

fitzpatrickreferrals
AUTUMN 2017

**Better Together** 





ONCOLOGY AND SOFT TISSUE TURNS TWO | BY PROFESSOR NICK BACON DOING THE ORDINARY EXTRAORDINARILY WELL | ORTHOPAEDICS REVIEW CASE STUDY | LILLY AND TARA'S STORY
FIRST | NEW REGENERATIVE MEDICINE SERVICE
REGULAR FEATURES | CLIENT COLUMN & FITZ & PIECES

ORTHOPAEDICS SPECIAL

**WELCOME TO THE AUTUMN EDITION OF THE** FRIENDS NEWSLETTER

"The future is not a result of choices among alternative paths offered by the present, but a place that is created - created first in the mind and will, created next in activity. The future is not some place we are going to, but one we are creating. The paths are not to be found, but made, and the activity of making them changes both the maker and the destination." **John Schaar** 

Change is inevitable. Ambitious, aspirational people will come and go and there is a constant flow of young people wishing to learn different aspects of our trade. In equal measure our environment is a bubbling cauldron of activity, creativity and productivity with a sprinkling of chaos, but it continues to keep me alive and invigorated with a long service medal in sight.

In September we said goodbye to Dr Stephen Kalff; he is heading to Silicon Valley to join his lovely wife after she won a fantastic promotion. Stephen has been a great asset to our team and we wish him well on his next big adventure. We are going to miss you big time Stevo. Bon voyagio!

Welcome back to Dr James Guthrie who has finished his ECVS residency-training program. Now ECVS eligible, he returns as Surgical Registrar. In addition

to our amazing nursing team, we continue to be supported by our current resident team Drs Susan Murphy, Padraig Egan, Laura Homer and Jayson Tuan. We hope that if a Senior Clinician is not immediately available to first opinion vets for telephone advice and emergencies, our resident team will bridge the gap.

However busy we can be, our patients are our priority and we endeavor to continue to provide a service that offers the support our clients and patients need and deserve. Drs Miguel Solano, Russell Yeadon, James Guthrie, Noel Fitzpatrick and myself perform the full range of elective and emergency orthopaedic surgeries including the weekend emergency neurosurgery service. The dedication of this team is what makes this service special. We would like to reflect the service you provide to your clients and hence welcome any feedback.

We have the privilege to be involved in educating others on site, such as inspiring and supporting the development of our junior staff. Off-site, a key summer event is VET Festival – what a great vibe! This is an amazing CPD event with a laid-back atmosphere and great music. What more could you ask for when you have to sit in a dark tent! Think TED talks & Glastonbury... you will never nod off again! VET Festival provides you the opportunity to meet veterinary educators who want to inspire others, and we all hope that you find this education useful. I welcome any feedback or ideas that can be used to support you in general practice. If you have any requests in the area of orthopaedics, please feel free to send your ideas to enquiries@fitzpatrickreferrals.co.uk with the subject line 'FAO Sarah G VET Festival Ideas.'

Mark your calendar for Friday 8th and Saturday 9th June 2018!

Sarah



**ONCOLOGY AND SOFT TISSUE TURNS TWO** 

### A personal note from Professor Nick Bacon

Two and a half thousand dogs and cats sounds an awful lot when it is written down. Since September 2015, that is the number of patients that have walked or been carried through the sliding doors at Fitzpatrick Referrals Oncology and Soft Tissue on the Surrey Research Park in Guildford. Some vets claim to remember every single patient, but I cannot truthfully say I remember my entire share. I am however certain that a member of our team remembers every case in some way. We might remember a name – Jasmine, Buddy, Mystic or Milo for example. Perhaps the background story – a rescue, a saviour, a companion or a reason to get up in the morning. Sometimes the owner is memorable – particularly friendly, tears of relief or painfully sad. It is occasionally the circumstance that sticks – puppies with cancer, wounds that don't heal, unexpected deaths, changing the game or having to change our game.

None of us are the same person we were two years ago. We all learn, we evolve, and we have successes and failures. For the past two years, I am pleased to say that the clinical team has constantly learned and evolved. Most notably in 2017 we have been joined by Dr Jonathan Bray, a gifted surgeon-scientist from Massey University in New Zealand, and Dr Gerard McLauchlan, a Fellowship-trained Interventional Radiologist from Glasgow who brings with him a remarkable skill set. We sadly said goodbye to Dr Kelvin Kow, but Sofia Carvalho has been moving the Medical Oncology team forward

whilst we finalise the newest member of the team. We certified as an International Cat Care Cat Friendly Clinic at Gold level and have achieved the RCVS Hospital status, both of which resulted from the practice working together to showcase the facilities, the philosophy

To all of our colleagues in practice who have supported us these past two years, I thank you and hope you will continue to trust us moving forward. We do our best to look after your client with the best possible standards, and we welcome any feedback on how we might

improve. I would also extend a sincere offer to show our veterinary colleagues around if you are ever in the area; I am very proud of the hospital, but I am even prouder of the people in it.



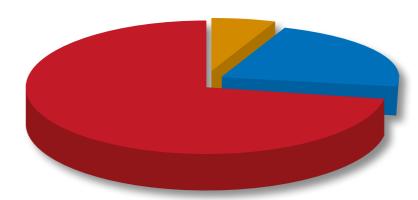


Professor Nick Bacon in consultation with patient Brinkley

**DOING THE ORDINARY EXTRAORDINARILY WELL** 

Through the dedication and skill of our orthopaedic specialists and extended patient care team, we are able to treat a wide range of small animal clinical conditions every day. This includes routine procedures for developmental elbow disease, cruciate ligament disease, patellar luxation and fracture management, ranging through to the more unique and complex surgeries such as limb salvage procedures and limb deformity correction.

More than 3/4 of all orthopaedic procedures at the practice are routine or conventional surgeries for everyday conditions. Our most frequently performed surgical procedure is Tibial Plateau Levelling Osteotomy (TPLO) for management of cranial cruciate ligament disease, followed by elbow arthroscopy most commonly for management of conditions such as medial coronoid disease, medial compartment disease and osteochondrosis.













We take pride in ensuring that TPLOs are performed We typically use the most up-to-date locking to the highest possible standard. There is now strong evidence that TPLO provides the most predictable positive outcomes for dogs with cranial cruciate ligament disease by comparison with a variety of alternative surgeries including Tibial Tuberosity Advancement (TTA)<sup>1,2,3</sup> and this is the reason we tend to recommend it as our mainstay for treatment of this common but debilitating condition. We will perform TTA in specific indications for cranial cruciate ligament rupture, often where there is propensity for concomitant patellar luxation. We anticipate that more than 90% of patients undergoing TPLO surgery for treatment of 'uncomplicated' cranial cruciate ligament disease will have a very good or excellent outcome, with the and we pride ourselves on everything that we vast majority returning to full activity levels with no ongoing visible lameness. Our complication rate is low, and we have openly documented this in a published retrospective review of our cases.4

implants, and have documented a benefit to this sort of fixation in our larger patients in particular.<sup>5</sup>

by Russell Yeadon

Although at Fitzpatrick Referrals we have a reputation for ground-breaking and innovative procedures, such as custom implant placement, these only make up a small percentage of the case mix. We do far more advanced orthopaedic procedures, such as total hip replacement, than we do of these innovative procedures, and take pride in being able to offer a full range of surgical options for our patients.

We always do our very best for every patient do, whether it is in science for the benefit of our patients or performing a TPLO. We believe that it is not just the extraordinary innovations that matter, but also that we do the ordinary extraordinarily well.

- 1. Krotscheck U, Nelson SA, Todhunter RJ et al: Long Term Functional Outcome of Tibial Tuberosity Advancement vs. Tibial Plateau Leveling Osteotomy and Extracapsular Repair in a Heterogeneous
- 2. Christopher SA, Beetern J, Cook JL.: Comparison of long-term outcomes associated with three surgical techniques for treatment of cranial cruciate ligament disease in dogs. Vet Surg. 2013
- 3. Gordon-Evans WI, Griffon DI, Bubb C et al: Comparison of lateral fabellar suture and tibial plateau leveling osteotomy techniques for treatment of dogs with cranial cruciate ligament disease. I Am
- 4. Fitzpatrick N, Solano MA. Predictive variables for complications after TPLO with stifle inspection by arthrotomy in 1000 consecutive dogs. Vet Surg. 2010 Jun;39(4):460-74.
- 5. Solano MA, Danielski A, Kovach K, et al: Locking plate and screw fixation after tibial plateau leveling osteotomy reduces postoperative infection rate in dogs over 50 kg. Vet Surg. 2015 Jan;44(1):59-64.



# LILLY & TARA'S STORY

Lilly is a seven-year-old Boxer who lives with the Stewart-Andris family and loves nothing more than causing havoc with her five-year-old sister Tara. They were both referred to Fitzpatrick Referrals at the same time by their family vet in November 2016 with pelvic limb lameness, and were admitted by Russell Yeadon with suspected cruciate ligament injuries.

On clinical examination, Lilly was affected by right pelvic limb lameness and pain affecting her right stifle with effusion and medial buttress formation (fibrosis). Slight cranial drawer instability was noted in flexion. Tara was affected by mild bilateral pelvic limb lameness and pain on extension of her stifles along with effusion and medial buttress formation (fibrosis). She had a greater degree of muscle wastage on her right pelvic limb than her left.

After a night spent in the comfort of their own beds at home, Lilly and Tara returned the following day for surgery. They were anaesthetised a few minutes apart and transferred to the imaging team for radiography.

X-rays confirmed evidence of right stifle joint effusion in Lilly and bilateral stifle joint effusion in Tara, as well as mild osteophytosis in both. These findings were

consistent with a diagnosis of cranial cruciate ligament tears for both dogs. Lilly and Tara were both prepared for surgery and successively underwent the same procedure on their right stifles, with Tara operated less than an hour after Lilly.

Russell performed a mini-medial sub-patellar arthrotomy of the right stifle, which confirmed a 90% rupture of the cranial cruciate ligament for Lilly and a 50% tear for Tara. Meniscal tears were not identified in either dog. Both dogs then underwent standard tibial plateau-levelling osteotomy (TPLO). The osteotomies were stabilised with Synthes 3.5mm 6-hole TPLO plate and screws, with the 'small' variant of this plate being used for Lilly to suit her more delicate bone anatomy. Postoperative radiographs confirmed satisfactory alignment and stability.

### Post-op X-rays of Lilly and Tara's stifle following TPLO surgery









Tara

Following the surgery, Lilly and Tara recovered in adjacent kennels and walked outside together for toilet breaks and fresh air. 24 hours after the surgery, Lilly and Tara started to weight-bear on their operated limbs and were comfortable enough to go home with anti-inflammatory medication and exercise restriction.

Seven weeks postoperatively, Lilly and Tara had recovered well with significantly reduced lameness. Both seemed comfortable on stifle joint examination and manipulation. Follow-up radiographs confirmed good positioning of the metal implant and satisfactory osteotomy healing.

Lilly and Tara have since then literally come on in leaps and bounds and now live a fully functional and happy life together in their family home. Fitzpatrick Referrals continue to work with their family vet as part of the care team for Lilly and Tara to manage postoperative reassessments and monitor their progress.



VetMB MA CertSAS DipECVS MRCVS Senior Surgeon in Orthopaedics

Russell graduated from the University of Cambridge in 2003. After a period of time in general practice in Bedfordshire, he completed internships both at Fitzpatrick Referrals and at Davies Veterinary Specialists in Hertfordshire. He then undertook a three-year residency training position shared between the University of Glasgow and Fitzpatrick Referrals during which time he was heavily involved in the clinical research programme at Fitzpatrick Referrals, and was awarded the RCVS Certificate in Small Animal Surgery in 2009. More recently, Russell accepted referrals in orthopaedics, neurosurgery and soft tissue surgery both as a locum surgeon at the University of Cambridge and at Vets Now Referrals in Swindon. He gained the ECVS Diploma in Small Animal Surgery in 2013 before joining Fitzpatrick Referrals as a Senior Surgeon.

"Lilly and Tara are gorgeous dogs who are obviously very attached both to each other and to their human family. They are both very affectionate and enthusiastic but also have very distinct personalities, sometimes competing with one another for attention. Both dogs were very disabled by their cruciate ligament problems before surgery, and it is really rewarding to be able to get them back to their usual active lifestyles." Russell Yeadon

"My journey with Fitzpatrick Referrals has been epic. Four boxers over a period of ten years, each of which have experienced the little bit of the 'magic' that Fitzpatrick Referrals offer. Roxy on recovery from a car accident and then consequently Scarlet with two TPLOs, Tara with one TPLO and Lilly with two TPLOs. From the caring attitude of the receptionists to the nurses and vets, there has always been a sympathetic and understanding ear coupled with a pragmatic approach of achieving the best for each of my girls. I have always known that the advice and treatment offered will be what is best for them. In Lilly and Tara's case, having the same surgery performed on the same day proved to be an experience. Handing over not only one of your dogs, but both, certainly left me feeling exposed. Lilly and Tara are rarely separated, but knowing that they would be close to each other during the recovery and the care and attention given to them made it easier to

be close to each other during the recovery and the care and attention given to them made it easier to leave them in Fitzpatrick Referrals' capable and caring hands. As a result, they are both continuing to enjoy life to the fullest." Lilly and Tara's mum, Sharon

(4)

## **Innovative Orthopaedic Procedures**

Alongside our daily caseload of routine orthopaedic procedures, we perform a small number of advanced and custom procedures for dogs where traditional surgical methods may not be appropriate or when the problem is so complex or unusual that only a custom implant can help. By working closely with a team of biomedical engineers, we are able to provide innovative solutions for animals who would otherwise face a lifetime of medical management, loss of limb or euthanasia. Here are some interesting examples of patients who have benefitted from this unique teamwork.

### MAX **ENDOPROSTHESIS**

Max is an eight-year-old 69kg Bull Mastiff who was referred for limb-sparing surgery due to a lytic bone tumour affecting his distal radius that eventually proved to be an osteosarcoma. Tumours of the distal radius are common in large dogs and we have developed a standardised system in three sizes enabling us to keep implants in stock and operate on patients shortly after diagnosis. Prior to this, patients would have needed to wait weeks for custommade implants or use traditional implants, which have worked less well for us.

Surgery was performed the next day and after a couple of weeks in hospital Max was able to go home. Max returned to the practice for an initial chemotherapy protocol and continues to return for metronomic treatment and monitoring. Max has survived a remarkable two years postoperatively and he continues to do well.



### **PEANUT**

### PERFITS

Peanut is a two-year-old cat who was referred with severe congenital orthopaedic and neurological abnormalities affecting both his lower forelimbs, though he had functioning shoulder and elbow joints. Peanut's surgery was postponed until he reached skeletal maturity, giving the bioengineers plenty of time to design the tiny implants he needed. Surgery took place six months later.

Following amputation of the distal manus and carpus bilaterally, the implants were placed. Peanut's tiny implants consisted of a medullary peg that inserted into the distal radius and two plates attaching to the radius and ulna. Beneath this a trabecular metal dome was situated to encourage skin on-growth, leaving a spigot in the external environment onto which an exoprosthesis is attached and changed as needed.

Peanut was able to go home after a few weeks of daily bandage changes and now runs riot in the quarry outside his family's home.



### FLO | OSTEOCHONDRAL PLUG

Flo is a two-year-old Italian Spinone who was affected by an osteochondritis dissecans lesion on her left caudal humeral head. Following a discussion detailing all of the available options, her family elected for a custom biphasic implant consisting of a titanium base and matrix of polylactide into which autologous chondrocytes were seeded. The implant was designed to fit the shape and depth of Flo's defect and surgery took place a month later. Nearly two years later, Flo has a normal, pain-free life and is able to enjoy long walks with her family.





### FINLEY | CUSTOM HINGED TOTAL ELBOW REPLACEMENT

Finley is a 3-year-old Springer Spaniel who was presented with ongoing pain and lameness attributed to chronic mal-union of an elbow fracture he sustained as a puppy. A custom hinged total elbow replacement was designed and manufactured, which consisted of a humeral component anchored to the bone with screws, a bone on-growth peg and collar and an ulnar component that was linked with a hinge and secured with a plate and screws.

Over a year later, and after some intensive physiotherapy in the first few months, Finley is able to exercise freely for over an hour each day and is pain-free without the need for medication.





### CUSTOM HINGED TOTAL KNEE REPLACEMENT

Lucy is a 10-year-old Golden Retriever who was referred with significant pain and lameness affecting her left pelvic limb attributed to considerable arthrosis -bone wear and complete erosion of the caudo-medial tibial plateau A custom rotating-hinge total knee replacement was designed and manufactured because of disruption of the cruciate and collateral ligaments. This consisted of two stems anchored into the femur and tibia using cement and hydroxyapatite on the bone abutment surfaces

Six months postoperatively, Lucy's lameness has completely resolved and she enjoys

# Fitzpatrick Institute for the Restoration of Skeletal Tissue **NEW REGENERATIVE MEDICINE SERVICE**



Whilst there is a multitude of exciting applications for stem cell technology, the service will begin by offering intra-articular adipose-derived stem cell injections to alleviate clinical symptoms associated with osteoarthritis. In recent years, we have successfully harboured this incredible cell technology to provide

unique solutions for patients with complex orthopaedic problems by combining it with our custom surgical implants. We hope that by launching this dedicated service we will further expand the options available to our patients and their families where traditional methods of medical management have not been entirely effective or where surgical interventions are not applicable or less desirable.

Stem cells have been the subject of intense research in human medicine and

research has demonstrated that skeletal stem cells can alleviate pain and inflammation associated with osteoarthritis and can improve the quality of damaged bone and cartilage within the joint in some situations. Low levels of poor quality research exist in veterinary medicine, despite what we have learned from studies in humans. With this in mind, patient

data and measured outcomes will be assessed in order to establish an evidence base and promote ethical and effective therapeutic interventions to optimise the outcome for current and future patients.

The service will initially offer concentrated Platelet

accepting referrals into this

of our specialist colleagues,

world-class facilities.

Rich Plasma (PRP), an autologous adipose-derived Our dedicated onsite veterinary stromal cell culture expanded and utilised at early passage, team are experts in stem cell and a co-administration of regenerative medicine and bone both. It is vital to Fitzpatrick tissue bioengineering, and are Referrals that we are able to provide a trustworthy and service. We are proud that this morally responsible service and new initiative will sit alongside so, uniquely amongst those our existing Orthopaedics and services already commercially available, we will be Neurology hospital in Eashing standardising the quantity and and benefit from the support characterising the phenotype of all cells to ensure safe and extensive veterinary team and specific doses can be given.

> The overarching aim here is to broaden the scope of

options to families and their dog or cat affected by osteoarthritis, whether that be with surgery or regenerative medicine incorporated as part of a program of comprehensive medical management. In the future, we hope to utilise this powerful technology for a broader range of applications.

Professor Noel Fitzpatrick laying the foundation stone for the FIRST building



# CLIENT COLUMN Our Bobby By Marc Etheridge

# Experience a day with us

Calling all registered veterinary nurses — are you thinking of making the move to referral practice but are perhaps not sure if it's right for you? We have opportunities available to shadow our team of registered veterinary nurses at both of our practices. You will be able to experience a typical day at Fitzpatrick Referrals and establish whether referral nursing is the right career step for you. The hours can be used towards your CPD so if you are interested in spending a day with us, get in touch. Please send your CV with a letter of interest indicating whether you wish to visit the orthopaedic and neurology practice, or the oncology and soft tissue practice, to recruitment@fitzpatrickreferrals.co.uk. Please note: this is for qualified registered veterinary nurses only.

# Fitz & Pieces

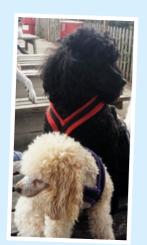
We are always looking to strengthen our team with skilled, dedicated and passionate professionals. Please visit our website for a full list of job vacancies: fitzpatrickreferrals.co.uk/jobs.

Bobby, our three-year-old Miniature Poodle, had seemed to be struggling to keep up with his playmate, Amy the Toy Poodle, and had started to develop an intermittent limp. Our family vet suspected cruciate ligament problems and took some X-rays. These showed that the poor chap had a problem that meant that his

hip would pop in and out of joint. They referred us to Fitzpatrick Referrals where we met the lovely Dr Sarah Girling, Senior Surgeon in Orthopaedics, who confirmed exactly what was wrong with young Bobby. Sarah explained that Bobby needed a hip replacement and totally reassured us with her confident, experienced and kind attitude. He spent three very long days at Fitzpatrick Referrals Orthopaedics and Neurology and then returned home with restricted exercise instructions.

It was so difficult looking at Bobby's sad face behind bars in corner of the room every day, but after following Sarah's post-operative exercise regime carefully and practicing the home exercise plan developed by Fitzpatrick Referrals' physiotherapy team, Bobby was given the all clear. He is now enjoying life more than ever! Not only can he do the important things again such as chasing tennis balls... but also a lot of his silly playfulness has returned! We had not seen this for a while and had put it down to 'growing up' when in fact; it was because the poor fellow was in pain.

On a lighter (but true) note, I had to undergo exactly the same surgery at the same time as Bobby, and I would not have minded having my hip replaced at Fitzpatrick Referrals! We cannot thank Sarah and all of the team at Fitzpatrick Referrals enough for such a wonderful, caring and efficient service.





Post-op radiograph following Bobby's hip replacement surgery

# FESTIVAL

8-9 June 2018 Loseley Park, Surrey

Centaur Services

### SAVE THE DATE!

One of the most anticipated events in the veterinary CPD calendar, VET Festival will return to Loseley Park on Friday 8th and Saturday 9th June 2018 to continue its mission to break the mould for the delivery of veterinary education.

To book Super Early Bird tickets with 25% discount, please visit vetfestival.co.uk

### **ESVN-ECVN Symposium**

We are thrilled that Dr Clare Rusbridge, Fraje Watson, Dr Ricardo Fernandes, Dr Anna Tauro and Joana Tabanez had eight clinical abstracts accepted for the European College of Veterinary Neurology Symposium in Helsinki - as well as winning the award for the best neuro imaging presentation! This is a fantastic achievement for the team – well done to all!



# New research helps dogs and children with Lafora disease - a rare and severe epilepsy

New hope is being given to children who suffer from a rare and severe form of epilepsy, thanks to unique research carried out by Fitzpatrick Referrals in partnership with University of Surrey. The research, published in PLOS One, has identified the progression of Lafora disease — a devastating form of epilepsy which affects up to 50 young children worldwide. Dr Clare Rusbridge, Chief of Neurology at Fitzpatrick Referrals, said:

"Lafora disease is a fatal disease that causes unbearable suffering for dogs and in rare cases, young children. Due to its rarity, little is known about the onset of this illness but what we have discovered, with the help of dog owners, is the clinical signs of Lafora disease which may help lead to quicker diagnosis. The more we learn about Lafora, the better chance we have of treating it effectively."

### **IN AN EMERGENCY**

To discuss a case or for any urgent or emergency referrals, please call us

For Orthopaedic and Neurological emergencies 01483 423761

For Oncological and Soft Tissue emergencies 01483 668100

For more information visit fitzpatrickreferrals.co.uk



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