

# Sample Submission Form for Canine Cancer Genetic Studies

Please submit samples to:



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The University of Cambridge is a partner in the LUPA project which is a European-wide effort to identify the genetic roots of dog diseases. The diseases we are studying are:

- **Soft tissue sarcomas and histiocytic sarcomas in Golden retrievers and Rottweilers**
- **Melanoma in Schnauzers and Poodles**
- **Mammary carcinoma in English Springer Spaniels.**

For this studies we are collecting blood samples from **affected dogs and from healthy controls (age 9yrs and above) of the same breeds**. These blood samples should consist of clinical residues from tests benefiting the patient.

**Please send blood samples (ideally 2-5ml in EDTA) to the address above.**

Vet and Practice submitting sample:  
(details will not be used  
for any other purposes)

Telephone / Fax number:

Date of sample submission: ..... Breed .....

Pet Name of Dog: .....

Kennel club number / name if available .....

Age ..... Sex ..... Neutered? Y N

Owner Name, Address, Phone number:

The sample corresponds to a: dog with cancer a control sample

Date diagnosis neoplasia confirmed: .....

Diagnosis: Histopathology Cytology Immunohistochemistry

Tumour site/ sites:  
.....

Evidence of metastasis (site)? .....

Other details about the neoplasia  
(e.g. ultrasound findings):  
.....

Current treatment:  
.....

Are there concurrent illnesses?  
.....

Our website: <http://www.vet.cam.ac.uk/news-and-events/gsd/lupacancer.html>

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# *LUPA : Helping dogs and people*

## European Research Project

### Information Sheet for Dog Owners: Genetic Analysis of Dog Diseases

You are being asked for permission for your animal to participate in a research project. This form is designed to provide you with information about the study

#### **Purpose of the Project**

This project aims to improve the understanding of numerous inherited diseases in dogs. Insight into the genetics of these diseases in the dog will help researchers find strategies to prevent and/or better treat these diseases in the dog and increase understanding of comparable diseases in humans.

#### **How this project is being conducted**

This is a four year project involving twenty veterinary schools from twelve European countries. Veterinarians and scientists are working together to collect DNA samples (in the form of blood or cheek swab samples) from both purebred dogs affected by specific diseases and from healthy animals of the same breed. It is necessary to obtain DNA samples from unaffected dogs (referred to as 'controls') to allow us to look for similarities between the affected dogs and unaffected dogs.

#### **Sampling Method and Veterinary Examination**

As samples are being collected from both dogs affected by disease and from healthy dogs, please be aware that participation in the study does not imply that your dog is affected with a disease, nor does it necessarily imply that the dog is at risk of producing puppies affected with a disease.

If your vet is taking a blood sample from your dog for a clinical reason, or as part of a health check, your vet will ask you if a residual amount of blood can be retained for this research project. If your vet has no reason to take a blood sample, you will be asked if you would allow some cells from the inside of your dog's cheek to be collected using a small brush. This is something that can be done by the veterinarian or veterinary nurse, or you can do this yourself. You will also be asked if you are able to provide a copy of your dog's pedigree for submission with the blood sample.

In unaffected control dogs, depending on the disease studied, the veterinarian may also ask for your permission to perform a few other non-intrusive clinical examinations, such as blood pressure measurements, etc (please note you are under no obligation to agree). If your dog is affected by cancer, a piece of the tumour will normally be removed (under anaesthetic) to enable the cancer to be diagnosed by a pathologist. If the cancer is one of the four cancers being studied within the project, a small piece of the tumour will also be retained for the research study.

## **You and your dog's involvement in this study**

All the blood samples and the DNA extracted from each sample, for both patients and controls dogs, will be stored anonymous and any personal data that is collected will be strictly confidential. All clinical and genetic information will be stored in a secure database and will strictly be reserved for use in research only. The results for any genetic analysis will not directly benefit your dog and due to the nature and size of the study no individual results can be sent back to the owners participating in this study.

With respect to unaffected control animals, please inform your veterinarian or the coordinator of the study (Dr.....) of any important change of the health status that takes place during the following 3 years.

Your involvement in this study is entirely voluntary and you are free to withdraw at any time. Unwillingness to participate or withdrawal from the study will in no way affect your animal's care. If you are happy to be involved in the project please read all of the information on the consent form before signing. On behalf of the project team thank you in advance for your involvement in this study.

## **The Project Summary**

Dogs are exposed to the same environment as humans and may spontaneously suffer from the same range of diseases, such as cancer, epilepsy, heart disease, diabetes, etc. Genetic factors play a variable role in the development of these diseases but it has been difficult to identify which genes are involved. Within a number of dog breeds these diseases are not as genetically complex when compared to humans. Therefore, conducting a genetic analysis within dog populations should make it easier to identify some of the important genes and mechanisms involved in the development of disease.

For some breeds of dog inherited disorders are a significant problem for their health and welfare. The frequency of these genetic diseases may be quite high (from 10 % and up to 40% in some cases). Therefore there is a strong need for the development of tools, such as DNA markers, that can help veterinarians find strategies to reduce the frequency of inherited disease. The use of DNA markers combined with DNA tests can help breeders select dogs for breeding that will not transmit a genetic predisposition for a disease to their offspring. It should also help veterinarians screen for inherited disorders so that they can either prevent disease or, by earlier detection, optimize the veterinary care of animals considered to be predisposed to the development of a particular disease.

In summary, this project will help to develop strategies that can decrease common diseases in purebred dog populations and will lead to a better understanding of the mechanisms and pathways of these diseases. Human medicine will ultimately benefit from these results.

This project is funded by the European Commission (7<sup>th</sup> Framework Research Programme). The study has been approved by an appointed European Commission Ethics Committee. More information, including the full list of the diseases studied in the project and details on the outcomes of the study can be found on the project web-site: <http://www.eurolupa.org/>. If you have any question or concerns please contact Anne-Sophie Lequarré at: [info@eurolupa.org](mailto:info@eurolupa.org)

**DOG OWNER CONSENT FORM**

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**Official Use Only**

**This protocol has been approved by the appropriate local Research Review Committee**

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**To be filled in by the responsible veterinarian:**

**Attending Researcher / Veterinarian**

Name: \_\_\_\_\_

Telephone number: \_\_\_\_\_ e-mail address: \_\_\_\_\_

Blood sample (in EDTA) : ..... mls

Additional non intrusive clinical exams (please list):

.....  
.....

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**To be filled in by Dog Owner:**

**Dog Owner Name (in capitals) .....**

Before giving consent for your dog to be included in this study please read the project information sheet and the details below.

If my vet is taking blood from my dog for a clinical investigation I hereby grant permission for excess blood taken to be used for research in the LUPA project:                    yes                    no

If my dog is affected by one of the four cancers being studied within the LUPA project and is undergoing a procedure for biopsy of the tumour, I hereby grant permission for a small piece of the tumour to be retained for research:                    yes                    no

I hereby grant permission for named non intrusive clinical examinations to be conducted on my dog:                    yes                    no

I hereby agree to be contacted at a later by phone or e-mail .....  
to provide the research team with further information about my dog:                    yes                    no

I accept that the blood sample/cheek swab sample (and tumour sample) becomes the property of the partners of the LUPA project and may only be used for research:      yes                      no

If I have any further questions I may either contact the researcher / veterinarian on:

.....

I may also contact the Project Coordinator on: [as.lequarre@ulg.ac.be](mailto:as.lequarre@ulg.ac.be)

**CONSENT:**

**I have read and understand the project information and give permission for my dog to participate in this study. To the best of my knowledge, the information I have supplied below is accurate. Upon signing below, I am free to make a copy of this consent form.**

Owner's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Researcher's or Veterinarian's Signature: \_\_\_\_\_

Each blood sample will be labelled with the dog's call name, the breed, birth date, and sex.

**INSTRUCTIONS TO THE VETERINARIAN**

The LUPA consortium recognises that taking a blood sample is an invasive procedure. Blood samples should only be taken as a part of clinical investigation and any excess blood retained for use in the LUPA project.

Sample / Project Code: \_\_\_\_\_ (filled in by Research Institute)

Dog's call name \_\_\_\_\_

Local identification in practice: \_\_\_\_\_

Dog's breed: \_\_\_\_\_

Dog's identification: Kennel Club pedigree number\*: \_\_\_\_\_ or

Tattoo or chip number: \_\_\_\_\_

Registered name: \_\_\_\_\_

Date of birth: \_\_\_\_\_

Sex:              Male / Female;      Spayed / castrated:      Yes / No,                      if Yes date: \_\_\_\_\_

\* If possible, please submit a copy of the pedigree