

CURRICULUM VITAE

NAME Dr David John Marlin

LOCATION Cambridge, UK

General Background

I am a business minded scientist with extensive experience in human and animal physiology and health. I have worked in teaching, clinical, academic, contract research and commercial spheres. I have a proven track record in taking projects from the initial idea stage through to prototype testing, to regulatory studies to commercially viable products. I have excellent communication skills and I am a very effective and clear presenter, whether dealing with students, scientists, medics, investors, the media or the lay public. I have very strong problem solving skills and am extremely effective at motivating staff to achieve high levels of productivity and performance.

Teaching Experience and Areas of Expertise

I have taught and mentored students at all levels from HND to PhD. I am comfortable in a conventional lecture environment or running seminars or individual mentoring. I like to engage students in a variety of ways to ensure that the teaching experience is stimulating and effective, including setting tasks for work in groups, problem solving and presentation of conclusions to group.

Critical evaluation of scientific literature

Presentation skills: how to produce and give an effective scientific presentation

Thermoregulation (equine)

Transport of horses

Respiratory physiology (equine)

Physiological measurement techniques

Comparative exercise physiology (horse v dog v camel v man)

Equine nutrition: physiology; practical nutrition; nutritional approaches to colic, obesity, exertional rhabdomyolysis, behaviour, gastric ulceration; EU law relating to animal nutrition; common problems encountered in client nutrition.

Equine respiratory disease & disorders: EIPH; RAO; IAD

Exercise physiology (equine); performance; training; fitness assessment;

Current welfare issues in equestrian sport (e.g. deaths in endurance; hyperflexion in Dressage; medication abuse)

Cardiovascular function during exercise (equine)

Commercial Experience

- In-depth understanding of the ambulatory monitoring markets (e.g. activity, fitness, health, mood, performance etc) in the military, pharma, healthcare, consumer and professional sport spheres
- Familiar with regulatory requirements (FDA, MHRA, BSI, EC13, ISO, etc)
- Application engineering
- Algorithm development, testing and validation
- Authoring Design, Functional and Test specifications
- NPI experience
- Overseeing patent and IP
- Developing product test programme

- Product architecture
- Ability to understand customer requirements and technology capability to work with all levels of company to deliver
- Taking lead in projects from concept through prototyping to production
- Working with high level organisations e.g. police, military, medical, professional sport
- Accomplished, clear and confident public speaker

In the past 5 years as an independent consultant I have worked for a diverse range of clients in a variety of fields, including human medical diagnostics. I have also helped clients source and secure investment through grant applications, through researching and identifying potential investors and through my network of contacts. Past and current clients include Disect systems, Ohmeda, Cosmed, Polar, DEFRA, Exhalation Technology, Jaeger, Viasys, Altitude Science, ETB, Britannia Pharmaceuticals, Pi Research, Sievers and Buxco. My role has involved conducting exploratory meetings with clients, through study design, budgeting, project management, data analysis and interpretation, report preparation and presentation. I have worked on a diverse range of projects including:

- Validation of the lithium dilution technique for cardiac output measurement (LIDCO)
- Advising on air quality and heat management of horses and riders at the 2008 Olympic Games Equestrian events in Hong Kong
- Product development, testing and writing technical and educational material for Polar Electro
- Performing the role of chief scientific officer for a company developing exhaled breath diagnostics for people and horses
- Acting as a consultant on a project funded by DEFRA to look at the feasibility of using exhaled breath diagnostics for bovine tuberculosis as an alternative to the tuberculin test
- Designing and testing protective boots for horses
- Validation of a commercial heart rate monitor for RR interval collection for subsequent time and frequency domain analysis
- Analysis of risk factors for horses suffering heat stroke during racing for the British Horseracing authority

Skills

I have a reputation for innovation. For example, I pioneered exhaled breath collection and analysis in animals including a non-invasive collection technique for pediatric use, designed a revolutionary protective boot horses, developed an algorithm to correct for low frequency response in measuring systems, devised a novel technique for use in image analysis where fixed markers placed on anatomical landmarks move, proposed a new theory for exercise-induced pulmonary hemorrhage, developed a technique for attenuation correction of scintigraphic images and patented a fractionated breath collection system.

I have a strong electronics and computing background gained through studying physics, electronics and computing at school and University and then through practical experience during my PhD and career in research. I can design and build small electronic circuits and electro-mechanical equipment and am competent and

comfortable with a variety of test equipment, including 'scopes (analogue and digital and PC based), function generators, frequency counters, etc. I have strong signal processing skills. I have extensive experience in interfacing sensors and equipment to data acquisition systems either in digital or using A/D conversion and experience with a wide variety of commercial software and hardware systems, including National Instruments, Ponemah, Bio-Pac, Dataq, Pico, Adept and Data Translation.

I am highly skilled with a variety of standard physiological measurement techniques, including ECG, heart rate variability, blood pressure, cardiac output, measurements of ventilation, lung function, gas exchange, etc. I have an in depth knowledge of the principal and operation of a wide variety of medical equipment, including blood gas and acid-base analysers, lactate analysers, glucose meters, ECG, blood pressure (invasive and non-invasive), pulse oximetry, spirometry, respiratory impulse oscillometry, whole body barometric plethysmography, thermal imaging, exhaled breath diagnostics (NO; H₂O₂; pH), kinetic and kinematic gait analysis, heart rate monitors and drug delivery devices (syringe drivers, infusion pumps, inhaled medication devices, etc). I have theoretical and practical experience with a variety of imaging techniques, including radiography, PET, MRI, scintigraphy, ultrasound and thermal imaging.

I am experienced in a wide variety of laboratory techniques, including HPLC, GC, GCMS, TLC, LC, flame photometry, photometry, spectrophotometry, respiratory mass spectrometry, electronic nose, ion selective electrodes, PCR, ELISA, RIA, air quality measurement (dust, VOC's moulds, endotoxin, etc), thermal stress (WBGT), material testing (e.g. concussion, penetration, flexibility). I have a solid theoretical and working knowledge of statistics, including modeling and epidemiology, and experimental design and have excellent data analysis and interpretation skills. I am able to run studies to GLP and GCP. I am familiar with the requirements of ISO13485. I also have a reputation for identifying the limiting factors in products or services and providing novel solutions. As a scientist I have a developed sense of attention to detail and a thorough approach but I am still able to look at the big picture. I also have an extensive network of contacts in the veterinary, animal science and human medical fields. I am comfortable working with marketing teams to provide them with the tools they require to commercially exploit scientific products or services.

Current Positions Held

- CEO, Science Supplements Ltd
- Adjunct Professor, Department of Physiology, Oklahoma State University, Stillwater, Oklahoma, USA
- Editor, Comparative Exercise Physiology

Undergraduate Career

Sept 1979 - June 1983 University of Stirling (Scotland) BSc (Hons.) Biology.

Postgraduate Career

Aug 1983 - March 1984 Representative, Syntex U.K., Maidenhead, Berkshire, England.

March 1984 - July 1984 Riding Instructor, Lee Bridge Riding School, London.

July 1984 - Feb 1988 Department of Comparative Physiology, Animal Health Trust, Newmarket, England and Department of Physical Education and Sports Science, University of Loughborough, Loughborough, England.

July 1984 - Feb 1988 Doctoral research investigating high-intensity exercise, training and performance in the Thoroughbred racehorse. Additional research investigating several aspects of equine nutrition in relation to performance.

Postdoctoral career

Feb 1988 - Dec 1990 Exercise Physiologist for racehorse trainer Luca Cumani, Bedford House Stables, Newmarket, Suffolk.

Development and application of field and treadmill based tests of ability and fitness. Advice on training methods, general management and nutrition. Nutritional monitoring of horses, especially in relation to prevention of musculoskeletal disorders (tying-up, fractures).

1991 -1999 Department of Physiology, Animal Health Trust, Newmarket. Investigation of cardiovascular and pulmonary function of the normal horse and in horses respiratory disease. Development of new diagnostic techniques for assessment of respiratory function and airway inflammation. Clinical exercise testing of horses referred for 'loss of performance'.

1993-1996 Leader of the Atlanta Project to investigate problems of transport and climate for horses competing at the 1996 Atlanta Olympic Games.

1999-2005 Head of Physiology and Senior Scientist, Animal Health Trust, Newmarket, UK

2010-2012 Chief Scientific Officer, Hidalgo Ltd, Swavesey, Cambs

2005-present Independent scientific consultant and visiting academic

2005-present CEO, Science Supplements Ltd

Achievements, Positions, etc

- Member of the European Respiratory Society Taskforce on Exhaled Breath Condensate
- Leader of the FEI Atlanta Field Trial Project 1994
- Advisor to the British Three-Day Event, Dressage and SJ Teams for Atlanta
- Provision of WBGT Index at 1996 Atlanta Olympic Games
- Provision of WBGT Index at 1999 Asian Games
- Production of recommendations for Horses Travelling to Atlanta
- Sports Science Advisor to British Endurance Teams
- Sports Science Project Manager for British Equestrian Federation
- Author of Equine Exercise Physiology (Blackwell)
- Member of the Equine Veterinary Journal Editorial Consultants Board
- Member of the Specialist Consultants Board for Equine Veterinary Education
- Editor of Comparative Exercise Physiology
- Member of the World Class Performance (UK) Scientific Advisory Group
- Chairman of the International Conference on Equine Exercise Physiology (ICEEP)
- Scientific leader of the FEI Welfare in Endurance Initiative
- Consultant to the Hong Kong Jockey Club
- Advisor to the FEI and IOC for the 2008 Beijing Games Equestrian events in Hong Kong
- Consultant to World Horse Welfare on Transport issues
- Scientific Project Leader for study of slaughter horse welfare in Europe for World Horse Welfare
- Organiser of the 1st and 2nd Havemeyer workshops on EIPH

Referees

Commercial

James R. Chiapetta
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Educational activities

- Regular teaching of undergraduate and postgraduate students
- Provider of a four day course on physiological data acquisition
- Provider of a four day course on Equine Sports Medicine and Science
- Supervision of numerous undergraduate and post-graduate projects
- Successful supervision of five PhD's to completion as first supervisor
- Previously external examiner for BSc courses at University of West of England and Bristol University.
- PhD external examiner
- Lecturer on Infectious Respiratory Disease for British Horseracing Authority trainers course
- Regular contributor to UK, International and US magazines and websites (e.g. The Horse, North American Trainer, United States Eventing Association)

Experience

- Responsible for biochemistry laboratory, treadmill facility and a research herd of 30 horses at Animal Health Trust
- Consultant to the British Horseracing Authority
- Consultant to DEFRA (UK Government agency for farming)
- Advisor to the Burns enquiry on deer hunting
- Represented the UK Biosciences Federation at European Union committee level
- Home office experimental license 1,2,3, 4 and 5 qualified
- Coaching on scientific data presentation
- Experimental design
- Scientific writing
- Data interpretation and analysis
- Grant writing
- Scientific report writing
- Concept to study design to budgeting to study execution (GLP) to data analysis and interpretation, scientific writing and presentation
- Placing and managing contract research for clients
- New product development
- Product improvement
- Problem solving
- Expert witness

PUBLICATIONS

1. Harris, R.C., **MARLIN, D.J.** and Snow, D.H. (1987) Metabolic response to maximal exercise of 800 and 2000m in the Thoroughbred horse. *J. Appl. Physiol.* **63** (1), 12-19.
2. Harris, R.C., Harman, J.C., **MARLIN, D.J.** and Snow, D.H. (1987) Acute changes in the water content and density of blood and plasma in the Thoroughbred during maximal exercise. In: *Equine Exercise Physiology 2*, Gillespie, J.R. and Robinson, N.E. (eds), ICEEP Publications, California, pp 464-475.
3. **MARLIN, D.J.**, Harris, R.C., Harman, J.C. and Snow, D.H. (1987) Influence of post-exercise activity on rates of muscle and blood lactate disappearance in the Thoroughbred horse. In: *Equine Exercise Physiology 2*, Gillespie, J.R. and Robinson, N.E. (eds), ICEEP Publications, California, pp 321-331.
4. Snow, D.H., Harris, R.C., Harman, J.C. and **MARLIN, D.J.** (1987) Glycogen repletion following different diets. In: *Equine Exercise Physiology 2*, Gillespie, J.R. and Robinson, N.E. (eds), ICEEP Publications, California, pp 701-710.
5. Harris, R. C., **MARLIN, D. J.** and Snow, D. H. (1988) ATP depletion and lactate accumulation thresholds in the exercising thoroughbred horse. *Can. J. Sports Sci.* **13**, 15.
6. **MARLIN, D. J.**, Harris, R. C. and Snow, D. H. (1988). Muscle buffering capacity and carnosine contents in the thoroughbred horse. *Can. J. Sports Sci.* **13**, 24.
7. Harris, R. C., Snow, D. H. and **MARLIN, D. J.** (1988) Muscle buffering capacity and dipeptide content in the thoroughbred horse, greyhound dog and man. *Proc. 2nd Intl.Congress. Comp. Physiol. Biochem.*, Louisiana State University, pp820.
8. **MARLIN, D. J.**, Harris, R. C., Gash, S. P. and Snow, D. H. (1989) Carnosine content of the middle gluteal muscle in thoroughbred horses with relation to age, sex and training. *Comp. Biochem. Physiol.* **93A** (3), 629-632.
9. **MARLIN, D.J.** (1989) Metabolic response to high-intensity exercise in the thoroughbred horse. Loughborough University of Technology, PhD thesis. 271p
10. Harris, R.C., **MARLIN, D.J.**, Dunnett, M. Snow, D.H. and Hultman, E. (1990) Muscle buffering capacity and dipeptide content in the Thoroughbred horse, greyhound, dog and man. *Comp. Biochem. Physiol.*, **97A** (2), 249-251.
11. Sewell, D.A., Harris, R.C., **MARLIN, D.J.** and Dunnett, M. (1991) Muscle fibre characteristics and carnosine content of race-trained thoroughbred horses. *J. Physiol.* **435**, 79.

12. Harris, R.C., **MARLIN, D.J.**, Snow, D.H. and Harkness, R.A. (1991) Muscle ATP loss and lactate accumulation at different work intensities in the exercising thoroughbred horse. *Europ. J. Appl. Physiol.* **62**, 235-244.
13. **MARLIN D.J.** and Harris, R.C. (1991) Titrimetric determination of muscle buffering capacity (Bm_{titr}) in biopsy samples. *Equine vet. J.* **23**, 193-197.
14. Harris, R.C., **MARLIN, D.J.** and Snow, D.H. (1991) Lactate Kinetics, plasma ammonia and performance following repeated bouts of maximal exercise. In: *Equine Exercise Physiology 3*, Persson S.G.B., Lindholm, A. and Jeffcott, L.B. (Eds). ICEEP Publications, California, pp173-178.
15. **MARLIN, D.J.** Harris, R.C. and Snow, D.H. (1991) Rates of blood lactate disappearance following exercise of different intensities. In: *Equine Exercise Physiology 3*, Persson, S.G.B., Lindholm, A. and Jeffcott, L.B. (eds). ICEEP Publications, California, pp188-195.
16. **MARLIN, D.J.** and Taylor, P.M. (1991) Blood gas and acid-base status - art, science and relevance. *Equine vet. J.* **23**, 398-399.
17. Harris, R.C., **MARLIN, D.J.**, Davies, B. and Williamson, V. (1992) Electronic pacing and narrow-beam infra-red timing systems for use in the training of racing camels. In: *Proceedings of the First International Camel Conference*, Allen, W.R., Higgins, A.J., Mayhew, I.G. and Snow, D.H. (eds.). R&W Publications Ltd, Newmarket, UK, pp414.
18. Sewell, D.A., Harris, R.C, **MARLIN, D.J.**, and Dunnett, M. (1992) Estimation of the carnosine content of different fibre types in the middle gluteal muscle of the thoroughbred horse. *J. Physiol.* **455**, 447-453
19. Harris, P., **MARLIN, D. J.** and Gray, J. (1992) Equine Thyroid Function Tests : A Preliminary Investigation. *Br. vet. J.* **148** (1), 71-80.
20. Snow, D.H., Harris, R.C., MacDonald, I.A., Forster, C.D. and **MARLIN, D.J.** (1992) Effects of high intensity exercise on plasma catecholamines in the Thoroughbred horse. *Equine vet. J.* **24** (6), 462-467
21. Roberts, C.A. and **MARLIN, D.J.** (1992) Changes in the pattern of breathing of the Thoroughbred horse associated with the presence of respiratory disease. *31st Ann. BEVA Congress*, Harrogate, p42.
22. **MARLIN, D.J.** and Roberts, C.A. (1992) Cardiorespiratory responses of the Thoroughbred during prolonged medium intensity treadmill exercise. *31st Ann. BEVA Congress*, Harrogate, p43.
23. Butler, P.J., Woakes, A.J., Smale, K., Roberts, C.A., Hillidge, C.J., Snow, D.H. and **MARLIN, D.J.** (1993) Respiratory and cardiovascular adjustments during exercise of increasing intensity and during recovery in the thoroughbred racehorse. *J. Exp. Biol.* **179**, 159-180.

24. Butler, P.J., Woakes, A.J., Roberts, C.A., Anderson, L.S. and **MARLIN, D.J.** (1993) Stride length and respiratory tidal volume in exercising thoroughbred horses. *Respir. Physiol.*, **93**, 51-56. 25.
25. Waran, N.K., Singh, N., Robertson, V., Cuddeford, D. and **MARLIN, D.J.** (1993) Effects of transport on the behaviour and heart rates of thoroughbred horses. *Appl. Anim. Behav.Sci.* **38**, 76-77.
26. Roberts, C.A., Hillidge, C. and **MARLIN, D.J.** (1993) Exercise-induced pulmonary haemorrhage in racing thoroughbreds in Great Britain. *1st International EIPH Conference*, Guelph, Canada, p11.
27. Roberts, C.A., **MARLIN, D.J.**, Hannant, D. and Mumford, J.A. (1994) Physiological, cytological and immunological studies on thoroughbred horses after influenza infection. *Seventh International Conference on Equine Infectious Diseases*, Nakajima, H. and Plowright, W. (eds.), R&W Publications Ltd, Newmarket, UK. pp340-341
28. Roberts, C.A. and **MARLIN, D.J.** (1994) Individual breath flow characteristics in cantering horses. *4th Int. Conference on Equine Exercise Physiol.* Brisbane, Australia.
29. Sewell, D.A., Harris, R.C. and **MARLIN, D.J.** (1994) Skeletal muscle characteristics in 2 year-old race-trained thoroughbred horses. *Comp. Biochem. Physiol.* **108A** (1), 87-96.
30. **MARLIN, D.J.**, Schroter, R.C., Holah, G., Scott, C.M., Browning, J.S. (1994) Thermal imaging of horses performing treadmill exercise in a controlled environment building at 20°C/40%RH, 30°C/40%RH or 30°C/80%RH. *Thermol. Osterr.* 4, p172.
31. **MARLIN, D.J.**, Harris, R.C., Harris, P.A., Scott, C.M., Mills, P.C., Orme, C.E., Roberts, C.A., Schroter, R.C. and Barrelet, F.E. (1994) Physiological responses of horses exercising at 20°C/40%RH, 30°C/40%RH and 30°C/80%RH. In: *On To Atlanta*, Clarke, A.F. and Jeffcott, L.B. (eds.), Equine Research Centre, Guelph, Canada. pp 25-26.
32. Harris, P.A., **MARLIN, D.J.**, Harris, R.C., Mills, P.C., Orme, C.E., Roberts, C.A., Scott, C.M., Barrelet, F.E. and Schroter, R.C. (1994) Haematological, plasma electrolyte and total protein changes during field and treadmill exercise and the effect of elevated temperature and humidity. In: *On To Atlanta*, Clarke, A.F. and Jeffcott, L.B. (eds.), Equine Research Centre, Guelph, Canada. pp 27-29.
33. Harris, R.C., **MARLIN, D.J.**, Harris, P.A., Mills, P.C., Orme, C.E., Roberts, C.A., Scott, C.M., Barrelet, F.E., and Schroter, R.C. (1994) Plasma metabolite and enzyme changes during field and treadmill exercise and the effects of elevated temperature and humidity. In: *On To Atlanta*, Clarke, A.F. and Jeffcott, L.B. (eds.), Equine Research Centre, Guelph, Canada. pp 30-32.
34. Barrelet, F.E., Harris, P.A., **MARLIN, D.J.**, Marr, C., Harris, R.C., Mills,

- P.C., Orme, C., Roberts, C.A. and Schroter, R.C. (1994) In: *On To Atlanta*, Clarke, A.F. and Jeffcott, L.B. (eds.), Equine Research Centre, Guelph, Canada. pp 33-38.
35. Orme, C., Harris, R.C. and **MARLIN, D.J.** (1995) Effect of elevated plasma FFA on fat utilisation during low intensity exercise. *Fourth International Conference on Equine Exercise Physiology*, Robinson, N.E. (ed), *Equine Vet. J., Suppl. 18*, 199-204.
 36. Lindinger, M.I. and **MARLIN, D.J.** (1995) Heat stress and acclimation in the performance horse: where we are and where we are going. *Equine Vet. Educ. 7*(5), 256-262.
 37. Harris, P.A., **MARLIN, D.J.**, Mills, P.C., Roberts, C.A., Scott, C.M., Harris, R.C., Michell, A.R., Orme, C.E., Schroter, R.C., Marr, C.E. and Barrelet, F. (1995) Clinical observations made in non-heat acclimated horses performing treadmill exercise in Cool (20°C/40%RH), Hot/Dry (30°C/40%RH) or Hot/Humid (30°C/80%RH) conditions. *Equine vet. J. Suppl. 20*, 78-84.
 38. Schroter, R.C. and **MARLIN, D.J.** (1995) An index of the environmental thermal load imposed on exercising horses and riders by hot weather conditions. *Equine vet. J. Suppl. 20*, 16-22.
 39. Harris, P.A., **MARLIN, D.J.**, Scott, C.M., Harris, R.C., Mills, P.C., Michell, A.R., Orme, C.E., Roberts, C.A., Schroter, R.C., Marr, C.M. and Barrelet, F. (1995) Electrolyte and total protein changes in non-heat acclimated horses performing treadmill exercise in Cool (20°C/40%RH), Hot/Dry (30°C/40%RH) or Hot/Humid (30°C/80%RH) conditions. *Equine vet. J. Suppl. 20*, 85-96.
 40. **MARLIN, D.J.**, Harris, P.A., Schroter, R.C., Harris, R.C., Roberts, C.A., Scott, C.M., Orme, C.E., Dunnett, M., Dyson, S.J., Barrelet, F., Williams, B., Marr, C. and Casas, I. (1995) Physiological, metabolic and biochemical responses of horses competing in the speed and endurance phase of a CCI**** Three-day event. *Equine vet. J. Suppl. 20*, pp 37-46.
 41. Waran, N.K., Robertson, V., Cuddeford, D., Kokoszko, A. and **MARLIN, D.J.** (1996) Effects of transporting horses facing either forwards or backwards on their behaviour and heart rate. *Vet. Record.*, **139**, 7-11.
 42. **MARLIN, D.J.**, McCutcheon, J., Geor, R., Allen, K., Kohn, C. and Jeffcott, L.B. (1996) Recommendations for horses going to the 1996 Atlanta Olympic Games. *The Equine Athlete*, **9**(3), 19-25.
 43. Schroter, R.C., **MARLIN, D.J.** and Jeffcott, L.B. (1996) Use of the Wet Bulb Globe Temperature (WBGT) Index to quantify environmental heat loads during Three-Day Event competitions. *Equine Vet. J. Suppl. 22*, 3-6.
 44. Schroter, R.C., Baylis, E. and **MARLIN, D.J.** (1996) Gait, cost of transport and heat production at different speeds in Three-Day Event horses. *Equine Vet. J. Suppl. 22*, 16-23.

45. Scott, C.M., **MARLIN, D.J.** and Schroter, R.C. (1996) A modified ventilated capsule for the measurement of sweating rate in the exercising horse. *Equine Vet. J. Suppl.* 22, 48-53.
46. **MARLIN, D.J.**, Scott, C.M., Schroter, R.C., Mills, P.C., Harris, R.C., Harris, P.A., Orme, C.E., Roberts, C.A., Marr, C., Dyson, S.J. and Barrelet, F. (1996) Physiological responses in non-heat acclimated horses performing treadmill exercise in cool (20°C/40%RH), hot dry (30°C/40%RH) and hot humid (30°C/80%RH) conditions. *Equine Vet. J. Suppl.* 22, 70-84.
47. Mills, P.C., **MARLIN, D.J.**, Demoncheaux, E. and Higenbottam, T. (1996) Airway nitric oxide (NO) production: The effects of exercise and nebulised methoxamine in horses. *Am. J. Resp. Crit. Care. Med.* **153**(4), A796.
48. Mills, P.C., **MARLIN, D.J.**, Scott, C.M. and Smith, N.C. (1996) Nitric oxide during exercise and pulmonary disease in the horse. *Pferdeheilkunde*, **12**, 551-556.
49. Roberts, C.A. and **MARLIN, D.J.** (1996) Diagnostic use of individual breath flow contours in Thoroughbred horses during exercise. *Pferdeheilkunde*, **12**, 718.
50. Mills, P.C., **MARLIN, D.J.** and Scott, C.M. (1996) Pulmonary artery pressure during exercise in the horse after inhibition of nitric oxide synthase. *Br. Vet. J.*, **152**, 119-122.
51. Mills, P.C., Smith, N.C., Casas, I., Harris, P., Harris, R.C. and **MARLIN D.J.** (1996) Effects of exercise intensity and environmental stress on indices of oxidative stress and iron homeostasis during exercise in the horse. *Eur. J. Appl. Physiol.* **74**, 60-66.
52. Mills, P.C., **MARLIN, D.J.**, Demoncheaux, E., Scott, C.M., Casas, I., Smith, N.C. and Higenbottam, T. (1996) Nitric oxide and exercise in the horse. *J.Physiol.* **495**(3), 863-874.
53. Mills, P.C. and **MARLIN, D.J.** (1996) Plasma iron in elite horses at rest and after transport. *Vet. Record.* **139**(9), 215-217.
54. **MARLIN, D.J.**, Scott, C.M., Schroter, R.C., Mills, P.C., Roberts, C.A., Harris, R.C. and Harris, P.A. (1996) Acclimation of horses to high temperature and humidity. *The Equine Athlete*, **9**(4), 1-11.
55. Mills, P.C. and **MARLIN, D.J.** (1996) Pulmonary artery pressure and nitric oxide in the horse. In: Proc. 11th Int. Conf. of Racing Analysts and Veterinarians, Auer, D.E. and Houghton, E. (eds.), R&W Publications Ltd, Newmarket, UK. pp252-255.
56. **MARLIN, D.J.**, Scott, C.M., Schroter, R.C., Mills, P.C., Roberts, C.A., Harris, R.C. and Harris, P.A. (1996). Acclimation and acclimatisation of competition horses to high temperature and humidity. In: Proc. 11th Int. Conf. of Racing Analysts and Veterinarians, Auer, D.E. and Houghton, E. (eds.), R&W

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59. Mills, P.C., Scott, C.M. and **MARLIN, D.J.** (1997) Effects of nitric oxide inhibition on thermoregulation during exercise in the horse. *Ann. New York Acad. Sci.*, 813, 591-599.
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