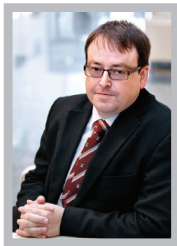




Welcome



Dear Colleagues,

Welcome to the latest of our newsletters, designed to keep you up to date with what's happening here at the Dick Vet.

In recent years the Hospital for Small Animals has expanded its offering of services, to provide the best possible referral options for you and your clients. While some of these services are high profile, others work behind the scenes to provide invaluable support, however they are no less key to our ability to offer quality care. In this edition we focus on two of these services, the Diagnostic Imaging Service and the Anaesthesia Service.

The School has invested significantly in new imaging modalities over the last few years and intends to continue that pattern as we go forward. We will ensure that we can always offer a full range of imaging options to our referring veterinary practices.

The Anaesthesia team is pleased to welcome its new Head of Anaesthesia, Dr Patrick Burns, who will draw on his wide-ranging experience in upholding the reputation of excellence that his team fully deserves.

I look forward to bringing you further updates in the future.

With best regards

Professor David Argyle
Head of School

Update of Diagnostic Facilities



Fig. 1

Figure 1: Thoracic CT image of a cat with *Mycobacterium microti* infection. There is a widespread pattern of coalescing nodules, due to the granulomatous infection.

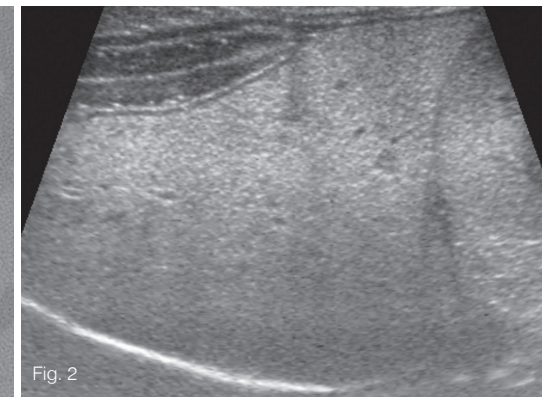


Fig. 2

Figure 2: Abdominal ultrasound image of a cat with hepatic lipidosis. The liver is markedly enlarged and hyperechoic (increased brightness).

The Diagnostic Imaging Service is one of the hospital's main support services, with a large team consisting of board-certified senior radiologists, residents and radiographers. They use a wide range of cutting-edge diagnostic imaging modalities, such as computed and direct digital radiography, dynamic digital radiography (dynamic DR), ultrasonography, computed tomography (CT) and magnetic resonance imaging (MRI).

Their work is intrinsically linked with

the work of the other hospital services and involves clear and consistent communication with colleagues. Their expertise is utilised in decisions involving a choice of imaging modality, ensuring the optimal clinical outcomes. They help decide where, when and which imaging-guided biopsy procedures would be beneficial and provide a review and correlation of the diagnostic imaging diagnoses, alongside other test results for treatment planning.

As an essential part of the Interventional

Radiology team, they aid in performing cutting edge diagnostic and minimally invasive imaging guided treatments.

Recent and on-going upgrades in the imaging equipment allow the use of new technologies, such as dynamic DR, where high-definition videoradiographic studies can be performed for swallowing disorders, airway collapse, subtraction angiography and catheter guidance.

The new high-end ultrasound machine allows them to perform elastography as well as contrast enhanced ultrasound, which provides characterisation of abdominal mass lesions, increased conspicuity of small metastatic lesions and vascular assessments of many conditions.

The CT scanner is currently being upgraded to a 64-slice system, which allows detailed assessment of large body parts with scanning times in the order of a few seconds. The high-field strength MRI is currently available twice weekly and will be permanently installed by the end of the year. This is a particular boost to our considerable and growing neurological caseload.



New Anaesthesia Staff

Anaesthesia is a key support service in the Hospital for Small Animals, working not only within the operating theatre but also with other services, to develop pre- and post-operative plans for patients.



Dr Patrick Burns

The team is pleased to have recently added two new members, including the new Head of the Anaesthesia Service, Dr Patrick Burns. Patrick is a graduate of The University of Queensland and worked in Australia until 2002. After completing a residency at The University of Pennsylvania, he spent thirteen years at various universities in North America before leaving The University of Montreal to come to Edinburgh.

Patrick will continue the current ethos of vigilance and the balanced approach to anaesthesia and analgesia at the School; his philosophy is to use an individual approach to the care of each patient, providing a personalised anaesthetic and analgesic plan. Patrick has extensive experience, including the use of various locoregional anaesthetic techniques and using a nerve stimulator to isolate and block specific nerves. His research interests are focused on reducing morbidity and mortality, and pedagogy.



Hannah Leigh

Hannah Leigh joined the School and the Anaesthesia Service in January 2016 to complete a Residency. Originally from the North West of England, she graduated from the University of Glasgow in 2010 and spent two and a half years in first opinion small animal practice, before going on to complete a 12 month anaesthesia internship at the University of Liverpool. Hannah has spent the last two and a half years working solely in anaesthesia and emergency and critical care and is a welcome addition to the team.



Our support services work together to provide the best and most efficient care.

Top Tip - Percutaneous catheter airway by Dr Patrick Burns

On more than one occasion, I have been called upon to assist with an intubation, where unbeknown to the veterinarian, it was impossible to open the mouth of the animal. This may be due to dysplasia of the temporomandibular joint or neoplasia. It is at this point that I will channel my inner "Macgyver" and use a percutaneous catheter airway if I do not have access to a tracheostomy kit. Immediately caudal to the larynx is the cricothyroid membrane through which an intravenous cannula may be inserted. This membrane joins the caudal larynx to the first tracheal ring. With a syringe attached, an 18 or 16G cannula is inserted perpendicularly through this membrane with the operator aspirating for the presence of air.



A cat with a parotid gland adenocarcinoma that had invaded the temporomandibular joint.

Once the tip of the cannula has penetrated the membrane, it is directed caudally with the cannula pressed up against the skin. Slide the cannula off the stylet. A 3ml syringe is then attached to the cannula. An endotracheal adaptor (6.5 or 7mm) can be attached to

the syringe to facilitate the use of an ambu bag or an anaesthetic breathing circuit. The exact size will vary depending upon the make of the syringe. A larger cannula may be used in large breed dogs. This temporary measure may save the life of the animal until it recovers from anaesthesia or you can do a definitive tracheostomy.



The Dick Vet Clinical Club CPD 2016

The Clinical Club is a free CPD series, running at 7:30pm on the first Wednesday of each month, at the Easter Bush Campus. Talks are given by senior members of staff and cover current topics in Veterinary Medicine. To find out more and to book please visit www.ed.ac.uk/vet/bookclinicalclub.