**Genetics behind behaviour**

|  |
| --- |
| Name of the owner:       |
| Address:       |
| Phone number:       |
| Email address:       |
| Breed:       |
| Dog’s name (official and call name):       |
| Registration number:       |
| sex: [ ]  male [ ]  female |
| Is the dog spayed/neutered: [ ]  yes  [ ]  no |
| If you answered yes, at what age is your dog spayed/neutered: |
| Do you have a blood sample from your dog in Hannes Lohi's research group's DNA bank?: [ ]  yes [ ]  no [ ]  I don’t remember |

This questionnaire includes questions which deal with fear, shyness, aggressiveness, noise phobia and separation anxiety. Generalized fear and noise phobia are known to have a heritable component, and the aim of this study is to find the genetic factors behind these behavioural traits in dogs. In addition to filling this questionnaire, a blood sample (or cheek swap) from your dog is needed. This study is conducted at the Helsinki University and at The Folkhälsan Institute of Genetics, Finland.

Please answer all the questions; even though your dog may not express shyness, aggressiveness or noise phobia, as we also need ‘control’ dogs in the study. If you are submitting forms for multiple dogs, you need to complete one questionnaire for each dog. All information submitted is strictly confidential. Neither you nor your dogs will be identified at any time.

You can find more information on the question by taking your pointer above the red question mark.

This questionnaire is a modified version from K9BEHAVIOURAL GENETICS QUESTIONNAIRES (Univ. of California, San Francisco & University of Pennsylvania, Philadelphia).

If you have any questions, please contact katriina.tiira@helsinki.fi , or hannes.lohi@helsinki.fi

**Background information**

Fear and shyness is affected not only genes but also by dog’s experiences, particularly in the puppyhood. Please take time in answering the following questions from your dog’s history. You may have to contact to the breeder of your dog for answering some questions. You can find more information on the question by taking your pointer above the red question mark.

1. At what age did the dog enter to your household?

2. Does the dog have any previous owners? Why didn’t the previous owners keep the dog?

3. Dog was acquired from [ ]  home breeder

 [ ]  home breeder (showline breeding)

[ ]  home breeder (working line breeding)

[ ]  Large kennel

[ ]  Larger kennel (show dogs)

[ ]  Larger kennel ((working dogs)

Other

4. Has the mother of your dog given birth to the litter at her home, or somewhere else (in the breeder’s kennel)

[ ]  in her home

[ ]  in the breeder’s kennel, or somewhere else (=not at the dog’s home)

[ ]  I don’t know

5. The birth of your dog. When your dog was born, were there any problems in the labour?

[ ]  Yes, there were problems, please spesify

[ ]  no

[ ]  I don’t know

6. Separation from the mother - at what age? At what age was your dog separated from its mother? Usually this happens around 4-9 weeks, however it is not always the same as the age when puppy enters new home.

[ ]  under 4 weeks

[ ]  at the age of 4 weeks

[ ]  at the age of 5 weeks

[ ]  at the age of 6 weeks

[ ]  at the age of 7 weeks

[ ]  at the age of 8 weeks

[ ]  at the age of 9 weeks

[ ]  at the age of 10-12 weeks

[ ]  over 12 weeks or older

[ ]  is still living in the same household with its mother

7. How did the mother of your dog take care of the puppies?

[ ]  I don't know

[ ]  Mother took extremely good care of the puppies and spend a lot of time with the puppies

[ ]  Mother took good care of the puppies

[ ]  Mother took relatively good care of the puppies, but sometimes it had to pushed back to spend time with the puppies

[ ]  At the beginning the mother spent some time with its puppies, but later started to avoid being with puppies

[ ]  Mother did not want to spent time with the puppies, even at the beginning, but nursed enough so the puppies were not taken from its mother

[ ]  Mother did not take care of puppies; puppies were taken to a surrogate mother, or they were bottle fed

[ ]  How did the mother of your dog take care of the puppies? If any of the obtions was not suitable, please tell in your own words

8. The socialization period: has the dog experienced the following events during the period between 7 weeks-3 months? How often?

*Events How often?*

Met strange adult dogs

[ ]  very often (several times per day)

[ ]  often (twice a week-once a day)

[ ]  sometimes (twice a month-twice a week)

[ ]  seldom (1-2 times at puppyhood - twice a month)

[ ]  rarely (less than 1-2 times during puppyhood)

[ ]  never

Met strange women

[ ]  very often (several times per day)

[ ]  often (twice a week-once a day)

[ ]  sometimes (twice a month-twice a week)

[ ]  seldom (1-2 times at puppyhood - twice a month)

[ ]  rarely (less than 1-2 times during puppyhood)

[ ]  never

Met strange men

[ ]  very often (several times per day)

[ ]  often (twice a week-once a day)

[ ]  sometimes (twice a month-twice a week)

[ ]  seldom (1-2 times at puppyhood - twice a month)

[ ]  rarely (less than 1-2 times during puppyhood)

[ ]  never

Met strange children

[ ]  very often (several times per day)

[ ]  often (twice a week-once a day)

[ ]  sometimes (twice a month-twice a week)

[ ]  seldom (1-2 times at puppyhood - twice a month)

[ ]  rarely (less than 1-2 times during puppyhood)

[ ]  never

Visited city (or other place with traffic &

many people)

[ ]  very often (several times per day)

[ ]  often (twice a week-once a day)

[ ]  sometimes (twice a month-twice a week)

[ ]  seldom (1-2 times at puppyhood - twice a month)

[ ]  rarely (less than 1-2 times during puppyhood)

[ ]  never

Travelled by car

[ ]  very often (several times per day)

[ ]  often (twice a week-once a day)

[ ]  sometimes (twice a month-twice a week)

[ ]  seldom (1-2 times at puppyhood - twice a month)

[ ]  rarely (less than 1-2 times during puppyhood)

[ ]  never

Travelled by buss

[ ]  very often (several times per day)

[ ]  often (twice a week-once a day)

[ ]  sometimes (twice a month-twice a week)

[ ]  seldom (1-2 times at puppyhood - twice a month)

[ ]  rarely (less than 1-2 times during puppyhood)

[ ]  never

9. Your household includes       adults and       children

10. How many dogs do you have at the moment (please mention breed, sex and age of the dogs)?

11. Is the dog in question your first? Second? 10th?

12. Dog lives [ ]  indoors [ ]  outside/ in the kennel

 [ ]  partly inside/partly in the kennel/outside

[ ]  other

13a. Do you engage any activities with your dog? Please specify?

13b. Activities with the dog – how much do you spend time in activities mentioned above? (daily walking excluded)

[ ]  zero

[ ]  once a year

[ ]  1-2 times / half a year

[ ]  1-2 times / month

[ ]  1-2 times / week

[ ]  2-4 times / week

[ ]  nearly daily

14. What does your dog eat?

[ ]  home food (specially made for the dog)

[ ]  home food (leftovers)

[ ]  commercial dog food (pet shop)

[ ]  commercial dog food (supermarket)

[ ]  something else, please specify

15. Do you give your dogs extra vitamins etc.?

[ ]  Regularly

[ ]  Sometimes

[ ]  Never

16. How many times does your dog get exercise in a typical day?

[ ]  three times or more

[ ]  twice a day

[ ]  once a day

[ ]  dog is outside all the time

[ ]  something else, please specify

During the daily walks, is your dog

 [ ]  on the leach during the whole walk

 [ ]  dog is leached part of the walk, and partly dog is allowed to run free

 [ ]  dog is mostly allowed to run free during the walks

17. How many hours/minutes does your dog get exercise in a typical day?

[ ]  three hours or more

[ ]  2-3 hours

[ ]  1-2 hours

[ ]  30 min-1 hour

[ ]  less than 30 min

18. How much does your dog spend alone in the house/kennel during the average working day?

[ ]  0 hours

[ ]  0-1 hours

[ ]  1-3 hours

[ ]  3-6 hours

[ ]  6-8 hours

[ ]  8-9 hours

[ ]  9-10 hours

[ ]  10 hours or more

**Shyness/fearfulness**

The following questions deal with dog’s potential fearful reactions towards strangers, unfamiliar dogs and also dog’s behaviour in new/strange places or situations.

If your dog’s behaviour is changed at some point, please describe that change in the section ‘Changed behaviour’.

Think how your dog usually reacts when meeting a stranger. If your dog shows shyness towards strangers, please mark **YES, my dog shows fearful behaviour**, **and then mark those appropriate behaviour(s) which best describe the behaviour of your dog.** If none of the behaviours listed below describewell your dog’s behaviour, you can add a suitable behaviour to the list**. If your dog does not behave fearfully, mark NO, and mark how your dog does behave when meeting a stranger.**

**19. Stranger**

**YES, DOG REACTS FEARFULLY** **[ ]  NO, DOG DOES NOT REACT FEARFULLY** **[ ]**

**When the dog meets a strange person, it…**

**[ ]** withdraws

[ ]  barks (is not going towards person)

[ ]  growls (is not going towards person

[ ]  tail low / between the legs

[ ]  not willing to make contact

[ ]  stays close to the owner

[ ]  barks / growls AND goes towards a stranger

**[ ]**

**How often does the dog react fearfully?**

**[ ]** Always, 100% of the times

[ ]  Almost always, 60-100% of the times

[ ]  Often, 40-60% of the times

[ ]  Rarely, 0-40% of the times

If you answered NO, please specify how your dog behaves when meeting a stranger

**[ ]** if allowed, always goes to greet the person

[ ]  jumps, licks, is very excited

[ ]  takes relaxed contact, sniffs and tail is wagging

[ ]  sniffs, bot loses its interest soon

[ ]  is not interested on people, but does not back up or mind if a person wants to pet the dog

[ ]  is not interested

[ ]  barks, growls

**[ ]  something else**

If the behaviour has changed at some point, please describe how your dog used to behave and how does it behaves now?

**Changed behaviour**

Former behaviour

Now

**20. Unfamiliar dog**

Think how your dog usually reacts when meeting unfamiliar dogs. If your dog is shy when meeting unfamiliar dogs, please mark **YES, my dog shows fearful behaviour**, **and then mark those appropriate behaviour(s) which best describe the behaviour of your dog.** If none of the behaviours listed below describewell your dog’s behaviour, you can add a suitable behaviour to the list**. If your dog does not behave fearfully, mark NO, and mark how your dog does behaves.**

**Does your dog show shyness or fear when meeting an unfamiliar dog?**

**YES, DOG REACTS FEARFULLY [ ]  NO, DOG DOES NOT REACT FEARFULLY [ ]**

**When the dog meets an unfamiliar dog, it…**

**[ ]** withdraws

[ ]  barks (is not going towards the dog)

[ ]  growls (is not going towards the dog)

[ ]  tail low / between the legs

[ ]  not willing to make contact

[ ]  stays close to the owner

[ ]  barks / growls AND goes towards a stranger

**[ ]**

**If you answered YES, please specify how does your dog react?**

**How often does the dog react fearfully?**

**[ ]** Always, 100% of the times

[ ]  Almost always, 60-100% of the times

[ ]  Often, 40-60% of the times

[ ]  Rarely, 0-40% of the times

If you answered NO, please specify how your dog behaves when meeting an unfamiliar dog

**[ ]** eager to meet, always friendly

[ ]  eager to meet, but loses its interest soon

[ ]  usually friendly, but responds aggressively if another dog shows aggressive behaviour

[ ]  usually friendly, but sometimes starts a fight

[ ]  usually growls

[ ]  usually barks

[ ]  barks / growls AND goes towards a dog

[ ]  indifferent, not interested in other dogs

[ ]  something else, please specify

**Changed behaviour**

Former behaviour

Now

**21. New situation, new environment**

Think how your dog usually reacts in new situations or places. If your dog shows fear is stressed (panting, shaking, intense peeling) please mark **YES,**  **and then mark those appropriate behaviour(s) which best describe the behaviour of your dog.** If none of the behaviours listed below describewell your dog’s behaviour, you can add a suitable behaviour to the list**. If your dog does not behave fearfully, mark NO, and mark how your dog does behaves.**

**In the case your dog shows fear only at the veterinary clinic, please do not take that into account.**

**Does your dog show fear or stress in a new situation or in a new environment?**

**YES, DOG REACTS FEARFULLY [ ]  NO, DOG DOES NOT REACT FEARFULLY** **[ ]**

**In a new situation /in a new environment my dog…**

[ ]  wants out of the situation / new space

[ ]  barks

[ ]  tail low

[ ]  stays still, does not want to explore the new environment

[ ]  stays close the owner (not under any command)

[ ]  walks low

[ ]  pants

[ ]  trembls

[ ]

**How often does the dog react fearfully?**

**[ ]** Always, 100% of the times

[ ]  Almost always, 60-100% of the times

[ ]  Often, 40-60% of the times

[ ]  Rarely, 0-40% of the times

**Changed behaviour**

Former behaviour

Now

If you answered NO, please specify how your dog behaves in a new situation or environment

**[ ]** tail in high position

[ ]  tail below the backline, but not between the legs

[ ]  dog is curious, eager to inspect

[ ]  is able to eat and sleep at the new place

[ ]  is calm, rather indifferent

[ ]  something else, please specify

**Other things that might be related to my dogs behaviour towards strange persons, dogs, or behaviour in new situations:**       **Aggressiveness**

The following questions deal with the dog’s aggressive behaviour towards strangers, dogs and owner / family member.

If the dog does not show aggressive behaviour, mark NO. If the dog shows aggressive behaviour, please mark the frequency of that particular behaviour on the scale 1-4. For example, if the dog almost always barks other dogs, then mark number 2 on ‘bark’ in question 16.

4= Always (100% of the occasions)

3= Nearly always (60-100% of the occasions)

2= Often (40-60% of the occasions)

1= Seldom (1-40% of the occasions)

0=never

**Aggressive behaviour**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| target | **NO reaction** | Growl | Bark(aggr.) | Snap(no skin contact) | Bite(Connects with skin) |
| 22. Strange person |       |       |       |       |       |
| 23. Familiar person |       |       |       |       |       |
| 24. Owner/ member of the family |       |       |       |       |       |
| 25. Strange dog |       |       |       |       |       |
| 26. Familiar dog |       |       |       |       |       |

**Changed behaviour:**

Former behaviour:

Now :

Are there any other issues that might be related to the aggressive behaviour of your dog which might be relevant concerning this study?      **Noise phobia**

The following questions deal with your dog’s reaction to loud noises. If your dog **does not react** on particular noise in question, mark **‘No’**. If your dog’s behavior has changed at any time, please, describe the former and present behavior under ‘Changed behavior’.

**27. THUNDERSTORM**

**YES [ ]  NO REACTION [ ]  DON’T KNOW** **[ ]**

**If you answered YES, please mark one or more behaviours that describe your dog's reaction**

[ ]  salivate

[ ]  defecate

[ ]  urinate

[ ]  destroy

[ ]  escape

[ ]  pant

[ ]  hide

[ ]  tremble

[ ]  vocalize

[ ]  pace

[ ]  freeze

[ ]  tail low/ between legs

**How often does the dog react to thunderstorm?**

**[ ]** Always, 100% of the times

[ ]  Almost always, 60-100% of the times

[ ]  Often, 40-60% of the times

[ ]  Rarely, 0-40% of the times

**Changed behaviour**

Former behaviour

Now

**28. FIREWORKS**

**Does your dog react to fireworks?**

**YES [ ]  NO REACTION [ ]  DON’T KNOW [ ]**

**If you answered YES, please mark one or more behaviours that describe your dog's reaction**

[ ]  salivate

[ ]  defecate

[ ]  urinate

[ ]  destroy

[ ]  escape

[ ]  pant

[ ]  hide

[ ]  tremble

[ ]  vocalize

[ ]  pace

[ ]  freeze

[ ]  tail low/ between legs

**How often does the dog react to fireworks?**

**[ ]** Always, 100% of the times

[ ]  Almost always, 60-100% of the times

[ ]  Often, 40-60% of the times

[ ]  Rarely, 0-40% of the times

**Changed behaviour**

Former behaviour

Now

**29. GUNSHOTS**

**YES [ ]  NO REACTION [ ]  DON’T KNOW [ ]**

**If you answered YES, please mark one or more behaviours that describe your dog's reaction**

[ ]  salivate

[ ]  defecate

[ ]  urinate

[ ]  destroy

[ ]  escape

[ ]  pant

[ ]  hide

[ ]  tremble

[ ]  vocalize

[ ]  pace

[ ]  freeze

[ ]  tail low/ between legs

**How often does the dog react to gunshot?**

**[ ]** Always, 100% of the times

[ ]  Almost always, 60-100% of the times

[ ]  Often, 40-60% of the times

[ ]  Rarely, 0-40% of the times

**Changed behaviour**

Former behaviour

Now

**30. OTHER NOISES (vacuum cleaners, leaf blowers, sirens, alarm systems etc.)**

**YES [ ]  NO REACTION [ ]  DON’T KNOW [ ]**

**If you answered YES, please mark one or more behaviours that describe your dog's reaction**

[ ]  salivate

[ ]  defecate

[ ]  urinate

[ ]  destroy

[ ]  escape

[ ]  pant

[ ]  hide

[ ]  tremble

[ ]  vocalize

[ ]  pace

[ ]  freeze

[ ]  tail low/ between legs

**How often does the dog react to gunshot?**

**[ ]** Always, 100% of the times

[ ]  Almost always, 60-100% of the times

[ ]  Often, 40-60% of the times

[ ]  Rarely, 0-40% of the times

**Changed behaviour**

Former behaviour

Now

**31**. Is the intensity of the dog’s reaction different when the dog is engaged in activities such as agility, obedience training, herding livestock, retrieving fowl?

a. [ ]  Yes, it is non-existent

b. [ ]  Yes, it is less severe

c. [ ]  No, it is the same

d. [ ]  Yes, it is more severe

**32**. How frequently do noise events such as thunder, fireworks or gunshots occur in the dog’s environment?

a. [ ]  Never

b. [ ]  Infrequently (few times a year)

c. [ ]  Regularly (averaging once a month or so)

d. [ ]  Frequently (a few times a month or more)

If you answered **b, c or d, to 31**what are the noises?

**33**. Has the dog ever been treated for noise sensitiveness or phobias? Please check all relevant choices below?

 [ ]  Acerpromazine

 [ ]  Rescue Remedy

 [ ]  Benzodiazepine, (Valiumilla or Xanaxilla

 [ ]  Other ’natural’ or ‘holistic’ remedies

 [ ]  Desensitization (tapes, CDs, videos)

 [ ]  Other?:

**34**. Do you have additional comments about your dog’s reaction to noises, or is there anything else about his or her behaviour when exposed to noise that you think we should know:

**Separation anxiety**

**35**. Does your dog exhibit separation anxiety when left alone?

**YES** **[ ]  / NO** **[ ]**

If you answered yes, please explain how the dog behaves: