

# CREATURE FEATURES

## Page 8

### DNA Testing

DNA testing at the Kennel Club Genetics Centre

## Page 4

### The Queen's Veterinary School Hospital under Covid

Running an animal hospital during a pandemic

## Page 10

### Eye of the tiger

An unusual case of tiger eye surgery



## Editor's Message

Despite the many challenges that the last couple of years have brought we want to pass on our thanks for all of your wonderful continued support. While plans for the new multi-species MRI machine are still going ahead they are, unsurprisingly, a little behind schedule.

However, during this time, we have continued to fund a number of posts within the Hospital, and been able to purchase several pieces of equipment from our Wishlist for our farm, equine, small animal, surgery and imaging teams, all thanks to your generous support.

These recent purchases mean that since we launched the Wishlist ten years ago we have been able to donate over £833,000 worth of equipment to all areas of the Hospital, which is an incredible achievement, and we really couldn't have done it without your help.

Thank you.



Liz Smith  
Fundraising  
Executive and  
Newsletter Editor



## MRI Update

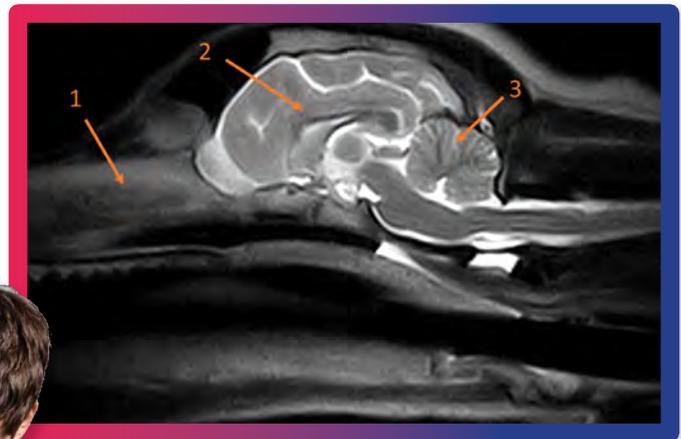
In our last newsletter (Summer 2019) we told you about the exciting plans to partner with the University of Cambridge and The Queen's Veterinary School Hospital (QVSH) to jointly fund a £1.6m project to provide a new multi-species MRI machine. The plans are still going ahead although, due to the Covid pandemic, they are a little bit behind schedule.

Matthew Moon, Hospital Managing Director, said 'Everyone has faced many challenges the world over during the last few months, but the University continues to support our vision and recognise that this is an important investment for the future. Whilst many projects have been suspended across the University, we are moving forward with this and hope to have the facility up and running in 2022.'

While the delay is regrettable it does give us some more time to reach our fundraising goal! So if you would like to make a donation towards Camvet's fundraising pledge of £300,000 please send a cheque donation by post, or you can donate via our MRI fundraising page:



[www.justgiving.com/campaign/mri](http://www.justgiving.com/campaign/mri)



Investment in a 3T MRI is not only commercially sound, but would be transformational for our operations, impacting positively across our teaching, clinical services and clinical research activities. High field technology at 1.5 Tesla has become the expected standard for referral centres. Securing a 3T machine would not only address our current deficiency in this core imaging method, but would position the QVSH at the forefront of veterinary medicine and enhance the reputation and capability of our service teams.

## Donor recognition

Throughout the history of The University of Cambridge Veterinary School Trust gifts from generous benefactors have been vital to Cambridge Veterinary School's development.

We welcome the chance to acknowledge the generosity of our supporters and we would be pleased to discuss recognition opportunities with you individually. Donor recognition will be subject to donor wishes as to confidentiality and donors requesting anonymity shall, of course, have their wishes respected.

## Keeping in touch

We love keeping you updated with developments here at Cambridge Veterinary School but we can only do that if we have up-to-date contact details for you. If you move please remember to let us know! All information we hold complies with UK Data Protection Legislation (Data Protection Act 2018) and you can read our personal statement at the address below or contact us for a printed version. If you wish to unsubscribe from future correspondence you can find a link on the same website page or contact the Trust Office to let us know.

[camvet.vet.cam.ac.uk/Dataprotection](http://camvet.vet.cam.ac.uk/Dataprotection)

## Friend's Subscription

Is your Friend's subscription due?

The current membership rates are:

Club, Society or Company Life

**£1,000**

Club, Society or Company

**£200 p/a**

Individual Life

**£300**

Individual

**£30 p/a**

Family

**£50 p/a**

Senior Citizen or Student

**£15 p/a**

If you are interested in becoming a Friend of Camvet please contact us for details.

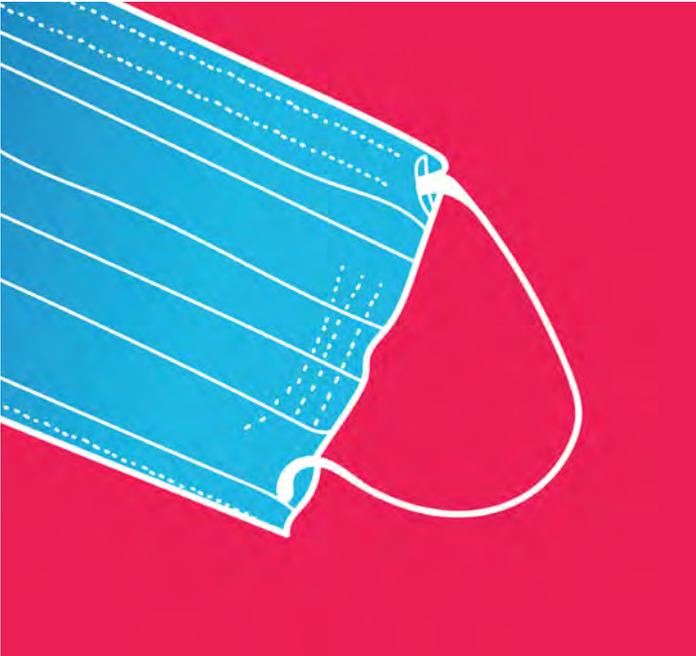


## Thank You!

While we like to thank each of you in writing for your generosity sometimes, if you only send a cheque or items for recycling in the post, it can be difficult to trace you with just a name and a postmark.

If you have donated to us and have not received a thank you it isn't because we are not grateful, we are!





# **The Queen's Veterinary School Hospital and Covid-19**



**While the whole of the UK went into lockdown in March 2020 The Queen's Veterinary School Hospital (QVSH) remained up and running, albeit under very different conditions. Continuing to adapt to the evolving guidance on COVID-19 the Hospital remained, and remains, dedicated to minimising risk and best ensuring the health and welfare of staff, students and visitors, as well as their patients.**

Many guidelines were put in place for clients of the QVSH. There is no admittance to the Hospital buildings for clients, with clinicians and students meeting them outside. Before gazebos were put in place for small animal appointments, if the weather was bad the pet was admitted to the Hospital and the consultation took place over the telephone. In our equine and farm animal areas the animal was unloaded by the owner and the owner then placed the animal in a stable. Both our equine and farm animal services offer visits to clients and so new ways of working had to be found. Avice O'Connor MVB GpCertEqP CertAvp (EM)

MRCVS, Equine Clinician at the QVSH said 'During the first lockdown, our services were limited to emergencies only. We carried out a large number of consultations over the telephone or online via photos or videos taken by the clients, before deciding if a visit was warranted. As restrictions lifted we were able to do more. At first we saw an increased number of cases in the Hospital, attended by a small team. This allowed us to reduce social interactions, whilst maintaining patient care. Case numbers have since returned to more normal levels. Interestingly, we have seen an increase in the number of requests for pre-purchase examinations, the horse market is booming!

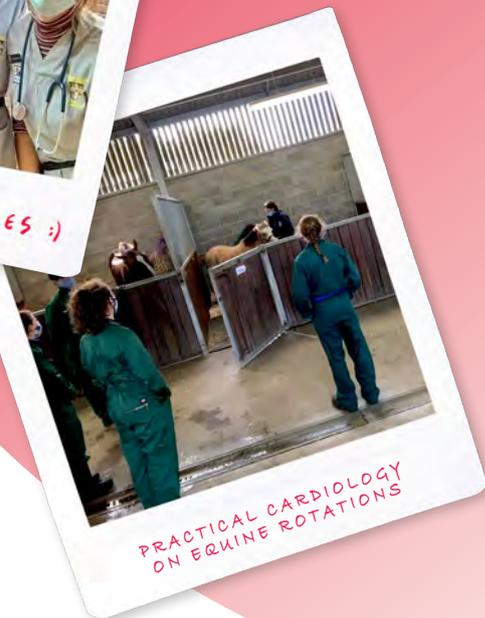
'Staff numbers were initially reduced slightly, however, we were relatively lucky in that while some staff continued to work in the Hospital or in the field, we also had client services administrators who could work from home, or on a rota basis in the Hospital. The students were sent home as soon as the first lockdown was announced. It was a sudden change to online teaching, with very



TEACHING IN THE SURGICAL  
DISCOVERY CENTRE



ROTATION 🐾 BUDDIES :)



PRACTICAL CARDIOLOGY  
ON EQUINE ROTATIONS

little warning or time to plan, compounded by the fact that our final years were in the home stretch of their time at university and were due to sit their final exams! The strength and good nature that they demonstrated during that time is something I will never forget.

'We adapted some of our teaching to live stream some cases during lockdown, which helped to make sure the students still felt part of the Vet School community whilst they were at home.

'At the present time, students drive to cases in their own vehicles, in small group bubbles. They stay in the same groups all year to minimise mixing. We are all very much looking forward to being able to share the same vehicle as soon as it is safe to do so. Car journeys provide valuable time to reflect on cases or discuss upcoming visits. We have noticed that our students have developed excellent navigational skills and it is not unusual for them to beat the vet to the visit!

'We always wear PPE and have adapted to doing things a little differently, but it is a challenge to maintain social distance while making sure students and patients are safe. We have enhanced our online resources and carry out some seminars online.'

When asked what the biggest difficulties faced by staff, students and clients were, and if there were any positives to have come out of the situation, Avic said 'I can't speak for everyone, but personally I found the lack of in person interaction with my colleagues and students the hardest challenge. Work is certainly more enjoyable now that our students and more colleagues have returned.

'The last year has taught us a lot about online learning and resource development and we will continue to integrate these resources in the future. It has also been a reminder of the value of our colleagues and students. It has been such a pleasure to see the students and seeing how happy they are to be back with live animals. As well as helping them to acquire new skills this has served to highlight how much we missed them.'

## How Can You Help?

Please help us to  
make a difference

The University of Cambridge Veterinary School Trust receives worldwide support, particularly throughout the UK, through its Friend's membership scheme, donations from Patient Owners and those who take out regular banker's orders for the benefit of the Trust. Other support is received from bequests, charitable trusts, industry and commerce, and through sponsorship and events. Our plans for the future are ambitious and challenging but, with your help, we can achieve our goals.

There are many ways you can support the Trust:

- Make a donation (by post, in person or online at [justgiving.com/ucvst](https://www.justgiving.com/ucvst))
- Add Gift Aid to your donation
- Contact us and ask for a collecting tin
- Take out a regular banker's order
- Become a Friend
- Leave a gift in your Will
- Organise a fundraising event
- Participate in an event
- Become a volunteer
- Join the Great Weather Lottery

Contact us for more information.



# BOAS Research



# Group



**The Cambridge BOAS Research group, based at The Queen's Veterinary School Hospital (QVSH), is run by clinical researchers, specialist soft tissue surgeons, a specialist nurse and biological scientists investigating respiratory disorders in brachycephalic canine breeds.**

Their aim is to improve breed health long-term and optimise current treatment options by implementation of evidence-based medicine. Brachycephalic obstructive airway syndrome (BOAS) is seen in a number of very popular breeds, including the French bulldog, English bulldog and pug.

The clinical team performs between five and ten BOAS assessments a week, using non-invasive techniques including functional grading and whole-body barometric plethysmography (WBBP). WBBP is a non-invasive and objective technique to measure respiratory function while the animal is fully conscious and minimally restrained. The animal rests in the WBBP chamber and respiration causes barometric pressure oscillations proportional to tidal volume. Through their assessments the team also collects DNA samples, head measurements, audio recordings and

thorough patient histories via owner questionnaire. The data obtained is used to identify patients who may benefit from further investigations and surgery to address elements of their airway disease, to help inform breeders about the respiratory status of dogs considered for breeding and to conduct clinical research.

At the QVSH, the soft tissue surgery team and BOAS research team work closely together to provide the best possible care for patients. All patients diagnosed with clinically significant BOAS undergo a thorough assessment, and comprehensive diagnostic tests, to allow the team to create a personalised surgery plan for each patient. Information gathered from every patient undergoing assessment and surgery is collated and studied by the research team to help improve the clinical practices provided by the Hospital. Following surgery, each patient is invited back for reassessment to ensure the patient has recovered well and clinical signs have improved.

***BOAS assessments currently take place on Mondays, Wednesdays and Thursdays. For more information please email: [vetboas@vet.cam.ac.uk](mailto:vetboas@vet.cam.ac.uk)***

**Pictured:** Lydia Smith RVN, BOAS assessor and Soft Tissue Surgery Specialist Nurse, and Superman the pug having his larynx auscultated for assessment of his BOAS

# Double Trouble!

**Meet George and Henry, bulldog 'brothers', who visited The Queen's Veterinary School Hospital (QVSH) together for BOAS assessment and surgery. They, along with their devoted owners, travelled a long way to undergo treatment with us.**

Henry's most concerning clinical sign before surgery was exercise intolerance – he would often take over 15 minutes to recover from even short periods of exercise. George on the other hand predominantly suffered with disturbed sleep. Both of these clinical signs are common in BOAS-affected dogs and were a clear justification for BOAS assessment. Henry was very excited during his BOAS assessment and severe stertor (noisy breathing) pre- and post-exercise was noted. George was a little shy but with some encouragement completed his BOAS assessment displaying moderate stertor pre- and post-exercise. Both dogs were deemed surgical candidates. Both George and Henry underwent BOAS investigations and surgery on their upper respiratory tract which involved a CT scan, rhinoscopy and a personalised surgery plan, before being closely monitored during their recovery in the Intensive Care Unit. A slight blip following discharge resulted in George being temporarily re-admitted to the QVSH for management of regurgitation but, after close monitoring and some additional medication, he was soon able to be reunited with his brother for the journey home.

The duo were rechecked via Zoom consultation a couple of months after surgery and the BOAS Team were delighted to discover that both dogs had made great improvements after surgery. Both dogs now recover quickly after exercise, and George can sleep smoothly without his breathing disturbing him multiple times a night.

Many of our clients travel long distances for their dogs to undergo assessment and BOAS treatment at the QVSH. Every effort is made to ensure, where possible, that the appointments, surgical procedures and discharges are scheduled to accommodate the logistical and safety implications of any long-distance travel for the patients, and to minimise the number of visits required.

**By Lydia Smith RVN  
Soft Tissue Specialist Veterinary Nurse**



# The KCGC at the University of Cambridge



**The Kennel Club Genetics Centre (KCGC) was created in 2009 to accelerate research into inherited canine disease. The main aim of the KCGC is the same today as it was twelve years ago; to investigate the genetics of inherited disorders that affect dogs and identify the positions in the DNA that underpin those disorders.**

A major objective of the KCGC's research is to develop DNA tools, based on the results of the research, that dog breeders can use to improve the genetic health of future generations of dogs. Veterinary surgeons can also utilise the same tests to help diagnose inherited disorders.

The KCGC focuses on diseases that are painful, blinding, require surgical or medical intervention or otherwise reduce the quality or length of life of affected dogs. In other words, the diseases that matter most to the dog and that inflict the most pain, discomfort, or long-term suffering. The KCGC researchers have been remarkably successful, having identified around 30 different mutations, each of which causes an inherited disease in one or more breeds. The KCGC has a very strong track record investigating inherited neurological and ocular diseases, including cerebellar ataxia in several breeds, as well as many genetically distinct forms of progressive retinal atrophy and glaucoma. Most of these mutations now form the basis of DNA tests that are offered commercially to dog breeders to help them reduce the risk of producing puppies that will go on to develop the inherited disorder in question. And the evidence shows that DNA tests work. In 2019 scientists from the KCGC and the Kennel Club investigated the impact DNA testing was having on disease. Data for eight different inherited diseases, collected at least five years after DNA test development, showed that DNA testing, coupled

with responsible breeding, had led to a reduction in the frequency of disease mutations of up to a staggering 90%. Most of the diseases that the KCGC researchers investigate are extremely difficult to treat, so elimination of the causal mutations using DNA tests is the most effective way to tackle these diseases.

The KCGC scientists work very closely with the Kennel Club, dog breeding communities and veterinary surgeons to identify and understand the inherited disorders that cause the biggest problems for different breeds of dog.

***DNA testing, coupled with responsible breeding, had led to a reduction in the frequency of disease mutations of up to a staggering 90%***

They then work closely with all relevant stakeholders to collect DNA from affected and unaffected dogs and investigate their DNA to find the variant(s) that are causing the disease. For single gene diseases, once the underlying DNA variant has been identified, it is usually a relatively easy task to develop a DNA test that breeders can use to find out which of their dogs are carrying the genetic risk factors and make appropriate breeding decisions.



The difficult part of the process is finding the disease mutation in the first place. The dog's genome is almost the same size as the human genome, and contains about 2.4 billion nucleotides, or letters of DNA, which is equivalent to 440 complete sets of the Harry Potter series! Some inherited disease can be caused by a single nucleotide of DNA that is incorrect, missing or in the wrong place and tracking down such small changes in all that DNA can be quite a challenge. To streamline disease investigations the KCGC has amassed significant resources since it was founded, including a collection of nearly 40,000 DNA samples taken from over 200 different breeds of dog. They have also sequenced the entire genomes (all 2.4 billion nucleotides of DNA) of over 200 dogs of 100 different breeds to create a 'genome bank' that has already contributed significantly to the KCGC's disease investigations. Using 'whole genome sequence' data it has been possible to identify causal mutations for some diseases from a very small number of affected dogs, enabling the development of DNA tests in a much shorter timeframe than it would have taken in the absence of the genome bank.

One breed to benefit from the genome bank is the Shetland Sheepdog. Breeders of these dogs were concerned about progressive retinal atrophy (PRA), a blinding condition for which there is no treatment. By comparing the whole genome sequence of a single PRA-affected Sheltie with the genomes of other breeds it was possible to identify a single genetic variant that they believe is the cause of this disease in this lovely breed. The investigation and its findings are currently undergoing peer review and they hope will be published shortly.

Many of the diseases that the KCGC has investigated to date have been single gene disorders. However, the Centre now plans to make an increasing impact on complex genetic diseases, such as epilepsy, as these diseases potentially compromise the health of the greatest number of dogs.

The Kennel Club Genetics Centre has recently moved to the Department of Veterinary Medicine at the University of Cambridge, from the Animal Health Trust (AHT) where the Centre was based previously. The KCGC continues to be led by Dr Cathryn Mellersh who moved to Cambridge in April with most of her previous team, and all the KCGC's precious DNA samples and scientific data. Dr Mellersh says, 'My team and I are very excited to be at Cambridge and to continue working with stakeholder groups to improve the genetic health of future generations of dogs'.

The continuation of the Kennel Club Genetics Centre is made possible by generous support from the Kennel Club Charitable Trust (KCCT) and the Kennel Club (KC). In addition to KCCT and KC support, the KCGC scientists also apply for grant funding from additional funding bodies including Dogs Trust, PetPlan Charitable Trust and the American Kennel Club Canine Health Foundation. Donations from Breed Clubs and individuals also play a very important role in their research and make a significant difference to the work that they can do.

**To find out more about the work of the KCGC please visit [www.canine-genetics.org.uk](http://www.canine-genetics.org.uk) or follow them on Facebook (@theKennelClubGeneticsCentre) and Twitter (@thekcgc). To make a donation please visit: <https://www.justgiving.com/ucvst> (ref: KCGC).**



**Pictured:** Dr Cathryn Mellersh (fourth from left) with the KCGC Team



**They say that if you are lucky you might get 15 minutes of fame. Well the last few weeks seem to have given me at least a fortnight of 'fame', if you can call it that.**

In the veterinary clinics I visit on my ambulatory eye referral service, as well as working at Cambridge Veterinary School, I've had several instances of people singing 'Eye of the Tiger' to me, a host of Facebook likes and even been styled Tiger King by some of my colleagues, which, having seen that TV series wasn't the warmest tribute! And all because back in February I was called by Shepreth Wildlife Park as one of their tigers had injured its eye. As you might imagine I was over there in a flash! Ratna, an 18 year old tigress, had indeed damaged her eye on a bamboo spike in her enclosure and the resulting infection was destroying the cornea. Basically, bacteria infecting the eye surface produced enzymes to help them invade the tissues, and then the white blood cells mobilised to fight the bacteria produced their own enzymes. All this made the cornea look like the Somme in the midst of a World War I battle.

The body produces its own inhibitors of these enzymes which circulate in the blood, so all we had to do was to get some serum from the animal and pop a drop in the eye hourly for a few days. Really? In a tiger?! It's difficult enough to do that in a domestic moggie if the same sort of problem were seen in them! The answer was to fashion a graft of conjunctiva (the tissue that lines the insides of the eyelids and covers the whites of the eyes) over the surface of the eye which would deliver blood onto the ulcer 24/7. It also protects the cornea until the ulcer heals and it naturally lifts off as the ulcer heals underneath. We perform this hood graft in cats and dogs but, to my knowledge, it has never been attempted in a tiger.

**Pictured:** David Williams (left) performing surgery on Ratna's eye  
Photograph by Rebecca Willers, Director, Shepreth Wildlife Park

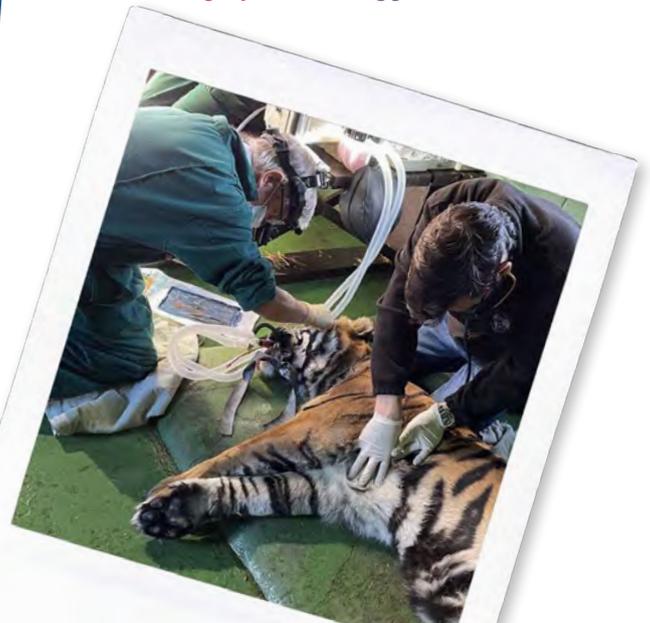
## The Tiger



The result wasn't perfect, but the key thing was that the eye was comfortable. In fact, Ratna had undergone cataract surgery elsewhere years before and probably hadn't had particularly good vision in the eye since then, so a worsening of sight in that one eye wasn't the end of the world. Once everything was better, Shepreth Wildlife Park were keen to get some publicity about the case and so contacted the BBC. It was the weekend before lockdown was eased and the corporation clearly wanted a good news story and this fitted perfectly. The story went viral, as they say. Ironically, the first people to contact me were colleagues at the vet school in Kandy, Sri Lanka. 'We deal with tigers every week' they told me 'but we never get this much publicity!'

Hopefully, through this unusual case, we can show more vets that this surgery could be valuable for their patients with cases of melting ulcers, which we have seen frequently this summer with the warm humid weather. Hopefully that publicity can help more animals than just those at Shepreth Wildlife Park.

**By David Williams MA VetMB PhD CertVOphthal  
CertWEL FHEA FRCVS. Associate Lecturer,  
Veterinary Ophthalmology**



# Neurology at QVSH

*An update from the Neurology Service at  
The Queen's Veterinary School Hospital*

**Despite the pandemic, the last year has been a very successful one for the Neurology Service at The Queen's Veterinary School Hospital (QVSH). We have seen Georgina Harris complete her residency and be replaced by Sara Formoso. Georgina then left the department for a few months before returning to take up a position as a clinical neurologist.**

Meanwhile Susana Monforte has entered her final year of residency training, and Sara Silva completed a year as our intern before gaining her own residency at Bristol University. Throughout these changes the service has become steadily busier under the supervision of its specialist veterinary neurologists, myself and Lisa Alves, with part-time assistance from An Vanhaesebrouck.

One of the most exciting developments are the collaborations we have formed with a number of organisations that are facilitating further growth of the service and especially more clinical research. Sam Khan has begun a PhD study looking into non-surgical treatment of intervertebral disc disease in dogs, work partly sponsored by the Kennel Club Charitable Trust (KCCT), Petsavers, the Debs Foundation and Dachshund

Health UK. Theresa Banu Yenen, a veterinary surgeon from Turkey, is midway through an MPhil looking into the role of calcium and other minerals in intervertebral disc disease (a disease which is all too common in the dachshund breed). Her work is also sponsored by KCCT as well as the Alice Noakes Trust. In addition, Camvet very generously agreed to fund the purchase of a freeze drier, which has allowed rapid processing and potential long-term storage of samples being used in Theresa's research. We have also been extremely fortunate to be able to link up with Dachshund Rescue UK (DRUK), a nationwide charity dedicated to rescue, rehabilitation and re-homing of dachshunds for all sorts of reasons.

As a charity they were keen to become involved with training and clinical research which would be of benefit to the breed they serve. Because of the nature of our research, they have agreed to fund not only a further MPhil student to start in October 2021, but also a third residency programme in neurology. From a clinical research point of view this will enable continuation of Theresa's exciting project. Bruno Scalia is the lucky recipient of the three year residency training programme, and joined the neurology team at the QVSH on 1st July 2021 to begin his three year training programme as the DRUK Senior Clinical Training Scholar in Neurology.

We are so extremely grateful to DRUK as well as Camvet and all the charities who have so kindly sponsored our training and clinical research. We are confident that our findings are answering some very important questions in clinical neurology, which may well lead to significant advances in the treatment of some painful and debilitating diseases over the coming years.

**By Paul Freeman MA VetMC CertSAO  
DipECVN MRCVS Clinical Neurologist**



**Pictured:** L to R: Paul Freeman, Susana Monteiro, Bruno Scalia, Georgina Harris, Sara Formosa Prado

# 2020 Virgin Money London Marathon



**The Trust benefits greatly from the Gold Bond Scheme run by the London Marathon, which guarantees charities a confirmed number of places in the race each year. In 2020 we had nine confirmed runners in our team, two of whom were making the journey from South Africa, to take part in the 40th running of the annual race.**

Sadly, due to the COVID-19 pandemic, the race was postponed from 26th April to 4th October 2020 and only allowed the elite runners to take part. While the mass participation event was cancelled, runners were given the opportunity to take part in a virtual marathon event, allowing people to run a marathon distance and record their own times. Over 43,000 people took part and, in January 2021, the virtual event received a Guinness World Record for most users to run an organised remote marathon in 24 hours.

While the majority of our runners decided not to take part in the virtual marathon, one brave runner did! David Gubb decided not to let his hard work go to waste and said of the event 'The whole experience was unique to say the least, first of all overcoming the disappointment that the original race was postponed, and then turned virtual - however having not done a marathon before, I really didn't have much to compare it to. Following the postponement, I let the training slip a little, I didn't really have a huge amount of motivation to keep up the intense amount, and vowed just to complete it.



'The route I did took me past the vet school. The actual day was quite wet, but not too cold, and I kept to well-known routes and spots that allowed some welcomed support from local friends who didn't fancy running any of it with me! But I had some fantastic support and saw some others running it virtually. It wasn't too tough mentally until the last 2km, this was 8km further than I had ever run before, but the help of friends for the last leg really helped get over the finish line in 4hrs15mins and get my big medal and T shirt! That and lots of Lucozade.'

We would like to thank David for his commitment and congratulate him, of course, on his amazing achievement! All of our runners for the 2020 race put such a huge amount of hard work into training and fundraising and we shared their disappointment that the race did not take place. However, we look forward to them running for us in the future.

Camvet has a Gold Bond Place for the London Marathon guaranteeing that we have five places for each race. Places are carried over if they are not filled or a runner has to drop out. If you would like to be considered for one of our 2022 places, or if you are lucky enough to be allocated one of the Marathon Ballot Places and would like to run on our behalf, please get in touch.

**Pictured above:** David Gubb (left) running the virtual marathon

# Equine Eye Case



By Anna Hollis BVet Med DipACVIM DipELEIM MSc MRCVS  
Clinical Director in Equine Studies

**Indi, a 16 year old Warmblood gelding, presented to the joint ophthalmology service, run by Cambridge Equine Hospital, University of Cambridge Veterinary School, and the ophthalmology specialists from Dick White Referrals, with a suspicion of a stromal abscess in the left eye.**

Stromal abscesses are a relatively common ocular disease process in horses, and can be sterile, bacterial, or fungal, affecting the middle layer (stroma) of the cornea (the surface of the eye). Indi's eye had been painful for around two weeks without improvement, so he was admitted for further investigation and treatment.

When Indi arrived at the Hospital the eye appeared painful, and he was sedated and local nerve blocks were performed to relax the eyelid to facilitate a thorough examination. A small creamy white opacity could be seen on the surface of the eye, with an area of disrupted epithelium (the outermost layer of the cornea) – the appearance was not quite typical of a stromal abscess!

The cornea is normally avascular, but new blood vessels could be seen migrating across the cornea towards the lesion. This is a common finding in horses with corneal disease, as the eye attempts to create an optimal environment for healing. Medical and surgical treatment options were discussed with Indi's owner, but it was felt that cutting out the lesion under standing sedation and local anaesthesia was the best option, avoiding the need for a general anaesthetic. The opacity was removed via a superficial keratectomy,

where the outermost and part of the middle layers of the cornea are removed, but the ophthalmologist is particularly careful not to puncture the eye! The piece of excised cornea was submitted to the lab, in order to try to establish a firm diagnosis.

Before Indi was referred a subpalpebral lavage system had been placed by his referring vet. This is a soft, flexible catheter that is implanted under the upper or lower eyelid, and runs from the eye, up the horse's head, and is plaited into the mane.

Many horses resent frequent application of eye medications, especially if the eye is painful, so this provides a more comfortable method of administering medication. Once Indi was admitted to the hospital after surgery, this catheter was connected to a pump pre-loaded with antibiotics, which infused a constant rate of medication slowly on to the surface of the eye. Medication only persists on the surface of the eye for a short period of time, so very frequent administration is usually required, which may be unpleasant for the horse. The use of the pump makes this experience much more tolerable. Indi also received intravenous pain relief to ensure he remained comfortable.

Indi stayed in the hospital for four days, during which time the results were received from the submitted corneal samples. This revealed that Indi had a corneal epithelial inclusion cyst, which has not been reported in horses previously! These occur when a small trauma to the eye results in normal epithelial cells forming a small pocket of epithelial cells and their cell debris. This news meant that the prognosis for Indi's eye is excellent, and the treatment performed is expected to be curative.



Indi's eye at initial examination, showing the corneal opacity (yellow arrow) and the blood vessels migrating across the cornea (red arrow)



Indi's eye immediately after surgery, showing the area of the excised cornea (yellow arrow)



Appearance of the eye at re-examination on 18th July - the blood vessels have extended to the surgery site, which appears to be healing well

# St Lucy Designs



Photos of homeware by Julia Lucas

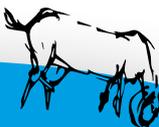
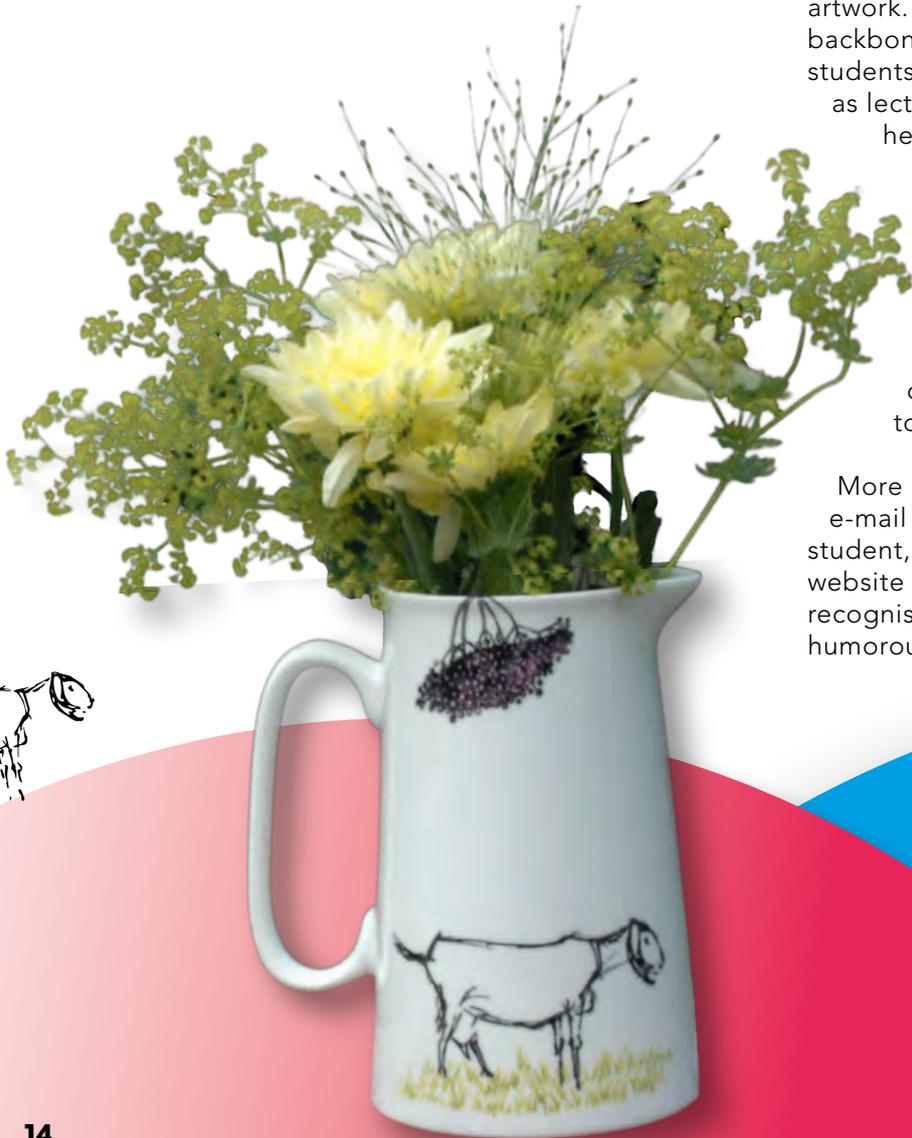
In 2008 the Trust was approached by local designer Lucy Burt-Gray who asked if the Trust would like to receive a percentage of all sales that were made from her new collection of greeting cards, later expanded to include a selection of bone china homeware, and launched under the umbrella of St Lucy Designs. We were, of course, delighted with this generous offer, and even more delighted when we heard the story behind it.

Lucy's beautiful collection features exquisite illustrations of animals and scenes, many from Cambridge life, drawn by her late father Donald Steven, an internationally recognised expert in veterinary medicine, a gifted teacher and an accomplished artist. Lucy told us that her father had greatly enjoyed his long and illustrious career at Cambridge Veterinary School, which inspired much of his art, and she wanted to give something back to the School in recognition of this.

In a tribute to Donald, following his death in 2005, former students Dr Ian Wright and The Rev Dr Jonathan Holmes wrote in *Veterinary Record* 'He was a magnificent teacher and a gifted artist, illustrating lectures and handouts with his own artwork. These remained for over 30 years the backbone of anatomy teaching for veterinary students at Cambridge. In addition to official roles as lecturer, supervisor and director of studies, he served also as an unofficial mentor to numerous veterinary students.

'His quiet, non-intrusive manner brought peace and logic to every situation. He had research interests in placentation, and many of his anatomical and ultrastructural observations laid foundations for others to follow.'

More recently Lucy received a touching e-mail from Simon Chedzey, another former student, saying 'I just chanced upon your lovely website – and was thrilled to immediately recognise your father's uniquely talented and humorous hand.



'Donald was my Director of Studies at Churchill College back in the 70s, and his charming drawings truly brought veterinary medicine to life for so many of us. I have often thought of him since then – and with ever growing appreciation. I am delighted that you are enabling others to enjoy his brilliant artwork.'



**Donald  
Steven**

We are thrilled to be involved with Lucy and her wonderful collection and hope that many people will be able to see and appreciate the beautiful artwork that is only one small part of her father's much wider legacy.

The complete range of Lucy's designs can be viewed, and a list of stockists found, on her website and Facebook page, or contact Lucy directly via e-mail, addresses below.

-  [www.stlucydesigns.co.uk](http://www.stlucydesigns.co.uk)
-  [facebook.com/stlucydesignsc](https://facebook.com/stlucydesignsc)
-  [info@stlucydesigns.co.uk](mailto:info@stlucydesigns.co.uk)
-  [www.julialucas.mypixieset.com](http://www.julialucas.mypixieset.com)
-  [@\\_julialucas\\_](https://www.instagram.com/_julialucas_)

## Moments: An Exhibition of Modern Art



John Brandler, one of our wonderful supporters and owner of Brandler Galleries in Brentwood, Essex, has been working with Moyses Hall Museum in the centre of Bury St Edmunds to display a range of street art by, amongst others, Tracy Emin, Damien Hirst, The Connor Brothers, My Dog Sighs, Blek le Rat, Pure Evil, Rachel List and the Kaws. The exhibition, Moments: An Exhibition of Modern Art, featured 150 works of art, both original pieces and prints, by 23 internationally renowned artists, and included eight original works by the world's most exciting and controversial artist Banksy.

The exhibition ran until the 30th September and, on the evening of Saturday 18th September, a limited number of guests were able to enjoy a tour of the exhibition, followed by a drinks reception, where they were able to browse the art at their leisure, and then partook in a small auction of signed prints and posters from some of the featured artists, in aid of Camvet.

We are also delighted that Fleur Sumption - a local ANIMAL artist – was able to display some of her wonderful work and generously donated an original piece to the auction. You can view Fleur's work on Instagram **@mayfineart**

The event raised over £2,000 and we would like to thank John, Linda and Daphne, Dan Clarke and his team at Moyses Hall Museum and everyone who attended for their incredible support.

**Pictured:** Bunny Girl by Pure Evil





# Banker's Order Form

INSTRUCTION TO YOUR BANK OR BUILDING SOCIETY TO PAY BY STANDING ORDER



Name(s) of Account Holder(s)			
Personal Account Number	<input type="text"/>	Sort Code	<input type="text"/> <input type="text"/> <input type="text"/>
Address of Account Holder(s)	Name and full postal address of Bank or Building Society		
<p>Please pay the University of Cambridge Veterinary School Trust, Account No. 10773972, Barclays Bank plc, St Andrews Street, Cambridge (Sort Code 20-17-19)</p> <p>£ _____ on the _____ (day) of _____ (month) _____ (year) and on the same date each succeeding year / half year / quarter year / month* for _____ years or until you receive instructions to close this order. *Please delete as applicable.</p>			
Signature(s) of Account Holder(s):			
Date			

*giftaid it*

**This Donation includes my Friend's Subscription (please tick if applicable)**

**Please tick this box to Gift Aid your donation**

To qualify for Gift Aid the amount you pay in UK Income Tax or Capital Gains Tax must at least equal the amount we will claim in the tax year.

## Our banker's order guarantee

THIS GUARANTEE SHOULD BE DETACHED AND RETAINED BY THE PAYEE

- This guarantee is offered by The University of Cambridge Veterinary School Trust.
- The amounts to be paid and the payment dates will not be changed by The University of Cambridge Veterinary School Trust without prior instruction from you.
- If an error is made by The University of Cambridge Veterinary School Trust you are guaranteed a full and immediate refund of the amount paid.
- You can cancel a Banker's Order at any time by writing to your Bank or Building Society. Please also send us a copy of your letter.



Tel: 01223 337630/764475 [camvet.vet.cam.ac.uk](http://camvet.vet.cam.ac.uk)