.	15:05-15:10	Asymmetries in hoof shape and differences in pressure distribution under the hoof
	Berg, L.	15:10-15:15	Histological and molecular characterization of equine myofascial structures
	Sloet van Oldruitenborgh, M.	15:15-15:20	Subjective and objective evaluations of horses for a fit-to-compete or unfit-to-compete judgment
Afternoon tea			
Session 6: Applied physiology: New technology			
Grace Forbes	Votion, D.	16:00-16:15	Muscle OXPHOS capacities in endurance horses predict racing performance
	Morrice-West, A.	16:15-16:30	Assessing the association of speed and stride parameters via GPS technology in Thoroughbred racing
	Davies, M.	16:30-16:35	Smartphone data for stride length and velocity in 971 exercise sessions by racehorses in training
	Fitzharris, L.	16:35-16:40	Respiratory muscle training for the treatment of dynamic upper airway collapse in racehorses
	Berger, A.	16:40-16:45	The influence of whole body vibration on bone mineral content in the stalled horse
		Secombe, C.	16:45-16:50

THURSDAY

Session chairs	NAME	Time slot	Title
Session 7: Applied physiology: Drugs in equine sport			
Anna Jansson	Keynote: Grace Forbes	08:00-08:40	Welfare in Equine Sport
	Foreman, J.	08:40-08:55	Efficacy of firocoxib and acetaminophen combined therapy in a reversible model of foot pain
	McKeever, K.	08:55-09:10	Effects of a type-5 phosphodiesterase inhibitor on pulmonary artery pressure in race fit horses
	Massie, S.	09:10-09:25	EIPH in horses: Effects of furosemide on pulmonary transmural pressure
	Symonds, N.	09:25-09:40	Urine and plasma elimination of dexamethasone sodium phosphate following a single nebulization
	Foreman, S.	09:40-09:45	30-day oral acetaminophen tolerance in adult horses
	Troutt, T.	09:45-09:50	Effect of terbutaline on potassium balance and fatigue during incremental treadmill exercise
	Foreman, J.	09:50-09:55	Methylprednisolone acetate suppresses intra-articular bone morphogenetic protein expression
	Vengust, M.	09:55-10:00	Effect of furosemide on [H+] across the lung in exercising horses
	McKeever, K.	10:00-10:05	Evaluation of cobalt as a performance enhancing drug in fit Standardbred race horses
Foreman, S.	10:05-10:10	Efficacy dynamics of oral versus intravenous phenylbutazone	
Morning Tea			
Session 8: Cardiovascular physiology			
Ken McKeever	Keynote: Andre la Gerche	10:40-11:20	Cardiac adaptations to exercise
	Johnston, G.	11:20-11:35	Respiratory abnormalities and cardiac arrhythmias during high-speed treadmill exercise in horses
	Ven, S.	11:35-11:50	Cardiac dimensions and function in matched untrained versus endurance trained Arabian horses
	Franklin, S.	11:50-12:05	Prevalence and repeatability of exercise-induced arrhythmias in Standardbred racehorses in training
	Nath, L.	12:05-12:20	Evaluation of cardiac arrhythmia in horses performing below expectation in Thoroughbred races in Hong Kong
	Mitchell, K.	12:20-12:25	Plasma amino acid concentrations during treadmill exercise tests in horses with cardiac disease
	Kuwahara, M.	12:25-12:30	Evaluation of late potentials for prevention of sudden death in Thoroughbred horses
	Franklin, S.	12:30-12:35	Effects of Omeprazole on electrolyte balance and exercise arrhythmias
	Ven, S.	12:35-12:40	Assessment of left ventricular function in horses with aortic regurgitation by 2D speckle tracking.
	Slocombe, R.	12:40-12:45	Left cardiac pressures at rest and during exercise
Lunch			
Session 9: Respiratory physiology			
Sam Franklin	Leguillette, R.	13:45-14:00	EIPH: Effects of blood volume changes on left ventricular, pulmonary arterial and venous pressures
	Johnston, G.	14:00-14:15	Endoscopic evaluation of the upper airway at rest and during maximal treadmill exercise in 75 horses
	Hinchcliff, K.	14:15-14:30	Effect of exercise-induced pulmonary hemorrhage on career longevity and performance in Thoroughbred racehorses
	van Erck, E.	14:30-14:45	Exercise-induced pulmonary hemorrhage in show-jumping horses
	Bayly, W.	14:45-15:00	Comparison of VO2max and measures of ventilation during racetrack and treadmill exercise
	Chesworth, M.	15:00-15:15	Variation in laryngeal function of Thoroughbred racehorses seen at exercise on two occasions
	Ter Wort, F.	15:15-15:20	Medical treatment of dorsal displacement of the soft palate in sport horses
	Fitzharris, L.	15:20-15:25	Coughing and dysphagia induced by prosthetic laryngoplasty - outcome following prosthesis removal
	Warlick, L.	15:25-15:30	Comparison of EIPH Severity in Horses Engaged in High Intensity Racetrack and Treadmill Exercise
	Jones, J.	15:30-15:35	Effects of Large Changes in Blood Volume on VO2max
Afternoon tea			
Session 10: Biochemistry, haematology, endocrinology and thermoregulation			
Ken McKeever	Keynote: Shawn Arrent	16:10-16:50	Exercise and Stress
	Katz, L.	16:50-17:05	Field trial establishing the bioavailability of MicroActive CoQ10 targeting equine skeletal muscle
	Constable, P.	17:05-17:20	Determinants of plasma ionized calcium concentration in Thoroughbreds and Standardbreds
	Dahlborn, K.	17:20-17:35	Effect of clipping and blanketing in exercising Icelandic horses
	Ohmura, H.	17:35-17:40	Catecholamine responses to supramaximal hypoxic, normoxic and hyperoxic exercise in horses

	Valli, C.	17:40-17:45	Creatine-kinase reference intervals at rest and after maximal exercise in Standardbred racehorses
	Benamou-Smith, A.	17:45-17:50	A retrospective study of 47 eliminated elite endurance horses requiring emergency treatment (WEG)
	Conysson, M.	17:50-17:55	Activity affects blood lactate concentration during and after pace-races in Icelandic horses
	Bond, S.	17:55-18:00	Assessing the Ammonia Response of Thoroughbreds to Strenuous Exercise with a Point-of-Care Analyzer

FRIDAY			
Session chairs	NAME	Time slot	Title
Session 11: Biomechanics and locomotion			
Ben Ahern	Keynote: Chris Whitton	08:00-08:40	Subchondral bone loading
	Kallerud, A.	08:40-08:55	Prevalence of movement asymmetry in young Standardbred trotters
	Hernlund, E.	08:55-09:10	Vertical movement symmetry and rider perceived laterality in elite riding horses
	Hargreaves, S.	09:10-09:25	The effect of saddle width on thoracolumbar range of motion
	Mira, M.	09:25-09:40	Challenges of gait evaluation in endurance competitions according to FEI veterinarians
	Serra Bragança, F.	09:40-09:55	The use of an artificial neural network to classify gait in Icelandic horses
	Biasutti, S.	09:55-10:00	Regional variation in gene expression in the normal ovine trochlear ridge
	Peham, C.	10:00-10:05	A finite element model of an equine stifle joint
	Cohen, R.	10:05-10:10	A dynamic computational model of whole-body equine locomotion
	Back, W.	10:10-10:15	Longitudinal objective monitoring of locomotor symmetry in trotting young warmblood horses
	Tijssen, M.	10:15-10:20	Validation of gait event detection algorithm using hoof-mounted inertial measurement units
Ferraz, G.C.	10:20-10:25	Kinematics of marcha picada of Mangalarga Marchador horses with AA and AC genotypes of DMRT3	
Morning Tea			
Jon Foreman	Forbes, B.	11:00-11:15	Comparison of visual lameness scores to gait asymmetry in racing Thoroughbreds during trot in-hand
	Ask, K.	11:15-11:30	Objective pain assessment during rest and locomotion in horses with two types of induced lameness
	Weishaupt, M.	11:30-11:45	Speed dependence of limb and body kinematics of horses walking and trotting on a treadmill
	Hammarberg, M.	11:45-12:00	Effect of performance level on pelvic vertical movement symmetry in horses trotting on a circle
	Clayton, H.	12:00-12:15	Forehand drop in walking dressage horses on a treadmill
	Hardeman, A.	12:15-12:30	Variation in gait symmetry parameters in sound horses at trot on the straight line and on the lunge
	Gunnarsson, V.	12:30-12:35	Objective evaluation of stride parameters in the five-gaited Icelandic horse
	Serra Bragança, F.	12:35-12:40	The effect of trotting speed on the kinematics of head, withers and pelvis
	Harrison, S.	12:40-12:45	A coupled biomechanical-SPH model of whole-body equine locomotion over two track surfaces
	Back, W.	12:45-12:50	The dilemma of the overfed Shetland pony: subclinical laminitis versus optimal showing
Persson-Sjodin, E.	12:50-12:55	The effect of NSAID treatment on movement asymmetries in riding horses	
Lunch			
Session 12: Physiotherapy			
Cathy McGowan	Keynote: Lesley Goff	14:00-14:40	Management of the equine sacroiliac joint - an evidence based and physiotherapy approach
	Montgomery, J.	14:40-14:55	Initial testing of a computer-integrated weight compensation system for rehabilitation of horses
	Kuhnke, S.	14:55-15:10	A comparison of mean peak rein tension in Western & English riding
	Mckane, S.	15:10-15:25	Reducing the pain from overriding dorsal spinous processes increases multifidus cross sectional area
	Bergh, A.	15:25-15:40	Effects of pulsating infrared and red monochromatic light on swelling and wound healing in horses
	Harrison, L.	15:40-15:45	The effect of kinesiology tape on the walking gait of normal horses
	Tabor, G.	15:45-15:50	Analysis of faults in International Showjumping Competition
	McKenzie, E.	15:50-15:55	International Survey of Veterinarians Using Rehabilitation Modalities in Horses
Afternoon tea			

Session 13: Biomechanics and locomotion			
Chris Whitton	Persson-Sjodin, E.	16:30-16:45	Withers movement symmetry can differentiate forelimb lameness from compensatory lameness in horses
	Rhodin, M.	16:45-17:00	Vertical movement of head and pelvis in the Icelandic horse at walk, trot, pace and tölt
	Roepstorff, L.	17:00-17:15	Quality measures of correct diagonal stance detection in trot based on pelvic markers
	Clayton, H.	17:15-17:30	Collisional Mechanics in the Diagonal Gaits of Horses
	Egan, S.	17:30-17:35	Equine behaviour analysis in a bilateral lameness model as a precursor to automated detection
	Biasutti, S.	17:35-17:40	A novel tendon autograft for cartilage resurfacing: an ovine model
	Faramarzi, B.	17:40-17:45	Characterization of correlations between equine hoof anatomy and midstance biomechanics at walk
	Takahashi, Y.	17:45-17:50	Electromyographic changes in superficial forelimb muscles in fatigued Thoroughbred horses
	Hargreaves, S.	17:50-17:55	Induced rider asymmetry and its effects on equine limb kinematics and thoracolumbar range of motion

POSTERS			
	Leguillette, R.		Relative aerobic energy contribution in endurance horses and Thoroughbreds during strenuous exercise
	Kirsch, K.		Physiological response to training as indicator of fitness and performance potential in event horses
	Mukai, K.		Individual variability in adaptation to normoxic and hypoxic training in Thoroughbred horses
	Bond, S.		Effect of high-intensity conditioning and 2 races on aerobic and anaerobic capacities in racehorses
	Almkvist, A.		Sensor based training registration in riding horses –a pilot study
	Stefánsdóttir, G.		Relationship between speed, plasma lactate concentration and judgement scores in Icelandic horses
	White, S.		Complexed trace minerals: Antioxidant responses to transportation stress in young equine athletes
	Chapman, A.		The effects of blueberry consumption on reactive oxygen species in sedentary and exercising horses
	Keowen, M.		Blueberry feeding improves volume of work in exercising horses by lowering heart rate and lactate
	Garza, Jr., F.		Blueberry feeding improves hematological parameters in exercising horses
	Richards, N.		Comparison of equine dietary iron requirements to iron concentrations of 5,837 hay samples
	Sertejn, D.		Active myeloperoxidase reaches mitochondria of myoblasts and interferes with mitochondrial function
	Courouce, A.		Cardiac variables of eventing horses at rest and after cross-country in international competitions
	Mitchell, K.		Identification of N-methyl D-aspartate receptor subunits in equine brain and myocardium using PCR
	Stucchi, L.		Within-breath input impedance by impulse oscillometry in severely asthmatic horses
	Cullimore, A.		Comparison of bronchoalveolar lavage fluid cytology from both lungs in Thoroughbreds
	Riihimäki, M.		Clinical alterations in horses with increased bronchoalveolar lavage fluid mast cell counts
	Riihimäki, M.		Effect of tracheal collapse in tracheal inflammation and exercise tolerance in a group ponies
	Lindinger, M.		Radiotracer flux of ²⁴ Na, ⁴² K and ⁹⁹ Tc-DTPA in horses during exercise and recovery
	Cywinska, A.		Changes in cytokine expression in blood leukocytes after cross country in eventing horses
	Noble, G.		Does oral magnesium aspartate supplementation affect reaction speed in horses of different breeds?
	Greco-Otto, P.		Effects of furosemide, blood depletion, and exercise on body fluid compartments in Thoroughbreds
	Spooner, H.		Influence of long-term furosemide administration on bone mineral content and bone metabolism markers
	Hinchcliff, K.		Ability of Thoroughbred racehorse trainers to predict the use of furosemide in Thoroughbred racehorses
	Williams, C.		Gastric Ulcers in Eventing Horses is Affected by Exercise Intensity and Housing
	Vivek, P.		Characterization of molecular traits of exercise endurance in a native ponybreed of a high altitude region
	Jansson, A.		Impact of using ear plugs during transport of horses
	Stefánsdóttir, G.		Impact of transport by road and air on heart rate in Icelandic horses
	Abkar, Z.		Radiographic Assessment of The Equine Carpus Under Incremental Loads
	van Matre, A.		Effect of pre-exercise massage on stride length of the forelimb in the horse
	Gunnarsson, V.		Effects of boots on movements in trot in Icelandic horses on a treadmill
	Stover, S.		The Effects of Arena Surface on Fore- and Hind- Limb Kinematics of Show Jumping Horses at Take-off

Faramarzi, B.		Routine hoof trimming and changes in regional forehoof biomechanics at midstance
Alienor Bardin		A preliminary AnyBody model of the equine forelimb for motion simulations
Rogers, C.		Pilot study examining centre of pressure in the forelimbs of Thoroughbred racehorses
Rogers, C.		The effect of ground surface on head and pelvis displacement at the trot
Hardeman, A.		Objectively assessed trotting symmetry of warmblood horses admitted for prepurchase examination
Kuhnke, S.		Laterality's influence on symmetry & time shift between left and right rein tension peaks
Bergh, A.		Acute effects of equine therapeutic massage
Steinke, S.		Development of a novel harness system to aid in rehabilitation of horses