

***We are Searching for Genes responsible for diseases such as  
Bone Cancer, Cardiomyopathy and Lung Inflammation in Irish Wolfhounds  
Why? For Carrier Testing and Improved Treatment in Dogs and Humans***

The Canine Genome Sequencing Project, based in Boston at the Broad Institute at Harvard and MIT, recently finished sequencing the dog genome. Now, with the help of the AKC Canine Health Foundation and the EU-project LUPA we are using this important new resource to find genes for canine diseases such as bone cancer (osteosarcoma) and dilated cardiomyopathy (DCM). This is a large international project that includes scientists at Swedish University of Agricultural Sciences and which already has funding and experienced scientists to conduct the planned research.

Bone cancer and DCM are the major killers of Irish Wolfhounds. We are searching for regions of the genome that differ between healthy dogs and dogs with these diseases. This research will help develop genetic tests to identify carriers of genes predisposing to these diseases. Ultimately, this will also improve treatment and survival rates in dogs and maybe also in people, we are not that different. If enough samples will be available we will also study genetic predispositions for pneumonia (lung inflammation) that is affecting more and more wolfhounds.

**To succeed at this, though, we need your help!** We need samples from all wolfhounds, the most valuable are older, healthy dogs (over 6 years) and dogs that are sick with e.g. osteosarcoma, cardiomyopathy, pneumonia, epilepsy and PRA. Your sample will help us to explore canine genetic issues including patterns of genetic diversity between and within breeds, and in disease states such as cancer. Many IW breeders have already supported this initiative.

### **What can you do?**

\* **Healthy dogs:** If you have a healthy wolfhound (especially older than 6 years but we gratefully accept blood samples from all wolfhounds older than 3 years), we would really appreciate a blood sample. If your hound would become sick for any reason after the sample was taken please let us know!

\* If your dog has **osteosarcoma, cardiomyopathy**, epilepsy, pneumonia or PRA please ask your veterinarian to draw a blood sample and send it to us together with the clinical information.

In both cases we also need the Kennel Club number and pedigree information (copy of pedigree). Please let us know if your dog has had any type of disease.

**We need a blood sample (minimum 4 ml EDTA-blood, preferably 8 ml). Ship samples by regular mail (padded envelope) to:**

Dr Susanne Gustafsson  
Animal Genetics Laboratory  
Dept of Animal Breeding and Genetics  
Swedish University of Agricultural Science  
Box 7023  
SE-750 07 UPPSALA  
SWEDEN

If you have questions please contact us at:

**E-mail:** [Susanne.Gustafsson@hgen.slu.se](mailto:Susanne.Gustafsson@hgen.slu.se), [henrik.von.euler@kv.slu.se](mailto:henrik.von.euler@kv.slu.se) or [anna.blom@med.lu.se](mailto:anna.blom@med.lu.se)

**Website:** [www.c3o.se](http://www.c3o.se)

All personal and contact information as well as information regarding your dog will be kept strictly confidential.



## Biobanksmedgivaravtal / Biobank consent form

### Provtagning för forskning

Vi skulle vilja ha ett blodprov eller i undantagsfall annan vävnad från Din hund för pågående och framtida forskningsprojekt. Genom att skriva under godkänner Du att provet och information från journaler får användas av SLU och dess samarbetspartner i forskningssyfte för att bland annat studera genetiken bakom olika sjukdomar hos hund. Vi kan också behöva kontakta Dig för ytterligare information angående Din hund.

### Sampling

We would like to collect a blood sample or in rare instances a tissue sample, from your dog for current and future research. By signing this consent you agree that the sample and information from medical records may be used by SLU and its collaboration partners for research on, among other things, the genetic causes of inherited diseases. We may also need to contact you in the future for additional information regarding your dog.

### All information om Dig och Din hund kommer att behandlas konfidentiellt

*All information about You and Your dog will be treated confidentially.*

Information om hunden (fylls i av ägaren och lämnas till veterinären/provtagaren)

**Information about the dog** (to be completed by the owner before submission to the sampler/veterinarian)

|  |  |                         |
|--|--|-------------------------|
| * Reg. nr / Reg. No.:  | * Ras / Breed:   |                         |
| * Registrerat namn / Registered name:  | ID: chipnummer och/eller tatuering / Chip and/or Tattoo:   |                         |
| Hundens tilltalsnamn / The dog's name:   | * Född / Date of birth:  | Pälsfärg / Coat colour: |
| * Kön / Sex<br><input type="checkbox"/> Hane / Male<br><input type="checkbox"/> Tik / Female | * Kastrerad / Neutered or spayed<br><input type="checkbox"/> Ja / Yes<br><input type="checkbox"/> Nej / No | Datum / Date: _____     |
| Övrig information (sjukdomar mm) / Additional health information (diseases etc)              |  |                         |

Ägaruppgifter / Owner (Eller patientetikett/Or patient label)

|                           |   |   |
|---------------------------|---|---|
| * Förnamn / First name:   | * Efternamn / Surname:  | * Land / Country:   |
| * Gatadress / Street:     | * Postnummer / Postal code  | * Stad / City:  |
| e-post / e-mail:          | Telefon / Phone<br>Hem / Home:<br>Mobil / Cell phone:<br>Arbete / Office: |   |
| Bilagor / Attachments     | ** Kopia av stamtavlan / Copy of Pedigree info                            | <input type="checkbox"/> Ja / Yes <input type="checkbox"/> Nej / No |
|                           | Kopia av journal / Copy of medical record                                 | <input type="checkbox"/> Ja / Yes <input type="checkbox"/> Nej / No |
| Ort & datum / City & date | Underskrift / Signature   | Namnförtydligande / Printed name                                    |

\* = obligatoriskt / mandatory

\*\* = Gäller endast icke SKK-registrerade hundar / only for dogs not registered in SKK



**Uppgifter om Provtagningen** (fylls i av veterinären/provtagaren)  
**Sampling information** (to be completed by the veterinarian/sampler)

|   |  |
|---|--|
| Datum för provtagning / <i>Date of sampling:</i>                                      | Typ av provmaterial / <i>Type of sample:</i>   |
| Hund ID (reg nr, chip och/el tatuering) / <i>Dog ID (reg no, chip and/or tattoo):</i> | Ursprungligen insamlat för projekt / <i>Originally collected for project:</i><br><input type="checkbox"/> Kontroll / <i>Control</i><br><input type="checkbox"/> Fall / <i>Case</i> Diagnoskod/diagnostic code: _____ |
| Provets märkning / <i>Sample:</i>   | Provtagare / <i>Sampler's name</i>   |

**Övrig information om hunden / *Additional information about the dog***

Kryptorchid / *Cryptorchid*       Ja / *Yes*       Nej / *No*

Hundens vikt / *Weight* \_\_\_\_\_ kg

Normalt hull / *Normal weight*       Under normalt hull / *Under normal weight*       Över normalt hull / *Overweight*

Övrig hälsoinformation / *Additional health information*

**Veterinäruppgifter**

|   |  |
|---|--|
| Namn på behandlande veterinär / <i>Name of vet:</i> | Telefon / <i>Phone:</i><br>Fax / <i>Fax:</i>                     |
| Adress / <i>Address:</i>                            | Postnummer, ort och land / <i>Postal code, city and country:</i> |
| e-post / <i>e-mail:</i>                             | Journalnummer / <i>Case record No:</i>                           |

Jag försäkrar att jag i samband med provtagning har kontrollerat uppgivet ID-nummer (chip och/eller tatuering) för ovan angivna hund. / *I declare that I have confirmed the identification of the dog (chip and/or tattoo) stated above.*

|   |                     |                        |
|---|---------------------|------------------------|
| Ort / <i>Place</i>                      | Datum / <i>Date</i> | STÄMPEL / <i>STAMP</i> |
| Underskrift / <i>Signature</i>          |                     |                        |
| Namnförtydligande / <i>Printed name</i> |                     |                        |

Insamlingen sker inom ramen för projektet hundhälsa med godkänt etiskt tillstånd (Dnr C139/9, prof Åke Hedhammar, SLU)  
*The collection is in accordance to the following ethical permission (Dnr C139/9, prof Åke Hedhammar, SLU)*

Skicka provet till SLU snarast möjligt efter provtagning. Undvik att sända provet en fredag (bättre att förvara provet i kyl över helgen). / *Send the sample to SLU as soon as possible after sampling. Avoid sending the sample on a Friday (it is better to store the sample in the fridge over the weekend).*

\* = obligatoriskt / *mandatory*

\*\* = Gäller endast icke SKK-registrerade hundar / *only for dogs not registered in SKK*

**In case of heart disease:**

Did your dog have any of the following symptoms:

- heart murmur  
  tired  
  fainting  
  heart rhythm disturbances  
  decreased energy  
 breathing affected  
  coughing  
  Increased diameter of the belly  
  decreased appetite  
 weight loss  
  other

Describe other symptoms: .....

Last veterinary investigation                      Date:.....                       has not been to the vet

Ultrasound investigation of heart               YES    Date:.....               NO

Describe results of ultrasound: .....

Röntgen (X-ray) investigation                   YES    Date:.....                   NO

Describe results of X-ray: .....

Has diagnosis of heart failure been done (fluid in lungs or belly):

- YES    Date:.....               NO

Describe treatment if any (list the medicines).....

**In case of bone cancer:**

- How was diagnosis made  
  biopsy/necropsy  
  X-ray  
  clinical signs (swelling, pain)  
 signs of metastasis:.....  
  has not been to the veterinarian

Date of onset of symptoms:.....

Describe treatment if any: .....

The hound is:  alive  died     euthanized;    date of death (if applicable):.....

**In case of pneumonia (lung inflammation):**

- How was diagnosis made  
  there was high fever  
  coughing  
  X-ray  
  blood work  
 has not been to the veterinarian

Date of onset of symptoms:.....

Describe treatment if any: .....

Was treatment successful?.....

The pneumonia was preceded by  kennel cough  tick bite  participation in dog show/competition  contact with a dog with respiratory disease

Has the pneumonia reoccurred (how many times)? .....