**ECVAA Residency Training Programme**

**DWR Veterinary Specialists, Cambridgeshire, UK**

**The Hospital**

DWR Veterinary Specialists was established in 2003 by Professor Dick White, as a private small animal referral centre treating dogs and cats. The hospital is located in Six Mile Bottom between Cambridge and Newmarket in the UK, with easy access to London (by road and train) and Europe (flights from Stansted Airport).

It is a large and recently expanded hospital, with specialists and residents in Anaesthesia and Analgesia, Surgery (soft tissue and orthopaedics), Neurology and Neurosurgery, Ophthalmology, Internal medicine, Cardiology, Oncology, Emergency and Critical Care, Diagnostic Imaging, Pathology and Clinical Pathology, Dermatology and Dentistry.

The state-of-the-art facilities at DWR include: six operating theatres, MRI, CT, ultrasound, digital and mobile radiography, endoscopy room, fluoroscopy, physiotherapy, and in house clinical pathology and histology facilities.

A new building, opened in 2023, has increased our kennel and consultation space, given us separate waiting and consultation rooms for cats and dogs, along with separate treatment rooms and isolation facilities for both species. This same year, we have been awarded gold-level Cat-Friendly Clinic status by the International Society for Feline Medicine. Additionally, the hospital expansion has included new imaging facilities, expansion of our Intensive Care space and also increased our non-clinical areas essential for colleague comfort and training (office space, on-site catering, quiet rooms and large seminar room). The theatre area has also been recently refurbished in this same year.

**The Anaesthesia Department**

DWR is an ECVAA recognised Standard Residency Training Centre with a long history of training residents to become specialists, since 2008. The team is comprised of Specialists in Veterinary Anaesthesia and Analgesia (ECVAA and ACVAA), post-residency clinical fellows, residents and anaesthesia nurses. We have a long-standing collaboration with the Newmarket Equine Hospital (NEH), a leading Equine primary care and referral centre 5 minutes by car from DWR. Specialists and residents from DWR provide an in-hours anaesthesia service for the NEH, which has a large caseload and state-of-the-art facilities.

The DWR anaesthetists work with modern anaesthesia workstations with ventilators, haemodynamic and respiratory monitoring including cardiac output monitoring (MostCareUp), two dedicated ultrasound machines, peripheral nerve locators, neuromuscular blockade monitors (Stimpod), syringe pumps and fluid pumps. We have special interests in neuraxial and peripheral locoregional analgesia, and teaching.

**The DWR Anaesthesia and Analgesia Residency**

We aim to educate and train residents in the discipline of veterinary anaesthesia and analgesia to a specialist level and support them in the process of becoming Diplomates of the European College of Veterinary Anaesthesia and Analgesia. The residency is expected to last three years, during which the resident is based at DWR participating in the daily activity of the small animal referral hospital providing an anaesthesia service for surgical, interventional radiology and advanced imaging cases, as well as supporting colleagues in procedural internal medicine and dentistry cases. The anaesthesia team provide an out of hours anaesthesia service for emergency referrals to other disciplines and inpatient care, which the resident will participate in.

The varied caseload at DWR and that of the NEH allow residents to develop their skills and confidence in a friendly and busy clinical setting, with the necessary level of supervision, and with support from our large, multi-disciplinary team of specialists and residents. Attendance at the NEH alongside a senior anaesthetist ensures exposure to equine cases, and direct supervision in this location too. Dick White Referrals has diagnostic imaging, emergency and critical care, and cardiology departments, with Specialists in each area facilitating internal rotations within these areas. Experience with food producing, laboratory and exotic/other species is through external rotations.

Teaching sessions take place first in the morning. There is a lecture given by one of the Specialists from the hospital to residents once weekly, as well as a presentation by one of the residents or interns to the rest of the hospital once weekly, whilst anaesthesia specific teaching is twice weekly comprising of short answer question practice, journal club, theoretical presentations and case discussions. Furthermore, there is fortnightly online teaching with an external Specialist (as part of the wider hospital group) based on the ECVAA resident training tool. Morbidity and mortality rounds and hospital-wide grand rounds is approximately quarterly. In addition, regular RECOVER advanced and basic life support training is available to everyone and organised by the ECC department. The hospital group of which DWR is a part hold annual professional skills courses and courses in statistics and research.

Teaching is followed by procedures starting from 0830. Although surgical rounds are attended by a senior anaesthetist or senior anaesthesia resident, residents should assess their postoperative patients from the day before to familiarise themselves with their postoperative care and effectiveness of analgesia plans. The day ends with pre-operative assessment of the following day’s patients and discussion of plans with senior anaesthetists.

There is an allowance of £3000 for continuing professional development. This can also be used to fund externships, which are organised during clinical time. Residents are allocated six study weeks annually to facilitate preparation of credentials, publications and presentations, with further study weeks allowed to prepare for the part 1 examination. They are also entitled to 28 days of holiday (including bank holidays).

During the first year of the residency, the resident is given assistance to develop their practical skills: placement of arterial and central venous catheters, simple locoregional techniques through to those of more moderate difficulty, including placement of epidural catheters. Alongside this, the resident is expected to appreciate the anatomy and potential complications arising from such practical techniques. A solid basis of knowledge in the pharmacology of routinely used anaesthetic drugs, understanding of how the commonly used equipment works and physiology of the cardiovascular, respiratory and nervous systems is built, as well as the physiology of pain. The resident will be assisted in identifying research projects and starting data collection.

In the second year of residency, the resident will take on more challenging cases with less supervision. In addition, they will start to teach rotating interns and visiting veterinary students from the University of Nottingham when on anaesthesia rotation. Knowledge of basic physiology is extended considering the endocrine, hepatic, renal/urinary and gastrointestinal systems, as well as that in pharmacology of the less commonly used anaesthetic and adjunctive drugs, and the physics underlying the more advanced pieces of anaesthetic equipment available. Data collection for projects should be completed by the end of this year, with initial parts of manuscripts drafted.

In the final year the resident should be competent to manage most cases unilaterally and be able to supervise nurses. By the end of the year, they should be confident in giving advice to general practitioners who contact the clinic, and managing a procedures list. The resident will finalise publications and get credentials in order. They should focus on the non-clinical skills required of an ECVAA diplomate, in addition to the clinical proficiency necessary.

Assessment of training occurs formally with the completion of the annual trainee report with the residency supervisor for the ECVAA, as well as twice yearly appraisals with the residency supervisor and the head of department, which are a workplace requirement additionally covering professional and personal development. Regular informal get-togethers with supervisors happen throughout the year to check progress and provide support.