



Institut de Génétique et Développement de Rennes  
Équipe « Génétique du chien »  
UMR6061, Faculté de médecine  
2 avenue du Professeur Léon Bernard  
35043 Rennes Cedex  
Fax : 02 23 23 44 78



<http://www-recomgen.univ-rennes1.fr/doggy.html>

## Genetic Study of Malignant Histiocytosis in the Bernese Mountain Dog : a collaborative study

C. André (CNRS, Rennes, France), M. Breen (NCSU, Raleigh, US)  
E. Ostrander (NIH, Bethesda, US),

In order to identify the genetic causes of Malignant histiocytosis in dogs, our three laboratory have been funded by the AKC-Canine Health Foundation to collaborate on this project and more samples are needed.

- If your BMD is over 10 years of age and has never been diagnosed with MH : a blood sample is useful to us as a control (it is essential that you contact us if your dog is later diagnosed with MH or any other cancer).
  - If your BMD presents MH signs: a blood sample from your dog and relatives is needed
    - 1) 5 ml of blood in EDTA (lilac top) tubes (name, breed, sex, written on the tube)
    - 2) Pedigree information of each dog
    - 3) A note from the vet indicating the clinical status of the dog
  - If an MH is suspected, it is necessary to have *pathology* done to establish whether it is definitely affected and to provide the pathology reports.
- All information will be kept confidential. We thank you very much for your help.

Please send blood samples at room temperature by rapid delivery mail.

From Europe to : Dr. Catherine ANDRE and Benoit HEDAN  
UMR6061, CNRS/ Université de Rennes 1 Faculté de Médecine  
2, Av. Léon Bernard 35043 Rennes cedex, France  
tel. 02 23 23 45 09 Fax 02 23 23 44 78  
email : [catherine.andre@univ-rennes1.fr](mailto:catherine.andre@univ-rennes1.fr) [benoit.hedan@univ-rennes1.fr](mailto:benoit.hedan@univ-rennes1.fr)  
<http://www-recomgen.univ-rennes1.fr/doggy.html>

From the US : Dr. Elaine Ostrander : contact : [eostrand@mail.nih.gov](mailto:eostrand@mail.nih.gov)  
Phone: + 00 1 301-594-5284 Fax: + 00 1 301-480-0472  
Cancer Genetics Branch NHGRI/NIH 50 South Drive, MSC 8000  
Building 50, Room 5351 Bethesda MD 20892-8000 USA  
[http://research.nhgri.nih.gov/dog\\_genome](http://research.nhgri.nih.gov/dog_genome)

Faculté de Médecine 2, avenue du Professeur Léon Bernard  
35043 RENNES Cedex  
Tel : 02 23 23 45 09  
Fax : 02 23 23 44 78

CNRS

Qualité et  
sécurité des services  
et des prestations  
des établissements  
de santé

Dr Catherine André et Clotilde de Brito  
Laboratoire de Génétique et Développement  
U.M.R 6061, Faculté de Médecine  
2 avenue du Professeur Léon Bernard  
35043 Rennes Cedex  
02 23 23 45 09

UNIVERSITY  
RENNES1

CLINICAL AND EPIDEMIOLOGICAL  
MALIGNANT HISTIOCYTOSIS SURVEY

Veterinarian :

Owner :

DOG IDENTIFICATION

**Name :**

**Identification (tattoo or chip) :**

**LOF :**

**Sex :** male  female  spayed / neutered  did she / he reproduced ? yes  no  how many litters ?

**Date of birth :**

**Race :**

**Weight :**

**Diagnosis of histiocytosis by :**

histology  laboratory, histological reference :

cytology  neither of two

**Did other dogs of its family develop malignant histiocytosis :** yes  no  don't know

**other cancers:** yes  no  don't know

cancer and link of family :

COMMEMORATIVES AND ANTERIOR DISEASES

**Lifestyle :** inside (house, flat)  outside  with other animals  specify :

**Food :** industrial / dry  industrial / wet  homemade

**Cancerigen elements in the dog environment?** yes  no

**Vaccination :** annual : yes  no  if no, what frequency ? what vaccines ?

**Other REGULAR medicines :**

external antiparasitics  specify :

internal antiparasitics  specify :

other (anti-inflammatory drugs, hormonal medicines...)

specify :

**Anterior diseases (and approximative dates)** significant diseases, particularly when an immunological scheme is implicated (for instance, chronic digestive disease, autoimmune disease, cutaneous hypersensitivity, endocrinopathy, alimentary allergy, reactive histiocytoses, other tumours, like cutaneous histiocytoma, lameness) :

**Infectious diseases :** piroplasmosis  leishmaniosis  other  specify :

MALIGNANT HISTIOCYTOSIS CLINICAL SIGNS AT DIAGNOSIS

**Clinical diagnosis date :**

**General signs :**

fever..... yes  no  non evaluated

pale mucosae.....yes  no  non evaluated

icteric mucosae.....yes  no  non evaluated

appetite disorders.....yes  no  non evaluated

weakness..... yes  no  non evaluated

loss of weight..... yes  no  non evaluated

polyuro-polydypsia..... yes  no  non evaluated

others :.....

**Cardiorespiratory signs :**

cough.....yes  no  non evaluated

abnormal pulmonary auscultation ? (if yes, specify)

.....

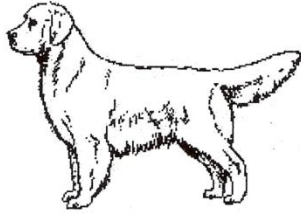
abnormal cardiac auscultation ? (if yes, specify)

.....

→

**Cutaneous signs:**

Cutaneous plaques..... yes  no  non evaluated   
cutaneous nodules..... yes  no  non evaluated   
multicentric..... yes  no  non evaluated   
location :



size.....<5cm  >5cm  non evaluated   
ulcerated aspect..... yes  no  non evaluated   
pruritus..... yes  no  non evaluated   
adherence with peripheric tissues : yes  no  non evaluated

**Have you detected one or many internal masses ?** yes  no  non evaluated

If yes, location : lungs  lymph nodes  specify :  
spleen  liver  other  specify :

Diagnostic methods : laparotomy  radiography  echography  other  specify :

**Neurologic signs :**

Central nervous system (ataxia, nystagmus, convulsions, etc).....yes  no  non evaluated   
if yes, specify :

Peripheric system (paresis paralysis, faecal and urinary incontinence, pain, etc) yes  no  non evaluated   
If yes, specify :

**Other signs :**

lymphadenomegaly.....yes  no  non evaluated   
if yes, specify :

splenomegaly.....yes  no  non evaluated   
hepatomegaly..... yes  no  non evaluated   
digestive signs..... yes  no  non evaluated   
others : .....

**HEMATOLOGICAL EXAM**

(eventually join a copy of the analysis)

**Numération formule :**

Anemia: yes  no  non eval.   
neutrophilia: yes  no  non eval.   
lymphopenia: yes  no  non eval.   
monocytosis: yes  no  non eval.   
thrombocytopenia: yes  no  non eval.

**Biochemical parameters :**

ALAT: yes  no  non eval.  fibrinogen: yes  no  non eval.   
PAL: yes  no  non eval.  proteinemia: yes  no  non eval.   
GGT: yes  no  non eval.  urea : yes  no  non eval.   
ASAT: yes  no  non eval.  creatinin... yes  no  non eval.   
bilirubin... yes  no  non eval.

For the biochemical parameters, specify values if abnormal :

**TREATMENT AND ANIMAL SURVIVAL**

**Was the animal treated by surgery?** yes  no  if yes, date ?

This surgery was : diagnostic (biopsy)  therapeutic (excision)

**Did the animal have a treatment ?** radiotherapy  corticotherapy  chimiotherapy

If yes, medicine and protocol :

**Did the dog die?** yes  no  if yes, date ?

cause of death:

**Clinical evolution between diagnosis and death :**

**Was the animal necropsied ?** yes  no

Have samples been done for the genetic research (Rennes CNRS – France) ?

blood : yes  no   
tumour : yes  non

Some other remarks about the animal :

Thanks for time and attention you gave to this questionnaire.