

British Equine Veterinary Association Queen Mother Travel Scholarship Award 2008  
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I am indebted to the BEVA Trust Queen Mother Travel Scholarship Award (QMSTA) for allowing me the opportunity to visit Randwick Equine Centre (REC), Sydney, Australia for a four-week externship during the final year of my BVMS course at the University of Glasgow.

Randwick Equine Centre is a state of the art referral hospital and importantly the veterinarians are highly qualified with a number being ACVIM, ACVA or ACVS specialists.

I self-funded my BVMS course and due to the financial constraint I have been limited in my ability to accept EMS opportunities in the past. The QMSTA allowed my proposed visit to become a reality at a crucial time in my career when I could capitalise on the learning afforded to me by REC.

### Learning Objectives

My interests are in equine orthopaedics and diseases of the upper respiratory tract hence my interest in visiting REC, a predominantly track practice. My main learning objectives for visiting REC were to gain exposure to the wealth of experience and expertise of the REC clinicians in surgery and medicine, which would be invaluable to me now and in the future, but would also allow me to build on extra-mural studies (EMS) I have done to date in reputable first opinion and referral practices in the UK and Ireland and also to learn more about the Australian Thoroughbred industry.



The main entrance to REC.

### Equine Influenza

It would be remiss of me not to mention the impact equine influenza (EI) had on REC and the Australian equine industry before and during my visit, which began on the 22<sup>nd</sup> of January 2008. Influenza A, strain H3N8, was first reported in metropolitan Sydney on the 24<sup>th</sup> of August 2007. Brought into Australia by vaccinated stallions from Japan, where there recently been an EI outbreak. The Australian government rapidly responded to the outbreak and among many measures implemented to reduce the spread of the disease, horse movement was locked down, infected properties and areas were quarantined and a strategic vaccination programme was instigated (<http://www.dpi.nsw.gov.au/agriculture/livestock/horse/influenza/summary-of-the-200708-ei-outbreak>).

My concern had been that the REC caseload would be depleted in the aftermath of the worst of the epidemic, but REC assured me things were almost back to normal, although their elective surgery caseload was reduced. On arrival at REC, EI was still a hot-topic amongst the equine community, clients wanted to converse about EI and a lot of clinician time was taken up discussing movement orders. Racing continued, but horse movement was still severely hampered and there were many stories of racehorses being unable to attend races in neighbouring states as the trainers did not have

the appropriate paperwork. Yearling sales at William Inglis and Sons, next door to REC, did not go ahead and REC clinicians had to travel to Queensland to alternative sales to read the radiographs. However, it did appear that it was almost business as usual at REC.

### About Randwick Equine Centre

Started by Dr Percy Sykes, who stills consults at the practice, in 1951, REC has grown from a one-man practice to a state-of-the-art purpose built facility employing 16 equine veterinarians including three interns and 18 support staff. Predominantly servicing the Thoroughbred flat -racing industry at Randwick racecourse and also from a base at Warwick farm to the east of Sydney city centre, REC has an extensive first opinion client base, but also serves as a referral centre for New South Wales and interstate. The majority of the caseload when I attended REC were lameness examinations, diagnostics and treatment both first opinion and in-house referrals from REC track vets and referrals from other practitioners into the clinic.

REC has a very distinguished staff including Dr Jonathan Lumsden and Dr Chris O'Sullivan who are both ACVS specialists in surgery and Dr Leanne Begg, an ACVIM specialist in internal medicine. Most days Prof. David Hutchins is on hand to consult on medicine and surgery cases. All the clinicians including Dr Richard Humberstone, Dr Michael Robinson, Dr Greg Nash *et al.*, have an extensive pedigree in racetrack practice.

The purpose built hospital was erected in 1988, although it is kept in pristine condition and is so well laid out one would be forgiven for thinking it was built in the last five years not the last 20. There are two surgical suites, where arthroscopy, tenoscopy, laser surgery, airway surgery, colic surgery and fracture repair are just some of the procedures carried out.

Diagnostic imaging is of the highest standard at REC. Randwick Equine Centre has a radiology suite as well as digital radiography. Chris O'Sullivan and others are constantly working on the radiography machines to ensure algorithms are set to gain the best quality of radiographic image. Randwick Equine Centre veterinarians are renowned for reading of repository films at sales in Australia and New Zealand and also for their mobile teams run by Greg Nash who can radiograph up to 20 horses in one day for repositories or examination for sale films (I was lucky enough to go on a repository trip to the Hunter Valley).



The dedicated nuclear scintigraphy boxes.



The digital nuclear scintigraphy suite.

Randwick Equine Clinic also provides clients with access to extra corporeal shock wave treatment, stem cell therapy and IRAP. With an onsite equine diagnostics laboratory for clinical pathology, pathology and microbiology, clients and patients are again provided with the highest class of service by REC.

## The Australian Racing Industry

Having had considerable exposure to Point-to-point racing, National Hunt and flat racing in the UK and Ireland it took me a couple of days to acclimatise myself to the Australian Thoroughbred system. Royal Randwick racecourse is situated a short walk from REC. Within the grounds of the racecourse there are at least six different trainers of varying sizes including Gai Waterhouse and John O'Shea. Each REC vet has their own yard/s, which they attend for morning trot-ups every day and some trainers request their vet to be in attendance for afternoon trot-ups as well. The vets have a very close working relationship with the trainers.



Each horses file is kept in the pharmacy, TPR's are taken twice daily and any other relevant information is recorded throughout the day for each case.

The drugs names took a bit of getting used to. Other relevant information is

This system allows the vets to diagnose any musculoskeletal conditions early. They can then rapidly decide on treatments plans or further investigation and monitor any injuries bi-daily. This was a brilliant learning curve for lameness diagnosis as there can be upwards of 20 horses per trot-up session and I was expected to be able to call the lame leg within a few strides. Furthermore it allowed me to follow many horses from trot-up and participate in the diagnostic work-up of flexion testing, nerve blocks, ultrasound, radiographs and on occasion to surgery.

The vets also attended race meetings in an official capacity, as official veterinarians for racing NSW race meetings and barrier trials, which I learned were somewhat like our breeze-ups. I was lucky enough to spend an hour with Prof. Hutchins at a barrier trial where we discussed the merits of EI vaccination – something that was, for obvious reasons, very topical during my visit.



The rather grand entrance to the racecourse I visited nearly every day of my externship for trot-ups and to administer treatments.



Horses returning to the stables after their barrier trial at Royal Randwick racecourse.

Randwick Equine Centre vets continued care of the racehorses at spelling. Spelling is very important to metropolitan trainers as horses being trained within the walls of Randwick racecourse and other metropolitan racetracks are totally confined to stables, there are no turn out paddocks. Thus, either for a rest during the 365-day racing calendar or for rehabilitation, there are specialist properties out with the city that provide grazing and work them back to fitness after a rest or an injury. I visited horses on these farms with REC vets on a number of occasions.



An afternoon swim at the Randwick racecourse equine pool. Used for cardiovascular work and also for orthopaedic injury rehabilitation.

### Day One Skills

My intention on attending REC was to spend the majority of my time in surgery as I plan to go on to complete an internship and then a residency in equine surgery. As aforementioned my main area of interest is orthopaedics and upper airway tract disease, hence my interest in taking an externship at a predominately track practice. In actual fact I found I benefited from the expertise of the vets at REC much more out of surgery, in the clinic.

I believe this is because Randwick Equine Centre employs three interns and there is a strong focus for teaching, the clinicians imparted their knowledge in a constructive and processed way. I learned so much from simple wound management to the more complex techniques of stem cell treatment, distal venograms and trans-tracheal washes, such that they are techniques I would now not be inhibited from performing at some stage in the future.

I am aware some private practices offering internships like interns to be proficient in anaesthesia, thus I made sure I assisted the intern in their pre-surgical preparations, which have a strict process and checklist for the interns to follow including the preparation of anaesthetic drugs, catheters, and the

anaesthetic machine. Being used to practices which use ACP, xylazine as a premedication, then ketamine and diazepam for induction, REC's anaesthetic protocol which included GGE and thiopentone was new to me, but again excellent learning from the REC AVMA accredited anaesthetist Dr Colin Dunlop. This exposure allowed me to build confidence in an area known for its complexity.

Dr Michael Robinson was the primary vet I went with "on the road" and I am indebted to him as I had been so focused on a surgical career, I had practiced few day one skills and he certainly taught me how to be more confident and proficient in many of these, including simple nerve blocks and stomach tubing something clinicians in the UK can be wary of allowing undergraduates to do for obvious reasons.

My main area of learning at REC was diagnostic imaging, a significant part of the REC business is from repositories and sales radiographs and this is reflected in the clinicians expecting the highest standard of radiography from their interns. I spent many hours in radiology and REC standards have given me the impetus to strive for the best radiographs I can when I am in practice.

### Case Examples and Some Procedures

Sing-for-us a two-year-old filly admitted for what was believed to be a bilateral mechanical laminitis. She was extremely painful and I was permitted to conduct both palmar digital nerve blocks and then abaxial nerve blocks to both feet before we conducted the digital venograms <sup>1,2</sup>. Despite differing opinions on their clinical value, the radiographs worked well, but did not show any areas of significant loss of contrast in comparison to a distal venogram performed a few weeks earlier at Randwick.



Conducting an abaxial nerve block on Sing-for-us using the Dr Robinson technique, which worked.



Sing-for-us and I waiting for the block to work.

<sup>1</sup> Redden RF. A technique for performing digital venography in the standing horse. *Eq Vet Ed* 2001;13:128-134.

<sup>2</sup> Redden RF. Possible therapeutic value of digital venography in two laminitic horses. *Eq Vet Ed* 2001;13:125-127



Left fore distal venogram of Sign-for-us



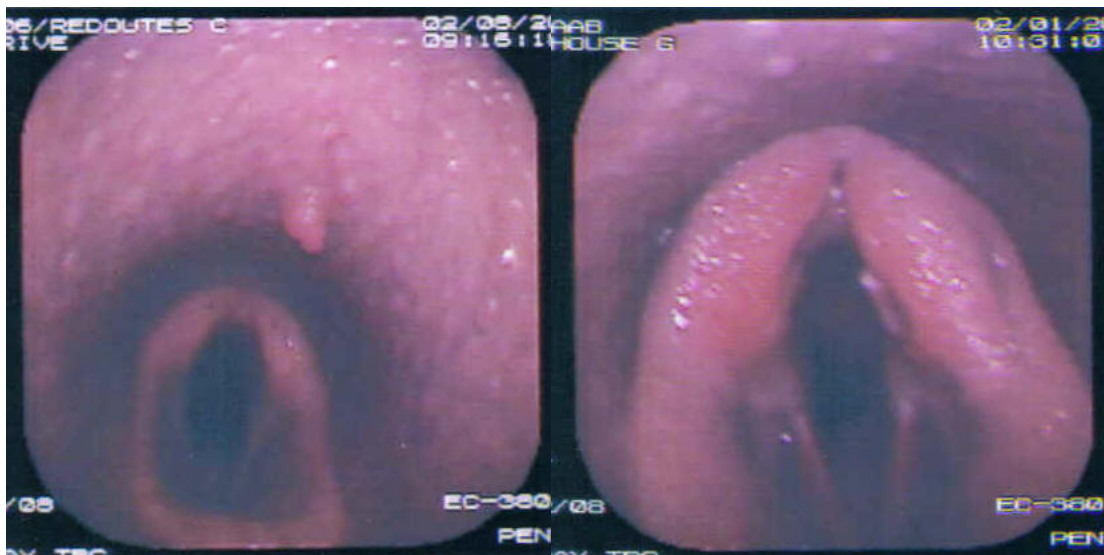
A comparative venogram of another REC case, showing stark areas of contrast loss, a poor prognostic indicator.



Dr Leanne Begg (and the legend Dr Percy Sykes) preparing for a bronchoalveolar lavage



Dr Begg, Dr Robinson and visiting vet Dr Russell from Coolmore, Scone conducting a BAL on a very expensive two year old. With me in the foreground observing on this occasion.



Endoscope of a yearling with a pharyngeal polyp laryngeal removed by laser.

Endoscope of a two-year-old gelding with a history of chondritis, evident on endoscopy. A kissing lesion is also present. This is a condition more commonly seen in Australian Thoroughbreds. He was hospitalised and treated with an intranasal anti-inflammatory and antibiotics.

#### University of Sydney Camden campus

I was fortunate enough to make contact with Dr Christine Smith at the University of Sydney Camden campus, where I spent two days during my REC externship and learned a huge amount. Camden run, in my opinion, a very good course for their students, which involves daily afternoon rounds where students and clinicians sit down and discuss each new case in depth, there is a weekly residents rounds where residents present a case they have had and everyone clinicians, residents and students all take part.

I also saw a case referred from REC to Camden for treadmill analysis. The horse had been referred to REC for poor performance and they had been unable to identify a problem. The treadmill is brand new, housed in a purpose built building, horses undergo a period of acclimatisation on day one and

depending on their behaviour are then assessed on day two. The horses are fitted with a wireless ECG that transmits readings to a nearby laptop. After a period of warm-up the horses then have an endoscope inserted in to the level of their larynx. Video footage is recorded and replayed in slow motion at the end of the session. The particular horse in question had dynamic pharyngeal collapse.



Dr Christine Smith controlling the speed of the horse on the treadmill during the warm-up phase



Moses the resident, placing the endoscope.



The homemade contraption, which keeps the endoscope in place during galloping.

## Summary

This was an invaluable experience for me and again I am indebted to the BEVA Trust for this opportunity, I learned how to be competent and confident at basic skills, whilst supplementing my learning with the knowledge and techniques employed at REC, a practice that strives for and achieves the highest standards. I am now more resolute than ever that I am on the right path to my chosen career in equine surgery.