



EQUINE ARTHRITIS CPD EVENT 20th – 21st MARCH 2020

Crockstead Farm Hotel Uckfield East Sussex BN8 6PT

Friday 20th March

9.15	STREAMED Keynote speaker presentations	
9.35–	Early diagnostics in arthritic horses	Professor Mandy Peffers
10.20	A general overview on the work that has been undertaken and is being carried out to diagnose early equine osteoarthritis (biomarker discovery), to identify therapeutic targets (by understanding the underlying mechanisms of osteoarthritis), to stratify equine osteoarthritis and, to treat osteoarthritis (extracellular vesicle studies).	Wellcome Trust Clinical Intermediate Fellow, University of Liverpool
10.20 –	Equine lameness – a systematic guide on how to reach	Andrew Crawford
11.30	diagnosis	Director Sussex Equine Hospital
COFFEE AND TRADE EXHIBITION		
12.00 –	Nutritional impact on health and immune function – Most	Dr Helen Warren
12.45	people are aware of the substantial effects that nutrition, weight management, and the microbiome can have on body systems. This presentation goes some way to try to explain those effects and demonstrate how nutrition can support these systems without exacerbating undesirable effects.	
LUNCH AND TRADE EXHIBITION		
2.00 –	Imaging in arthritis	Dr Dagmar Berner
2.45	An overview of current imaging modalities. Besides demonstrating the appearance of arthritic changes on images, this presentation will also highlight the pros and cons of the different modalities; helping to decide when to use which imaging modality and how horses could benefit from it.	Lecturer Equine Diagnostic Imaging RVC
PRACTICAL WET-LAB SESSIONS – STREAMED		
2.45 –	Vets: Practical – joint injections into cadaver limbs	Details to be confirmed
4.30	Other Professionals: Distal limb dissection – joint pathology the inside story	Andrew Casserly FWCF

TEA AND TRADE EXHIBITION

Saturday 21st March

9.00 – 9.45	“Truly correct” equine movement – the scientific answer and its relevance to performance enhancement and, osteoarthritis prevention and management. How this understanding can be taught and applied to help all aspects of the equine industry optimise equine posture and movement, aiding injury and osteoarthritis arthritis prevention and, performance enhancement.	Gavin Scofield Equine Osteopath
9.45 – 11.00	Early intervention in foals – getting it right from day one A collaborative approach to ensuring the best possible outcome from birth to four year old. Good confirmation is just the beginning. The influence of good nutrition and correct foot balance to promote healthy development cannot be underestimated.	Dr Jane Nixon Dean Dibsdall AWCF Emma Short Nutritionist
11.00– 11.30	COFFEE AND TRADE EXHIBITION	
	STREAMED PRESENTATIONS	
11.30-11.45	Keynote speaker presentations	
11.45–1.00	Vets: Stem cells – what is the future for them? Embryonic stem cells Autologous stem cells Allogenic stem cells	Dr Debbie Guest Dr Jay Dudhia Dr Jan Spaas
11.45–12.15	Other professionals: How can trimming and shoeing help the arthritic horse?	Dean Dibsdall AWCF
12.15–1.00	Other professionals: An all encompassing approach to equine arthritis – looking at how mobility, strength, stability and flexibility can improve and maximise the performance and comfort of the ridden horse and, the team work required to achieve this.	Fiona Bloom MSc BSc (Hons) MCSP MHCPAC ACPAT Cat A
	LUNCH AND TRADE EXHIBITION	
2.30 – 3.15	Vets: Inflammation and resolution in soft tissue joint disease – this research focuses on identifying the mechanisms underpinning the development of chronic inflammation and fibrosis in soft tissue disease of the joint. The overarching goal is to discover novel therapeutic strategies to promote resolution of inflammation in chronically inflamed soft tissues of the joint, with a particular focus on tendinopathy and frozen shoulder.	Prof Stephanie Dakin PhD BVetMed MRCVS
	Other professionals: Panel discussion Keeping the arthritic horse sound	Suzannah Povey White Fiona Bloom, Dean Dibsdall Emma Short, Jane Nixon

3.15 – 5.15	Pulling it all together – Interactive gait analysis and case study session followed by panel discussion incorporating ‘What happens when the drugs don’t work’	Dr.-Ing. Thilo Pfau – Royal Veterinary College Andrew Crawford and panel
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SPEAKER PROFILES

Prof Mandy Peffers

Following a degree in Animal Science at the University of Leeds, Mandy completed her veterinary degree at the RVC qualifying in 1995. She spent 11 years in industry and private practice before returning to do a PhD supported by the Wellcome Trust. Mandy is currently a Wellcome Trust Clinical Intermediate Fellow studying ‘The role of small nucleolar RNAs in cartilage ageing and disease’. Her research group studies the role of small non-coding RNAs in the pathogenesis of osteoarthritis and the potential to use extracellular vesicles to treat osteoarthritis.

Andrew Crawford Cert ES (Orth), Dip ECVS, MRCVS Director Sussex Equine Hospital

Andrew is a Diplomate of the European College of Veterinary Surgeons and an RCVS Registered Specialist in Equine Surgery, working predominantly in orthopaedics as an equine surgeon in West Sussex. Andrew graduated from the RVC in 2002 and, after completing an equine internship and working in racing in South Africa, he spent five years as an ambulatory vet in Sussex. Andrew returned to the RVC in 2008 to complete a three-year surgical residency and gained the RCVS Certificate in Equine Orthopaedic Surgery.

Andrew returned to Sussex in 2011 and became a director of the Sussex Equine Hospital in 2015. He has published in peer-reviewed journals on topics including orthopaedic surgery and regenerative therapy for musculoskeletal injuries, has co-authored a chapter on equine orthopaedics, and has presented at conferences both internationally and within the UK.

Dr Helen Warren

Helen achieved her primary degree in Animal Science from Aberystwyth University, Wales in 1999, followed by her PhD in fatty acids in beef from the Faculty of Medical and Veterinary Sciences at Bristol University. She spent five years lecturing degree students in animal and equine science before moving to industry. She is a trustee of the British Society of Animal Science, a qualified lecturer and a registered Animal Scientist. She currently works as a European Technical Manager for Ruminants and Horses for Alltech, initiating European research projects as well as delivering nutritional education and technical sales support.

Dr Dr Dagmar Berner Lecturer Equine Diagnostic Imaging RVC

After graduating from the University of Leipzig Dagmar finished her residency in diagnostic imaging in 2015. She worked at the University in Vienna before joining the Equine Referral Hospital of the RVC in 2017, where she works as a lecturer in large animal diagnostic imaging. Dagmar holds the Diplomate of the ECVDI and a DrMedVet. Her research interests are diagnostic imaging of orthopaedic diseases in the equine distal limb with different modalities.

Andrew Casserly FWCF

East Sussex based Andrew trained with Michael Cerullo RSS and passed his RSS in 1978. He achieved the AWCF in 1984. He has trained 15 apprentices including his two sons, Jack and Ben, who now run the family business and work closely with local equine vets in remedial cases. Andrew is a well known and successful competitor in shoeing competitions nationally and internationally. He is a Worshipful Company of Farriers examiner and judge and, gained his Fellowship of the Worshipful Company of Farriers in 2018. His dissection presentation will provide an opportunity to see the

anatomy of the distal forelimb and, tendon origin, route and insertion will be discussed. External reference points will be identified for a more accurate shoe placement.

Gavin Scofield Equine Osteopath

Gavin is an International equine osteopathic pioneer who has been working with performance horses throughout the world for the last 28 years, including over ten years with one of the British Equestrian teams. His presentation will focus on: "Truly correct" equine movement – the scientific answer and its relevance to performance enhancement and osteoarthritis prevention and management". The presentation will describe how, after spending over two decades studying this subject, a clear understanding of what correct movement for the equine athlete really is in scientific terms has been determined. This will incorporate how this understanding can be taught and applied to help all aspects of the equine industry optimise equine posture and movement, aiding injury and osteoarthritis arthritis prevention and performance enhancement.

Dr Jane Nixon MA, Vet MB, BSc, MRCVS

Jane a consultant equine veterinary surgeon based in Maids Moreton, Buckingham. Since graduating from the University of Cambridge in 1978, Jane has worked in private equine practice with the well-known equine veterinarian and first Hon Vet to the RDA her late husband Stewart Hastie, and is now a freelance consultant to the re branded Buckingham Equine Vets, a variety of elite studs and world class training establishments and, other private clients.

Jane has always been passionately interested in the best management of the young developing horse through to adulthood and beyond to ensure fitness for purpose. Having produced/ridden all her life, from achieving the Pony Club A test to winning Working Hunter at HOYS, Master and Field Master of the Grafton Hunt for 10 years and now in her second term as British Equestrian Federation Director of Equine Development, including head vet to the Futurity & Bridge Schemes having examined on average 500 foals to 5 year olds annually, for over 10 years. Additionally Jane was Veterinary Surgeon to Towcester Racecourse since 1978, Senior Veterinary Surgeon since 2000 and Consultant Veterinary Surgeon to the Society of Master Saddlers. A Member of the Saddlers Company Steering Group & of AHT Industry Committee representing the BEF & SHBGB Chair BEF Horse Health Steering Group encompassing all equine stakeholders in the UK, promoting equine biosecurity.

Dr Jay Dudhia BSc (Hons) PgCert(VetEd) PhD FHEA

Jay graduated from Queen Elizabeth College University of London with a BSc Joint Honours degree in Biochemistry and Physiology and then gained a PhD in Molecular Biology at Queen Elizabeth College (Kings College London). He took up a postdoctoral position with Professor Tim Hardingham in the Department of Biochemistry at the Kennedy Institute of Rheumatology (London) to pursue interests in the molecular changes in articular cartilage with ageing and in osteoarthritis, and the cloning and sequencing of a number of extracellular matrix proteins.

In 1997 he joined The Royal Veterinary College as a Senior Research Fellow to continue studies on articular and intervertebral disc cartilages with Professor Mike Bayliss in the Department of Veterinary Basic Sciences. In further collaborative work with Professor Roger Smith in the Department of Clinical Sciences and Services (CSS) he has investigated biomarkers of early tendon disease and in 2003 he moved to CSS to take up the opportunity to work closely with the equine clinic and run the tendon biology research group.

He has established a Veterinary Medicine Directorate approved stem cell laboratory for the expansion and preparation of clinical grade MSCs for the equine and dog clinics to treat tendon and articular joint injuries. Jay acts as an examiner, both internal (University of London) and external for

PhD or MSc/MRes oral exams. He is currently external examiner for the MRes programme at the University of Liverpool.

Dr Debbie Guest BSc (Hons) PhD

Debbie completed a BSc in Genetics at the University of Leeds in 2002, followed by a PhD on the transcriptional control of neuronal differentiation in stem cells, which she completed in 2005. She then joined the Equine Fertility Unit in Newmarket as a post-doctoral scientist to derive and characterise equine embryonic stem cells. This work continued when Debbie moved to the Animal Health Trust in 2007, where she began to investigate the therapeutic potential of embryonic stem cells for treating horse tendon injuries. Her research group is now also conducting research to derive stem cells from horses and dogs with inherited diseases. These stem cells are being used to provide *in vitro* models to study the diseases and aid the future development of new drugs for their treatment.

Dr Jan Spaas PhD DVM Managing Director Global Stem Cell Technology

Jan obtained a PhD scholarship from Flanders Innovation and Entrepreneurship (VLAIO) then completed his PhD research at the Department of Comparative Physiology and Biometrics in the Faculty of Veterinary Medicine, Ghent University.

He co-founded Global Stem cell Technology (GST) to develop regenerative therapies for the treatment of musculoskeletal diseases in horses and dogs. He established an Ethics Committee and large experimental animal unit with federal government recognition and GCP/GLP accreditation and created a stem cell production unit that was granted a manufacturing authorisation and Good Manufacturing Practice (GMP) license. He developed the first veterinary stem cell product that has been recommended for marketing authorisation in Europe.

Jan Spaas is inventor of 8 patents and key author of more than 25 peer-reviewed scientific publications. He is a member of the International Society for Cellular Therapy (ISCT), European Society of Gene and Cell Therapy (ESGCT) and International Veterinary Regenerative Medicine Society (IVRMS). He was appointed Associate Editor of Frontiers in Veterinary Science for the Veterinary Regenerative Medicine specialty and is a board member of the scientific society for equine health (WVGP) and VIA NOVA equine hospital.

Fiona Bloom MSc BSc (Hons) MCSP MHCPC ACPAT Cat A

Fiona qualified as a chartered human physiotherapist in 2007 and spent 2 years working in acute care in the NHS before completing her MSc in Veterinary Physiotherapy at the Royal Veterinary College, University of London in 2011.

She continued to work in both human and veterinary physiotherapy, running her own physiotherapy business based in West Sussex and, travelling internationally for competition horses.

Fiona is currently studying her PhD in Lameness in Endurance Horses at Hartpury University, hoping to demonstrate that improving welfare ultimately optimises performance.

Professor Stephanie Dakin PhD BVetMed MRCVS, University of Oxford

Stephanie graduated as a veterinary surgeon in 2003 from the Royal Veterinary College. After undertaking an internship specialising in equine orthopaedics at the Animal Health Trust (Newmarket), she then spent 5 years in practice as an equine veterinary clinician. In 2008, Stephanie commenced a PhD at the RVC researching the role of inflammation in equine tendinopathy, which was successfully completed in 2012.

To translate her research from horse to human, Stephanie moved to NDORMS, University of Oxford in 2013 and was awarded consecutive Fellowships from Arthritis Research UK and Oxford-UCB. In 2017 she was appointed Associate Professor and is the current Director of the Taught MSc in Musculoskeletal Sciences at the University of Oxford.

Dr.-Ing. Thilo Pfau Senior Lecturer in Bio-Engineering Royal Veterinary College

Thilo graduated in Information Technology from the Technical University of Munich. He undertook a PhD in the field of pattern recognition at the Institute of Human-Machine Communication at Munich, followed by a two year postdoc at the International Institute of Computer Science, Berkeley, California. He then joined the Structure and Motion Lab at the RVC as a postdoctoral fellow and worked on BBSRC, HBLB and [DEFRA](#) funded projects investigating locomotion on compliant limbs, horse-surface interaction and automated lameness detection in dairy cattle.

In 2008 he became a Lecturer in Bio-Engineering in the Department of Veterinary Clinical Sciences and was recently promoted to Senior Lecturer. He is now focusing on applied locomotor biomechanics with an emphasis on objective quantification of movement anomalies. Since being appointed Lecturer he has concentrated on pioneering a multi-sensor GPS-enhanced gait analysis system for field and clinical use.