

## Modiano Lab: The Samples We Need

The samples we need most include **fresh biopsy samples** and come from as yet **untreated** dogs affected with **hemangiosarcoma, osteosarcoma, or lymphoma**.

Included in the **biopsy sample collection kits** we ship to veterinarians is transport media specific to these three tumor types. **These media help keep fresh biopsy samples in the best possible condition for transport to our lab for cell culture.** Unused transport media can be kept refrigerated (not frozen) for use for up to two years.

### **Ideal sample submissions include:**

- 1) A fresh tumor biopsy sample:** aseptic, representative sample, about the size of a blueberry, taken during surgery (or post mortem **within 20 minutes** of death) and placed in relevant transport medium (provided in kit).
- 2) A preserved tumor biopsy sample:** clean, blueberry-size or smaller sample placed in a jar of 10% formalin (included in kit). We will submit this sample to our histopathology lab for a definitive diagnosis. *The report from this sample will be forwarded to the dog's attending vet when it becomes available, but, because of the backlog of samples, it should NOT be considered a substitute for the report from the vet's diagnostic lab.*
- 3) A whole blood sample:** 5-10 ml in EDTA purple top tubes (included in kit).

If necessary, we can accommodate emergency situations, where an untreated dog with a suspected diagnosis of one of the cancers mentioned above is on the surgery table and the owner is willing to contribute **tumor and blood samples** but the vet is without our kit. In these cases, the vet should get in touch with **Mitzi Lewellen ([lewel001@umn.edu](mailto:lewel001@umn.edu) or 612-626-6890, press Option 1)** at the Modiano Lab for instructions on sample submission. Likewise, **if a sample must be taken late on a Thursday, on a Friday, or over a weekend, please contact Mitzi for submission instructions.**

Because fresh biopsy samples are our highest priority and need to be overnighted, we will pay the cost of shipping the kit both ways. We can receive samples at the lab **Tuesdays through Fridays (excluding holidays)**, but **we ask for 24 hours' advance notice** that an overnight sample is coming so that we can have the personnel ready to process it.

**Blood-only samples:** Blood samples (5-10 ml in EDTA purple top tubes) **from pedigreed dogs with a definitive diagnosis of one of the three cancers we are researching** are always welcome for susceptibility mapping studies; they **do not** require a biopsy sample collection kit and **do not** need to be overnighted. To a somewhat lesser extent, we can use blood samples from healthy pedigreed dogs that are close relatives of the affected dogs in our studies. We can even accept blood samples from affected dogs that are being treated by chemotherapy, if the blood draw can be scheduled to occur at the longest interval between treatments.

Although we consider all samples important and useful, blood without biopsy samples, even in untreated dogs, is of somewhat lower priority to our lab than blood with biopsy samples. **Most often, blood-only samples will be referred directly to mapping studies being done by our collaborators (for example, the Broad Institute), which may have additional criteria for inclusion.** We will, nevertheless, bank samples we receive, even

## **Modiano Lab: The Samples We Need**

if they are currently ineligible (for example, when they are excluded because of age or breed), as they may be vital for future research efforts.

**The first step to any sample submission to the Modiano Lab is contacting Mitzi Lewellen ([lewel001@umn.edu](mailto:lewel001@umn.edu) or 612-626-6890, press Option 1).** She coordinates sample submissions and will provide you with forms and shipping information, and, if appropriate, provide your vet with a biopsy sample collection kit.