



BSAVA
PetSavers

Impact Report **2023**

**TOGETHER WE CAN HELP OUR COMPANION ANIMALS
LIVE LONGER, FULLER AND HEALTHIER LIVES.**



Introduction

Welcome, everyone, to our 2023 impact report.

For BSAVA PetSavers and myself, as Chair of PetSavers Management Committee, 2023 has been a year of discovery, the implementation of new innovations, challenge and the excitement of more to come.

Hard economic times have knock-on effects for all charities, and the significant stresses on our veterinary professions also have indirect effects on BSAVA PetSavers. Despite these, we have had another very successful year in numerous ways, and here we share the highlights with you, whether it be awarding our first Research Fellowship, the findings of our recently published research, or the launch of our Ageing Canine Toolkit.

Rosie Godfrey

Chair, PetSavers Management Committee

Our purpose and mission

As the clinical research arm of BSAVA, our overriding purpose is to drive excellence in veterinary practice to improve the health and welfare of small animals.

Our specific mission is to fund clinical research into the prevention, diagnosis and treatment of diseases of pets, so that vets always have the knowledge they need to counter the distress and pain caused by those diseases.

We are one of few funders solely focused on clinical research into companion animal disease, and we strive to be at its forefront in the UK. Through the types of grants we offer, we provide undergraduates, postgraduates and clinicians in practice the opportunities to start their researcher journey, and more established young researchers the chance to progress their career.



PetSavers is one of a limited number of research funders that specifically encourages clinical research to be conducted in companion animals for the benefit of companion animals.



Professor Adrian Boswood

Professor of Veterinary Cardiology and Vice Principal for Learning, Teaching and Assessment at the Royal Veterinary College

Our wonderful supporters

This year, we wish to start our impact report with you – our wonderful supporters. Our supporters take many forms; they may be our alumni and researchers whose hard work brings about the changes in companion animal veterinary medicine that we see and report on. Or they may be our vital fundraisers, volunteers, donors and legators, who often begin our stories of improved pet health, better diagnosis and less suffering. Without these amazing people, PetSavers could not continue.

Terry Heath's legacy

Teresa Heath, known as Terry, always had a love of animals and owned a number of beloved pets throughout her life. Later, after owning Kirsty the English Bull Terrier, she became smitten with the breed and went on to own, breed and show many English Bull Terriers. She also had her own boarding kennels.

Terry was passionate about the health and welfare of dogs, and was particularly inspired by her own English Bull Terriers to investigate diseases that they were predisposed to. She engaged with vets to set up free health screening at dog shows and became very interested in epidermal, cardiovascular, neurological and behavioural problems associated with the breed.

On her death at the age of 72, she left a very generous legacy to PetSavers for research into canine diseases. We have started to carry out Terry's wishes to improve dog health by using some of her legacy to fund a clinical research project at the University of Cambridge on 'Flow cytometric analysis of Ki-67 expression in canine cutaneous mast cell tumours and its prognostic value' (£18,860.97).



If you have the Will, we have the way

Whether large or small, your legacy gift will help ensure that advances in veterinary medicine continue long into the future. If you are interested in leaving a legacy to PetSavers, please go to our website (bsava.com/petsavers/legacies) or email us at petsaversadmin@bsava.com

**REMEMBER US IN
YOUR WILL**
Help our work live on...



...only with good research can we gain the evidence to improve treatments and diagnostic techniques, and potentially help provide better outcomes for animals in our care and their owners.



Christine Pye

Veterinary surgeon and PhD student whose master's degree was funded by PetSavers



New lay committee member

This year, for the first time, PetSavers has a layperson on its management committee. This key role will ensure a wider and fresh perspective on the work of the committee and help provide us with greater independence for the work that we do.

Nadia Davies, Director of Business Development at Solihull College and University Centre, joins us as the PetSavers Management Committee layperson. Alongside her day job, she created and launched the online and social media platform 'More Purrs' to channel her passion and commitment to championing the welfare of domestic cats, and to inspire and educate owners and cat care providers/professionals to optimise cat friendly environments. Nadia also holds the International Cat Care (ICC) Advanced Feline Behaviour for Cat Professionals qualification.

She said, "It's not often that I see opportunities for non-clinical professionals to contribute to the physical lives of pets. Having had pets my whole life I have a HUGE appreciation for the veterinary profession, and more gratitude than I can put into words. To share my transferable business skills and passion with the BSAVA would be a privilege on my part."

Rosie Godfrey replied, "I'm delighted to have Nadia onboard and think PetSavers is very lucky to have such a committed pet owner and proactive advocate for pet welfare directly involved."

Nadia has dived straight into all things PetSavers, and has even roped in her visually impaired cat Spartan to help fundraise for us. Throughout December 2023, Spartan has been doing one of his favourite things, shoelace retrieval, for donations to PetSavers and the ICC!

PetSavers alumni group

Our BSAVA PetSavers alumni group is going from strength to strength, with growing numbers and several alumni supporting us in various ways. We held our first alumni gathering at BSAVA Congress 2023 and it was lovely to meet and talk to those who attended. Ross Bond, Professor of Veterinary Dermatology and Head of the Dermatology Service at the Royal Veterinary College, and Paul Freeman, Principal Clinical Neurologist and Professor of Neurology and Neurosurgery at the University of Cambridge, gave excellent summaries of their PetSavers-funded research, and five undergraduates presented their clinical abstracts from PetSavers-funded student research projects.



↑ Ross Bond.



↑ Paul Freeman.



Regular giving

Whether big or small, your donations help make a difference to us. Many of our longstanding supporters give regularly to us and we greatly appreciate the reassurance this type of support provides.

Our donations and funds are ring-fenced, and we rely solely on them together with legacies and sponsorship to fund our grant awards and administrative costs, receiving none of the BSAVA membership fee. BSAVA continues to support PetSavers in a variety of ways, however, as they have done since our inception in 1974 as the Clinical Studies Trust Fund. They help reduce our administration costs, and provide other free services from different departments, for which we are very grateful.

If you would like to make a regular donation, or a one-off gift, please visit www.bsava.com/petsavers/donate.

Our 2023 in numbers

11 grants were awarded including the first Research Fellowship, 1 Master's Degree by Research, 6 Student Research Projects and 3 Clinical Research Projects (2 joint-funded)

A substantial legacy of £87,560 from Terry Heath

£159,221 awarded to research

8 peer-reviewed publications and 3 review articles from PetSavers-funded studies



Clinical research trials are important for informing the diagnosis and management of disorders in clinical practice, and BSAVA PetSavers provides a vital source of funding for anyone hoping to undertake this form of research.



Sam Khan

Vet, researcher and PhD student at the University of Cambridge



Launch of the Ageing Canine Toolkit

We recently funded a major research project – the Old Age Pets (OAP) project – at the University of Liverpool. The aim was to help vets and owners provide the best care for their senior dogs. The results of the research showed that it can be difficult for owners to know what are ‘normal’ age-related changes (signs of ageing) or whether signs indicate possible disease that would benefit from veterinary advice and treatment.

Key findings from the study were therefore used by the research team to develop a traffic light colour-coded checklist to help owners know whether to seek advice from a veterinary practice and to guide discussions during consultations. Regular discussions and veterinary check-ups can help relieve and prevent suffering, identify diseases earlier and ensure an ageing dog’s quality of life remains high and that they live longer.



Our investigations uncovered common physical and behavioural signs in dogs that owners observe and for which support from the veterinary practice would be beneficial. Our simple evidence-based checklist is designed to engage owners and importantly stimulate efficient discussion with their veterinary team.

Professor Carri Westgarth

University of Liverpool, and Old Age Pet Project Lead

← Zoe Belshaw at BSAVA Congress 2023 launching the Ageing Canine Toolkit (ACT).

BSAVA PetSavers developed a leaflet for owners containing information about the more common health problems affecting aged dogs and what to look out for, as well as several copies of the checklist for owners to use at home at regular intervals to monitor their dog as they age. This forms part of the evidence-based Ageing Canine Toolkit (ACT), which was launched at BSAVA Congress 2023 to great interest from delegates, the veterinary professions and public media including *The Telegraph*. It is being successfully rolled out across UK practices, and was included and recommended in the older dog module of The Dog Friendly Clinic Scheme, which is a joint initiative between Dogs Trust and the British Veterinary Behaviour Association.

The leaflet and poster are available to download free from our website: www.bsavalibrary.com/content/cilgrouppetsaversact and can be ordered by veterinary professionals from the BSAVA Store.



← Carri Westgarth at BSAVA Congress 2023 proudly presenting the Ageing Canine Toolkit (ACT) posters and booklets!

Publications deriving from the OAP project

Jackson, Jodie (2022) Understanding the approach taken to ageing dogs in primary veterinary care using mixed-methods health informatics. Master of Philosophy thesis, University of Liverpool.

Wallis, Lisa; Radford, Alan; Belshaw, Zoe et al. (2023) 'Just old age' – A qualitative investigation of owner and veterinary professional experiences of and attitudes to ageing in dogs in the UK. *Journal of Small Animal Practice* 64: 425-433.



Grants awarded in 2023

Research Fellowship

Cell-based assays to detect 'low-affinity' antibodies against acetylcholine receptors or antibodies against other neuromuscular junction antigens in canine myasthenia gravis

University of Cambridge

Total grant: £70,000

Our first Fellowship was awarded to Dr An Vanhaesebrouck, a clinical neurologist and European Specialist in Neurology. Myasthenia gravis (MG) results from the defective transmission of messages from nerves to muscles at neuromuscular junctions. Most canine cases are acquired when the dog's immune system starts attacking neuromuscular junction receptors in an autoimmune disease response. This form is seen particularly in certain larger breeds of dog. It is a relatively common neurological disorder, and affected dogs usually have significant signs of weakness and fatigue on starting to exercise; many also develop a dilated oesophagus (megaesophagus) leading to frequent regurgitation and the risk of inhalation pneumonia. Some may show megaesophagus as their main sign.

Dr Vanhaesebrouck suspects that up to 23% of cases of acquired MG and some cases of idiopathic megaesophagus (likely caused by MG) go undiagnosed and are missed using the standard radioimmunoprecipitation assay (RIA) diagnostic tool as they have no detectable acetylcholine receptor (AChR) antibodies. She hypothesizes that a proportion of dogs with focal or generalised MG have low-affinity antibodies against AChRs or antibodies against other neuromuscular junction proteins that are not detected by traditional RIA, but could be detected by cell-based assays, as is the case in humans. She and her team are therefore investigating if cell-based assays can be used to detect these cases which currently fail to get a full diagnosis and thus cannot receive prompt and targeted treatment. If their hypothesis is correct, many more dogs with this debilitating and potentially life-threatening disease can be helped.

Our thanks and appreciation go to Professor David Killick who, as past Chair of PetSavers' Grant Awarding Committee (GAC), was the driving force behind identifying the need for and developing the PetSavers' Research Fellowship.

Master's Degree by Research

Is IgA deficiency a feature of canine atopic dermatitis in small and medium sized dogs?

SRUC/University of Edinburgh

Total grant: £33,540

Student Research Projects

Comparison of serum procalcitonin and serum amyloid A (SAA) concentrations as a marker of bacterial causes of systemic inflammatory response syndrome (SIRS) in cats

University of Cambridge

Total grant: £3200

Comparing the early viral entry process in avirulent and virulent caliciviruses

University of Glasgow

Total grant: £2600

Exploring adverse event reporting following vaccination in veterinary free-text clinical narratives

University of Liverpool

Total grant: £2600

Evaluation of antimicrobial activity of canine urinary extracellular vesicles against causative agents of canine otitis externa (*Pseudomonas aeruginosa* and *Staphylococcus aureus*)

University of Cambridge

Total grant: £3180

Evaluation of plasma and urinary nucleosomes in dogs with urothelial carcinoma

University of Cambridge

Total grant: £3200

Validation and pathway analysis of biomarkers of canine cruciate ligament disease

University of Liverpool

Total grant: £2600 (fully funded by The Debs Foundation)



The Debs Foundation

Clinical Research Projects

Flow cytometric analysis of Ki-67 expression in canine cutaneous mast cell tumours and its prognostic value

University of Cambridge

Total grant: £18,860.97

This project was funded using money from Terry Heath's amazing legacy. It is hoped that the outcome of this research will change the way staging and grading of canine mast cell tumours is performed. Current grading is performed on a histological specimen acquired at the time of surgery, and there is no reliable method of assessing tumour grade without this. The new diagnostic process, if successful, would allow rapid diagnosis ahead of surgery via a simple fine needle aspirate. This will help guide treatment decisions prior to surgery (or other treatment) and ultimately could improve patient outcomes.

Blood adipokine and ghrelin concentrations in cats with chronically treated diabetes mellitus and with diabetes and hypersomatotropism undergoing hypophysectomy

RVC

Total grant: £9940

(joint funded with SAMSoc)



An intelligent stethoscope for detecting hypertrophic cardiomyopathy in cats

University of Cambridge/RVC/Davies Veterinary Specialists

Total grant: £10,000

(joint-funded with the Veterinary Cardiovascular Society)



Hypertrophic cardiomyopathy (HCM) is the most common heart disease affecting pet cats. Research suggests that around 15% of cats have HCM, therefore affecting over 1.5 million cats in the UK alone. The disease can cause distressing signs and may be life-threatening. The aim of this project is to produce a smart stethoscope with an inbuilt AI algorithm that will help first opinion vets differentiate between heart murmurs caused by HCM and non-harmful, physiological murmurs, aiding earlier first opinion diagnosis, and early monitoring and treatment of HCM.



The best clinical research is curiosity driven ... and likely to have a meaningful impact in terms of improving outcomes that are important to animals and their owners.



Professor Adrian Boswood

Professor of Veterinary Cardiology and
Vice Principal for Learning, Teaching and
Assessment at the Royal Veterinary College

Funding the research fellowship and joint-funded PhD

Our Research Fellowship aims to support veterinary academics in the early stages of their research career. The funding targets the period immediately after gaining a postgraduate research qualification and will help individuals establish themselves as independent researchers and/or prepare for a research council fellowship application. It requires active mentorship from a senior scientist and 50% guaranteed research time from the recipient's institution.

Early in 2024, we will be awarding our first joint-funded PhD. This offers partial funding of up to £80,000 for a postgraduate student to carry out a 3-year PhD research project in companion animal science. We have had some excellent applications and GAC will make its final decision in February 24.

The Fellowship and PhD are substantial grants to finance, and our ability to continue to fund these research projects is completely reliant on our current and future donors, fundraisers and sponsors. Please continue to support us!

Papers from PetSavers-funded studies published in 2023

1. S. Khan and P. Freeman. *HASTE MRI sequence findings correlate with loss of deep pain perception in dogs with thoracolumbar disc extrusion*. *Vet Med Sci* 9: 604-608 (2023).
2. Y. Bandara, S. L. Priestnall, Y. M. Chang, A. Kathrani. *Outcome of chronic inflammatory enteropathy in cats: 65 cases (2011-2021)*. *J Small An Pract* 64: 121-129 (2023).
3. L. J. Wallis, A. D. Radford, Z. Belshaw, J. Jackson, E. Kubinyi, A. J. German, C. Westgarth. *“Just old age” – a qualitative investigation of owner and veterinary professional experiences of and attitudes to ageing in dogs in the UK*. *J Small An Pract* 64: 425-433 (2023).
4. Y. Bandara, S. L. Priestnall, Y.-M. Chang, A. Kathrani. *Characterization of intestinal fibrosis in cats with chronic inflammatory enteropathy*. *J Vet Intern Med* 37: 936-947 (2023).
5. I. Chan, A. Dowsey, P. Lait, S. Tasker, E. Blackwell, C. R. Helps, E. N. Barker. *Prevalence and risk factors for common respiratory pathogens within a cohort of pet cats in the UK*. *J Small An Pract* 64: 552-560 (2023).
6. A. Kathrani, B. Theelen, R. Bond. *Isolation of Malassezia yeasts from dogs with gastrointestinal disease undergoing duodenal endoscopy*. *J Small An Pract* 64: 661-668 (2023).
7. M. O. Mazzarella, N. K. Jones, G. J. Culshaw. *Isometric myography is a feasible method to identify and quantify endothelial dysfunction in dogs with myxomatous mitral valve disease*. *Am J Vet Res* 18: 1-7 (2023).
8. Fins IS, Singleton DA, Radford AD, Sánchez-Vizcaíno F and Pinchbeck GL. *A mixed-methods approach utilising electronic health records to examine antimicrobial prescription surrounding gastrointestinal clinical presentations in dogs and cats*. (2023) *Front. Vet. Sci.* 10:1166114. doi: 10.3389/fvets.2023.1166114

PetSavers awards



The 2023 winner of the **BSAVA PetSavers Veterinary Achievement Award** was Ellyn Groat for her paper *UK dogs eating raw meat diets have higher risk of Salmonella and antimicrobial-resistant Escherichia coli faecal carriage*, which was published in the Journal of Small Animal Practice (JSAP). The work was carried out as an undergraduate student project at the University of Liverpool, under the supervision of Dr Vanessa Schmidt and was thought to have a high impact on a globally important public health issue. This annual award is presented to the first author of the most valuable peer-reviewed research paper following a PetSavers' grant, with respect to veterinary practice.



The **PetSavers Clinical Abstract Award** 2023, sponsored by Hill's Pet Nutrition, was awarded to Emily Blackwell, also a veterinary student from the University of Liverpool, for her excellent presentation of an abstract entitled *Exploring recording of adverse drug reaction reporting in veterinary free-text clinical narratives* at BSAVA Congress 2022. This work was carried out under the supervision of Dr Heather Davies.



Looking back and to the future

This year, I have discovered the amazing legacy created by BSAVA PetSavers' volunteers, researchers, residents and supporters over the 50 years of our existence. Each of you in your own, unique, individual way have helped build, shape, establish and maintain BSAVA PetSavers and more importantly the companion animal clinical research base over this time.

To all of you, thank you for your support and hard work.

In our 50th year, we hope you will join us to celebrate, fundraise, and help us share stories of how you and PetSavers have helped make that difference to small animal practice. I know we have some wonderful stories to tell and am greatly looking forward to meeting many of you in 2024.

Rosie Godfrey

Chair, PetSavers Management Committee



Please continue your support of PetSavers so that together we can continue to change companion animal veterinary practice for the better.

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