

## COLLECTING HAIR AND BLOOD SAMPLES FOR ANALYSIS

Below are instructions on how to collect and submit hair or blood samples of your horses for genotyping analyses. **When submitting, please include the “Sample Submission Form” with your shipment(s).**

### **Instructions for hair root sample collection and shipping:**

1. Pull 40-50 mane or tail hairs with roots intact.
2. Inspect the hairs to ensure that a clear bulb is present from the root of the sample. DNA cannot be obtained from cut hair. See Figure 1 below.

**Figure 1. Root of horse hairs. White bulbs of the roots are indicated in the red rectangle.**



3. Place in a completely sealed *paper* envelope label with horse name and owner full name and email. **DO NOT place hair roots in a plastic bag, this will degrade DNA.** Please ship these samples to the address provided below with the sample submission sheet for your horse or horses.

**Instructions for blood sample collection and shipping.** Blood samples can be drawn at the University of Minnesota Veterinary Hospital, by a member of the research team at no charge (if arranged), or by your veterinarian. If done by your veterinarian, please have them follow the instructions below.

1. Blood samples should be collected with the use of appropriate restraint, under calm conditions by a licensed veterinarian.
2. Submit 10-15 cc (ml) of whole blood in a purple-topped (EDTA) tube(s). If 10-cc tubes are not available, please use 5 cc or 3 cc tubes. Please write owner's last name and horse name on the tube.
3. Gently rock the tubes a few times to distribute the anticoagulant: Do not spin, extract serum, or do anything further. Refrigerate the sample if it is being held for any time before shipping.

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4. Pack the sample in a small, insulated container (most veterinarians have these for shipping samples to labs), with one or more cool packs. Blood samples must be kept cool but not frozen.
5. Ideally, ship the sample immediately. Ship by overnight delivery (US Mail, UPS, or FedEx) to the address provided below. **Do not send on a Friday** because no one may be available to accept the delivery on a Saturday, and the sample might become unusable by Monday.
6. **If the samples are held for a day or over the weekend, they must be refrigerated and gently rocked once a day.**

### Shipping Address:

Dr. Molly McCue, c/o Lauren Hughes  
225 Veterinary Medical Center  
1365 Gortner Ave  
St. Paul, Minnesota 55108