

4 February 2016

Dear Mr Steele

Re: Request for Information Pursuant to s.1(1) of the Freedom of Information Act 2000

Having conducted a search of the College's records, I can confirm that it does hold information relevant to your request. Accordingly, my response is attached below.

The RVC is satisfied that in making this response, it has complied with the requirements of the Freedom of Information Act. If, for any reason, you are not satisfied with this response, you should request an internal review by writing to The Chief Operating Officer and Secretary to the Council, Royal Veterinary College, Hawkshead Lane, North Mymms, Hatfield, AL9 7TA, who will ensure that this is dealt with accordingly. There is no charge for such a request. Should you still be dissatisfied with the outcome of any such complaint, you have the right to make a complaint via the Information Commissioner, pursuant to Section 50 of the Freedom of Information Act, via The Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF.

Yours sincerely,



Simon Jackson
Freedom of Information Officer

Your Request

The information I request is as follows:

- (1) Statistics on the number and species of animals used in research by the Public Authority in 2014.*
- (2) A breakdown of the areas or intended areas of research in which animals were used in 2014, e.g. human medicine, veterinary medicine.*
- (3) Statistics on the number of dogs used in animal research for each year available since 2005 (by species, e.g. beagle, labrador).*
- (4) Statistics on the number of dogs currently being used in animal research and / or related breeding by the Public Authority (by species, e.g. beagle, labrador).*

As you are no doubt aware, the Act specifies a written response must be provided by the Public Authority within 20 days of receipt of a request for information. I must stress that I am not interested in any information which identifies individuals or third parties and agree for such to be redacted. However, should the Public Authority take the view any information is exempt from disclosure, it is requested a full breakdown of the reason(s) for exemption and Public Interest Test is provided.

General Statement

The Royal Veterinary College (RVC) undertakes a wide variety of research, including some involving animals. Research involving animals is well regulated in the UK and the RVC has a long-standing commitment to the welfare of animals in research environments. The College undertakes research to improve the welfare of experimental animals.

The RVC shares society's desire to minimise the use of animal experimentation and increase the use of scientifically validated alternative methods that reduce, refine or replace the use of animal models. Nevertheless, animal experimentation remains a necessary part of the scientific discovery process and development of new medicines for veterinary practice and human medicine.

Dogs, cats and other companion animals suffer from cancers, heart diseases, diabetes, joint disease and many other conditions. Research involving these and other species enables the development of new safe and effective veterinary medicines that improve the health and welfare of animals and man worldwide.

Project licences

We currently have three project licences that allow the use of dogs.

One relates to the use of client owned dogs. The purpose of this project is to allow clinical research projects to be conducted under A(SP)A to investigate novel therapeutics in the treatment and prevention of various spontaneous disease processes in animals. Client owned pets where disease has occurred naturally are enrolled onto the projects. Owners are fully informed of the details of the study and give their consent to their pet being enrolled. Where possible, samples are collected alongside or in conjunction with normal diagnostic samples. All procedures undertaken are routinely used as part of

standard veterinary practice. Upon completion of the studies, the animals are discharged from the Act back into the care of their owners

The second project licence relates to work that was carried out in relation to developments in the way anti-sickness medications are developed and tested for veterinary and human use. The study was designed to improve the standard protocol for this type of research by refining the dose to limit the negative side-effects and allowing for repeated doses - thus reducing the number of animals needed for research. It also investigated the utility of biomarkers circulating in the blood that indicate nausea – these are now being investigated in canine veterinary patients to determine their clinical utility. Finally, the refined model of nausea was used to test which drugs were most effective in treating nausea, information that is informing veterinary clinical practice better enabling us to control this clinical problem. All the beagles were rehomed after the study and further information is available on our website: <http://www.rvc.ac.uk/research/about/animal-welfare-focus/nausea-research-and-dogs> This project has now finished and the project licence will be returned to the Home Office.

The third project licence relates to work we are doing with dogs with a form of inherited muscular dystrophy. These dogs have a naturally-occurring mutation in their dystrophin gene (it was not artificially engineered), but by chance, the mutation is right in the middle of the most commonly mutated part of the gene in humans, which means that they are especially relevant to Duchenne Muscular Dystrophy (DMD) in man. We will be using the dogs primarily to investigate a range of possible novel treatments for DMD, including gene therapy, stem cell therapy, exon skipping and gene correction. All therapies will have first been tested and shown to be safe and effective in the mdx mouse model of DMD which will reduce the risk of adverse events in the dogs. If successful, the same treatments will be applicable to other pet dogs with the same disease, and so both dogs and humans with DMD could benefit in the future. More broadly, many of the techniques used, specifically in this case for muscular dystrophy work, might be applicable to other genetic conditions, which are of course very common in many dog breeds. Further information is again available on our website: <http://www.rvc.ac.uk/research/about/animal-welfare-focus/duchenne-muscular-dystrophy>

All our work is conducted with very careful consideration of the ethical and welfare aspects of the project, and we carefully weigh the experimental proposals with the possible benefits to humans and dogs in the future. All the work is regulated under government legislation and has been subject to external review. This has been an open and transparent process and we have invited national journalists in to our facility to see the important work we are doing.

Question 1: Statistics on the number and species of animals used in research by the Public Authority in 2014.

This table below lists the **number of procedures** that were carried out. It is possible for more than one procedure to be done on the same animal so the number of procedures does not equate to the number of animals used. Some of our project licences permits/requires animals to be transferred from one procedure to another (for example that is the case with the equidae). Simply adding the numbers of animals used under each licence over-estimates the total number of animals used in the research.

Where possible we re-home animals that are unlikely to suffer from any adverse effects following procedures and that are deemed suitable for rehoming by the NVS in agreement with experienced NACWOs and after considerations on suitability of the future owner. We also have pets owned by

clients that were used under the Animals Scientific Procedures Act with the clients signed consent, all of which were returned to their owners (discharged home column in the table below) after the procedure had been undertaken. These account for all the cats used and the vast majority of dogs. When animals have to be euthanased, where possible, we ensure their bodies are used for teaching or supply of tissues for research purposes.

	Discharged home/ Rehomed/ Returned to farm	no re-use	re-use	Total procedures
cats	57			57
cattle	4	1		5
danio rerio		1108	2	1110
dogs	80	2		82
equidae		4	75	79
domestic fowls		699		699
guinea pigs		12		12
mice		4578	24	4602
pigs		296		296
rabbits		7		7
rats		2656	42	2698
salamandra		14		14
sheep		71		71
Grand Total	137	9452	143	9732

Question 2; A breakdown of the areas or intended areas of research in which animals were used in 2014, e.g. human medicine, veterinary medicine.

The purpose of the research carried out at the RVC was under the following categories:

- (Basic Research) Cardiovascular Blood and Lymphatic System
- (Basic Research) Endocrine System/Metabolism
- (Basic Research) Gastrointestinal System including Liver
- (Basic Research) Immune System
- (Basic Research) Multisystemic;
- (Basic Research) Musculoskeletal System
- (Basic Research) Nervous System
- (Basic Research) Respiratory System
- (Basic Research) Urogenital/Reproductive System
- Human Musculoskeletal Disorder
- Maintenance of colonies of established genetically altered animals, not used in other procedures.

- (Regulatory Use) – other efficacy and tolerance testing
- (Regulatory use/Toxicity and..) Other
- (Trans/Appl Research) Animal Diseases and Disorders;
- (Trans/Appl Research) Human Cancer;
- (Trans/Appl Research) Human Cardiovascular Disorders
- (Trans/Appl Research) Human Musculoskeletal Disorders
- (Trans/Appl Research) Human Nervous and Mental Disorders
- (Trans/Appl Research) Human Gastrointestinal Disorders including Liver
- (Trans/Appl Research) Non-regulatory toxicology and ecotoxicology.
- (Trans/Appl Research) Human Urogenital/Reproductive Disorders
- (Trans/Appl Research) Other Human Disorders

It is important to recognise that basic research underpins both veterinary and human medicine and that translational or applied research that is stated on the licence to be for human medicine can be equally applied to veterinary medicine

Question 3: Statistics on the number of dogs used in animal research for each year available since 2005 (by species, e.g. beagle, labrador).

Please note that information collected in 2013 and earlier relates to number of procedures started rather than finished. In 2014 and 2015 it relates to the number of procedures finished.

Please note no dogs were used during 2005 and 2006.

2015

Project Licence 1

The following number of procedures were carried on dogs:

- 6 Procedures: Domestic breeds dogs;
- 7 Procedures: Domestic Breeds dogs;
- 43 Procedures: Domestic Breeds dogs;
- 38 Procedures: Domestic Breeds dogs;

52 dogs were used in total. All were client owned animals who were returned to their owners upon completion of the procedures.

The breeds used were:

Basset Hound: 1
 Border Collie: 1
 Border Terrier: 1
 Boston Terrier: 1
 Cockapoo: 2
 Cocker spaniel: 2
 Collie Cross: 3

Cross breed: 6
Dalmation: 1
Dog de Bordeaux: 1
English springer spaniel: 1
German Shepherd: 2
Greyhound: 1
Greyhound cross: 1
Hungarian Vizsla: 2
Irish setter: 1
Jack Russell cross: 1
Jack Russell Terrier: 1
JRT cross Pug: 1
Labrador: 8
Leonberger: 1
Lurcher: 1
Miniature Schnauzer: 2
Perro de Presa: 1
Rhodesian ridgeback: 1
Saluki Cross: 1
Shih Tzu x Jack Russell: 1
Staffordshire bull terrier: 5
Standard Poodle: 1
Terrier Cross: 1

Project Licence 2

- 2 procedures were carried out on beagles
- 2 affected beagles were killed

2014:

Project Licence 1

Procedures carried out:

- 26 procedures on dogs.
- 54 procedures on dogs.

These were client owned animals. Upon completion of the study, the animals were discharged from the Act into the care of their owners.

The breeds used were:

Basset Hound: 1
Beagle: 2
Bichon Frise: 1
Border Terrier: 3
Catahoula: 1
Chein de la Rue: 1
Cocker spaniel: 4
Cross breeds: 10

Dogue de Bordeaux: 2
English springer spaniel: 1
German Shepherd dog: 3
Golden retriever: 4
Greyhound: 4
Hungarian Vizsla: 1
Irish Setter: 2
Labrador: 6
Lurcher: 2
Pointer cross: 1
Rhodesian Ridgeback: 1
Saluki: 1
Springer spaniel: 1
Sprocker: 1
Staffordshire Bull Terrier: 2
Standard Poodle: 1
West Highland White Terrier: 1
Yorkshire Terrier: 1

Project Licence 2

- 2 dogs; both were killed as a result of disease progression.

2013

Project Licence 1

Procedures carried out:

- 2 procedures on dogs;
- 13 procedures on dogs;
- 12 procedures on dogs;
- 17 procedures on dogs;
- 5 procedures on dogs;

These were client owned animals. Upon completion of the study, the animals were discharged from the Act into the care of their owners.

The breeds used were:

Airedale Terrier: 1
Basset hound: 1
Bichon Frise: 1
Border terrier: 1
Boxer: 1
Chein de la Rue: 1
Cocker spaniel: 2
Crossbreed: 5

Dogue de Bordeaux: 1
German shepherd dog: 13
Golden retriever: 1
Greyhound: 1
Husky: 1
Jack Russell Terrier: 3
Labradoodle: 1
Labrador Retriever: 6
Lurcher: 1
Maltese terrier: 1
Staffordshire Bull Terrier: 2
Standard Poodle: 1
Tibetan terrier: 1
West Highland White Terrier: 1
Whippet: 2

Project Licence 2

- 2 dogs

2012

Project licence 1

Procedures carried out:

44 procedures on dogs

11 procedures on dogs

8 procedures on dogs

2 procedures

These were client owned animals. Upon completion of the study, the animals were discharged from the Act into the care of their owners.

The breeds used were:

Border Collie: 5

Boxer: 2

Bracco Italiano: 1

Bulldog: 1

Cavalier King Charles Spaniel: 1

Cocker Spaniel: 4

Crossbreed: 4

Dalmation: 1

Doberman: 1

Dogue de Bordeaux: 1

English springer spaniel: 3

Eurasier: 1

Fox Terrier: 2

French Bulldog: 1

German Shepherd dog: 13
German Short Haired Pointer: 1
Golden retriever: 5
Greyhound: 1
Jack terrier: 1
Labrador: 7
Leonberger: 1
Lurcher: 1
Miniature Dachshund: 1
Miniature Schnauzer: 1
Rhodesian Ridgeback: 1
Saint Bernard: 1
Shar Pei: 1
Staffordshire Bull Terrier: 1
Welsh Springer Spaniel: 1

Project licence 2

2 procedures on dogs
1 procedure on dog

Project Licence 3

8 procedures on beagles.
All were rehomed.

2011

Project Licence 1

Procedures carried out:

14 procedures on dogs

22 procedures on dogs

These were client owned animals. Upon completion of the study, the animals were discharged from the Act into the care of their owners.

The breeds used were:

Basset Griffon Vendéen: 1
Border Collie: 1
Border terrier: 2
Boxer: 2
Bulldog: 1
Burnese Mountain Dog: 1
Cairn Terrier: 1
Cockapoo: 1
Cocker Spaniel: 1
Crossbreed: 2
English Bull Terrier: 1
English setter: 1
Flat Coat Retriever: 1
German Shepherd: 1
Giant Schnauzer: 1

Golden Retriever: 3
Irish Terrier: 1
Labrador: 5
Lurcher: 1
Miniature Schanuzer: 1
Patterdale Terrier: 1
Scottish Terrier: 1
Shih Tzu: 1
Staffordshire Bull Terrier: 1
Standard Poodle: 1
West Highland White Terrier: 2

Project Licence 2

8 procedures on beagles

2010

Project Licence 1

Procedures carried out:

12 procedures on dogs

14 procedures on dogs

These were client owned animals. Upon completion of the study, the animals were discharged from the Act into the care of their owners.

The breeds used were:

Beagle: 1
Boston terrier: 1
Cocker Spaniel: 1
Crossbreed: 1
English Springer Spaniel: 1
GSD: 1
Hungarian Visla: 1
Labrador: 2
Standard Poodle: 1
Tibetan Terrier: 1

2009

Project Licence 1

16 Procedures on dogs:

These were client owned animals. Upon completion of the study, the animals were discharged from the Act into the care of their owners.

The breeds used were:

Border Collie: 1
Boston Terrier: 1
Cocker spaniel: 2

Crossbreed: 1
English Springer Spaniel: 1
Giant Schnauzer: 1
Hungarian Visla: 1
Labrador: 3
Tibetan Terrier: 1

2008

Project Licence 1

31 Procedures on dogs:

These were client owned animals. Upon completion of the study, the animals were discharged from the Act into the care of their owners.

The breeds used were:

Cavalier King Charles Spaniel: 30
Doberman: 1

2007

Project Licence 1

21 Procedures on dogs:

These were client owned animals. Upon completion of the study, the animals were discharged from the Act into the care of their owners.

The breeds used were:

- Border Collie: 1
- Boxer: 1
- Cavalier King Charles Spaniel: 2
- Cocker Spaniel: 1
- Crossbreed: 1
- English Springer Spaniel: 1
- French Bull Dog: 1
- German Shepherd Dog: 1
- Jack Russell Terrier: 1
- Labrador: 4
- Parsons Russel Terrier: 1
- Rottweiler: 1
- Staffordshire Bull Terrier: 1
- Standard Poodle: 1
- Tibetan Terrier: 1
- West Highland White Terrier: 2

Question 4: Statistics on the number of dogs currently being used in animal research and / or related breeding by the Public Authority (by species, e.g. beagle, labrador).

Project Licence 1

These are client owned animals. Upon completion of the study, the animals will be discharged from the Act into the care of their owners.

- Basset Hound: 1
- Boxer: 1
- Cocker Spaniel: 1
- German Shepherd: 1
- Golden retriever: 1
- Irish setter: 1
- Labrador: 2
- Leonberger: 1
- Lurcher: 1
- Presa cross: 1
- Rhodesian ridgeback: 1
- Saluki cross: 1
- Springer Spaniel: 1
- Terrier Cross: 1

Project Licence 2:

22 beagles.

Where possible the beagles are rehomed.