

## DNA Sample Collection from Animal Companions

**General Shipping Instructions** – Overnight shipping is not required. However, to make sure that your precious sample arrives safely we strongly suggest using a shipping method with tracking or delivery confirmation.

U.S. Priority Mail with delivery confirmation is inexpensive and reliable.

**Cheek Swabs\*** - Cheek swabs are a great, noninvasive way to collect DNA from a cat or dog. A soft brush is gently scraped on the inner cheek to remove cells. Label the swab packet, open it and remove the swab. Gently pull the pet's cheek away from the teeth and insert the brush into the cheek pouch with the bristles pressed out against the inner cheek (away from the teeth). Gently brush up and down for about 30 seconds. If the pet grows impatient, switch sides or try again later. Try to brush for at least 30 seconds total. Also, avoid taking the sample immediately after the pet has eaten. Let the brush air-dry at least 30 minutes, then place back in the packet and into a paper envelope. **DNA is best preserved when kept dry so avoid plastic bags or air-tight containers. Bacteria will grow on the swab in a sealed container. If your veterinarian assists you with sample collection make sure they do NOT use a Culturette swab.** If submitting a cheek swab from yourself be sure to label it as well.

**As a substitute for a Perpetua cheekswab, a new, small toothbrush or several cotton-tipped swabs can be used and placed in a paper envelope for shipping. Consider this option if you would rather not wait for a DNA collection kit or if your pet is very ill.**

**Blood** - A 1 ml blood sample (approximately ¼ teaspoon) can be collected in a lavender-top tube. The sample should be protected from breakage in a small box or pill vial and shipped in a padded envelope or box. During cooler weather no overnight shipping is required but should be mailed within a few days. During the hot summer months consider using Priority or Express mail. We are not in the office to receive samples on Saturday or Sunday so mail early in the week, refrigerate until then. It is fine if the sample is less than 1 ml; it will still have more DNA than other sample types.

**Bird or Reptile Blood** – Birds and reptiles have DNA in all their blood cells so Perpetua only needs a drop. Place a drop of blood on a piece of ordinary paper (about a dime-size spot) and allow to dry. Fold the paper and place in a Ziploc bag.

**Bunnies and Pocket Pets** – A small blood sample (a small amount in a lavender-top tube) are the best options for these pint-size pets. You can also submit pulled hairs\*. Place a few tufts in a Ziploc bag. Cheek swabs do not yield significant DNA.

**Hair or Feathers\*** - Clipped or shed hair contains small amounts of DNA. That DNA can be used alone or in combination with another sample type, such as a cheekswab from another pet or yourself. Note that plucked hairs with roots contain more DNA than cut hair. Seal the hair in a small Ziploc bag and enclose in the same envelope with the other sample if you decide to include one. Please label the bag by writing the name on a piece of tape (Scotch brand or masking tape) and adhering it to the bag.

**Horses** – Sample options for horses include blood and hair\*. Ask your veterinarian to collect 1-2 ml of blood in a lavender-top tube. This is easily done when the horse is sedated for dental work or other procedures. Pulled mane hairs are also good sources of DNA. Pull 4-5 hairs at a time by wrapping the hairs around your finger close to the skin and pulling slowly and evenly. The “DNA-rich” root bulb appears as a little hook structure at the base of correctly-pulled hair. As you pull the hairs bunch them together so that the root ends are together. When you have 10-20 hairs wrap some tape around the bunch a few inches above the root ends and place in a Ziploc bag. Cut mane or tail hairs still have DNA preserved in the hair shaft. Simply enclose 5-10 hairs in a Ziploc bag. Be sure to label the bag with your name and the horse's name.

**For recently passed pets** - Please have your veterinarian or pet mortician contact us for instructions. If your pet passes away when we are not available, ask your veterinarian to store the remains appropriately until we can advise him/her.

**Cremated ashes** - During the cremation process the DNA is completely mineralized. Perpetua mixes the fine ash with DNA from another sample (such as a cheek swab) from another pet or yourself. The ashes will be visible as a fine texture on the surface of the DNA. Please note that cremated ashes vary in color and the DNA tint may be modified with the addition of ashes. Enclose a few teaspoons of ashes in a small Ziploc bag and enclose in the same envelope with the other sample. Please label the bag using a piece of tape (Scotch brand or masking tape) and adhering it to the bag. Unless instructed otherwise, Perpetua will respectfully scatter unused ashes in the redwood forest near our facility.

**\*Please note that cheekswab and hair samples do not have sufficient DNA to complete the Life Jewel helix. Botanical DNA is added and acts as a lattice to support the sample DNA without interfering with its unique qualities.**