

**Randwick Equine Centre  
3 Jane Street  
Randwick  
Sydney  
2301**

**Award recipient travel report**

**Introduction**

During the final year of vet school at University of Liverpool every student is given the opportunity to undertake an elective in an area of veterinary medicine that particularly interests them. This elective can be performed internally at Leahurst or externally with a vet who is a diplomat or has held a certificate in that area for many years. I took this opportunity to further my interest in equine internal medicine and chose Randwick Equine Centre (REC) in Sydney as a placement.

**Purpose of visit**

My initial aim of this elective was to improve my day one clinical skills. As a result I planned my learning objectives around improving my clinical examination skills, using appropriate diagnostic tests and reaching a conclusive diagnosis. I was also interested in gaining an insight into Australian equine medicine, particularly within the racing industry.

My learning objectives were as follows:

1. Develop competence in palpation per rectum by identifying abnormal findings
2. Develop competence in nasogastric intubation
3. Learn to recognise abnormalities on ultrasound examination of the abdomen
4. Become proficient at abdominal paracentesis and interpretation of results
5. Confidently auscultate the heart and identify and grade murmurs
6. Confidently auscultate the lungs
7. Pass an endoscope and identify abnormalities of pharynx, larynx and guttural pouch on endoscopy
8. Confidently perform a dental examination and perform routine dental tasks
9. Confidently perform an ophthalmic examination
10. Confidently perform a neurological examination and identify and locate abnormalities

Most of my experience in large equine hospitals had been based in universities. Randwick offered me the opportunity to observe working practices in a large private practice. Randwick also boasts high levels of expertise across all areas of equine practice. My supervisor, Leanne Begg, is a Diplomat in Equine internal medicine. I was really keen to do this placement as I felt it would make me far more confident and knowledgeable in many areas of equine medicine. This will help me enormously in my finals but perhaps most importantly in my future career. I am also interested in

doing an internship and I hoped this elective would give me more insight into what is involved in becoming integrated into such an environment.

### **Randwick Equine Centre**

REC is an 18 vet equine only practice. These comprise of three consultants, three diplomats in surgery and medicine, eight associate vets and four interns.



REC is very well equipped with two surgery suites, a gamma camera for nuclear scintigraphy, ultrasonography, digital radiography, video-endoscopy and its own laboratory. They perform lameness examinations, soft tissue and orthopaedic surgery, ophthalmic and neurological exams and have 24 hour intensive care facilities. Stem cell therapy, IRAP and Platelet rich plasma therapy are also carried out regularly.



**Chris, a diplomat in equine surgery, taking bone marrow to harvest stem cells.**



**Digital radiography**



**Abdominal radiography**

REC's caseload consists of about 90% racehorse work. They act as a referral centre and have first opinion vets who are associated with specific race yards and spelling farms. Whilst working in the hospital I spent the majority of my time working alongside Dr Leanne Begg and Dr Richard Humberstone who specialise in equine ophthalmology. As well as this I regularly accompanied Dr Michael Robinson on his racetrack daily rounds.

### **The Elective**

My day would start at 7.30 am when I would assist the interns with clinical examinations of the inpatients, give treatments and then attend hospital rounds with the clinicians. I would then either attend racetrack rounds, work up referred cases in the hospital or assist with surgery. The main surgery day was Tuesday when Dr Colin Dunlop an anaesthesia consultant would come to the hospital to conduct the anaesthesia with an intern. Up to five surgeries would be performed in one day. The day ended at about 7pm after evening inpatient clinical examinations, treatments and hospital rounds.



**Carpal arthroscopy**



**Anaesthesia recovery**

Racetrack rounds provided me with the ideal opportunity for improving my clinical skills such as passing a nasogastric tube. This is due to the fact that so many horses at the racetrack are treated with DMSO for exercise induced pulmonary haemorrhage and wormed via a nasogastric tube so I had plenty of opportunities to practice this skill. The horses were not in stocks and were never sedated so this provided me with a good learning experience for treating horses in the field and not necessarily in a hospital situation. The vet I accompanied on track rounds was very keen to involve me in the cases and gave good instruction. Track rounds also enabled me to become confident passing an endoscope and identifying abnormalities of the larynx, pharynx and guttural pouch. I would assist with lameness examinations, performing flexion tests and perineural and intra articular anaesthesia. I saw around 50 horses trotted up a day and so greatly improved my identification of lameness and subsequent physical examination including palpation of tendons, muscles and joints.

I am particularly interested in conditions affecting the larynx. During my elective, REC was involved with the annual yearling sales where every yearling after being sold had upper respiratory tract video-endoscopy and was graded for laryngeal hemiplegia. Over the course of two days around 200 yearlings were endoscoped. Due to the nature of racehorse work the hospital deals with a large number laryngeal conditions. I was also involved with cases of arytenoid chondritis requiring a partial arytenoidectomy, an entrapped epiglottis which was treated via ventral laryngotomy and resection of the aryepiglottic fold and a prosthetic laryngoplasty with ventriculocordecotomy.

## **Cases**

The external elective portfolio that was required for university included a case report of an interesting case seen whilst on placement. This allowed me to become involved in a case of pleuropneumonia in a two-year-old Thoroughbred flat racer filly. The filly presented with clinical signs of fever and depression. Thoracic auscultation revealed increased bilateral lung sounds and an absence of lung sounds over the left ventral lung field. Thoracic ultrasonography was performed using a 2.5MHz sector scanner. This revealed a large anechoic region in the pleural space corresponding with a moderate amount of pleural fluid in the left hemithorax. Fibrin tags were also visible as hyperechoic strands. Ultrasonography of the right hemithorax showed hyperechoic areas consistent with pulmonary consolidation and hypoechoic areas due to a small amount of pleural fluid. A diagnosis of pleuropneumonia was made.

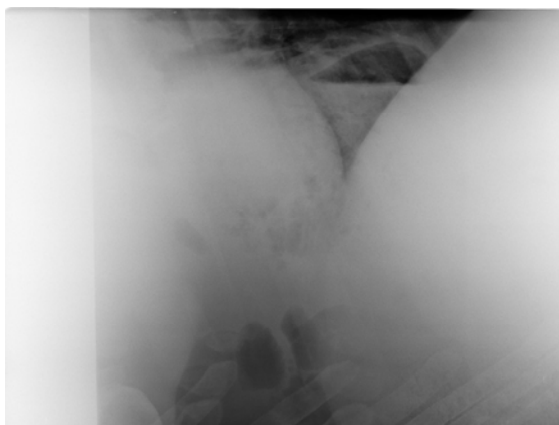


**Ultrasound image of the right hemithorax showing consolidated lung and a small volume of pleural fluid.**



**Ultrasound image of the left hemithorax showing a moderate volume of pleural fluid.**

An indwelling chest drain was placed in the left ninth intercostal space and approximately 4L of serosanguineous fluid was drained from the pleural cavity. The filly also received procaine penicillin, gentamicin and metronidazole daily with the addition of flunixin meglumine if her rectal temperature spiked over 39.5°C. Progression of the disease was monitored by daily thoracic ultrasound and thoracic auscultation. In the fifth week of hospitalisation thoracic radiographs revealed an encapsulated structure containing a fluid line and gas in the caudoventral right lung field which was consistent with a pulmonary abscess.



**Radiographic image showing a pulmonary abscess in the right caudoventral lung field.**

The filly was finally discharged after five weeks of hospitalisation with a 28 day course of oral trimethoprim sulphonamide and metronidazole. The plan was to repeat thoracic radiographs before discontinuing the treatment.

The prognosis for this case is fair and the filly may return to previous performance with six months of rest.

REC also sees a large number of eye trauma cases, as racehorses appear very prone to this. I was involved in a particularly interesting case involving a melting corneal ulcer. The horse presented with severe blepharospasm, increased lacrimation, corneal oedema, conjunctivitis and the obvious large melting stromal ulcer.

Auriculopalpebral and supraorbital nerve blocks were applied to allow further examination of the eye. Corneal swabs were taken for culture and a sub-palpebral lavage system was inserted. The colt was treated with ofloxacin, gentamicin, plasma every four hours and atropine to effect. However after three days on re-examination of the eye the descemet's membrane was visible as a black spot in the centre of the ulcer. This conveyed that current therapy was not working and so conjunctival graft surgery was performed. The surgery was successful and due to the position of the ulcer the graft could remain in place. The colt had a good prognosis for return to racing.



**Melting corneal ulcer**

I was able to follow these two cases progress whilst in the hospital and improve my clinical skills of thoracic auscultation and ophthalmic examination. I also became confident at abdominal paracentesis from several cases of colic that were referred to REC. I assisted with anaesthesia preparation, inserting catheters, intubating cases and keeping anaesthetic records.



**Me performing abdominocentesis**

My initial aim for this elective was to improve my first day skills and I believe I have definitely achieved this. REC has a very large case load and the clinicians and interns were very encouraging which allowed me to become involved with cases and perform these clinical skills. I have gained a great deal of insight and knowledge of horse racing and its associated injuries and diseases so I do feel that my time at REC was very valuable and extremely enjoyable. I would like to thank BEVA trust for enabling me to have this experience through the Queen Mother Student Travel Award.

All correspondence with REC should be sent to Sophie Parkhill.