

### ***Canine Buccal Swab DNA Sample Instructions***

Thank you for participating in the Dog Genotyping project for our Genetics Class!

The class will be genotyping a handful of purebred dogs, mixed breed dogs, and a wolf-dog hybrid in order to study several questions about the Dog genome. The DNA markers are associated with several traits, such as size, weight, and behavioral traits like herding. We would like a Buccal (cheek) swab sample to isolate your dog's DNA. Please also answer the questionnaire that follows about your dog's physical traits. We hope to observe the markers associated with these traits, but we will also be asking some more simple questions, such as whether purebred dogs have less heterozygosity than the mixed breed dog or the wolf. The class will also be doing a paternity test for one of the dogs.

To take the DNA sample, please allow at least 30 minutes after your dog's last meal or treat to reduce contamination. We have included a pair of non-latex exam gloves to use when you take the sample. It is important to keep the brush from contacting your skin or other sources of contamination. A pair of scissors is the only item that is not supplied for the procedure.

1. Take out the exam gloves from the bag and place them on your hands.
2. Remove a cytology brush from its foil packet and place the foil on a table that is out of reach from the dog or children. (you will need to set the brush down for 2 hours during step 4)
3. Take the cytology brush and rub the bristled end on the inside of your dog's cheek. You may need someone else to hold your dog. While rotating the brush, scrape the cheek up and down for 5 to 10 seconds.
4. Place the brush on top of the foil and let dry for two hours.
5. Repeat steps 2-4 with the second brush on the opposite cheek.
6. After the brushes have dried, place each brush end inside a small microfuge tube and, using a pair of scissors, clip off the bristled end. Cap the tubes and place them along with the questionnaire into the zip top storage bag.
7. Lastly, give your dog a treat, and thank her for her scientific contribution.

The student will collect the kit after you have finished taking the sample. Please complete the sample collection by \_\_\_\_\_.

***Dog DNA Questionnaire***

Your name: \_\_\_\_\_

Name of your dog: \_\_\_\_\_

Breed(s) of your dog: \_\_\_\_\_

Weight: \_\_\_\_\_lb

Color of hair: \_\_\_\_\_

Length of hair (circle best answer):   Short                   Long

Does your dog point or herd or both? \_\_\_\_\_