The Samples We Need

The kinds of samples we need most come from affected, untreated dogs and include a fresh tumor biopsy (about the size of a blueberry) and 5-10 ml of fresh blood, with enough notification for us to overnight a sample collection kit to the vet performing the biopsy. We have specific transport medias (for lymphoma, hemangiosarcoma, and osteosarcoma tumor samples) which we include in the kits we send. These medias help keep biopsy samples in the best possible condition until they arrive at our lab for processing. A second tumor biopsy sample (again, about blueberry size, or smaller) preserved in a jar of 10% formalin (also included in our kit) will be submitted to our histopathology lab. (The report from this sample will be forwarded to the dog's attending vet, but it should not be considered a substitute for the report from the vet's own histopathology lab.)

Because samples received in our kits are our highest priority and need to be overnighted and cold, we will pay the cost of shipping them. We can receive samples at the lab Tuesday through Friday, but we ask for 24 hours' advance notice that an overnight sample is coming so that we can have the personnel on hand to process it.

We can accommodate emergency situations, where an untreated dog 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 or 612-626-6890) at the Modiano Lab for instructions on sample submission.

Blood only samples, 5-10 ml in EDTA purple top tubes, are always welcome for our susceptibility mapping studies. These studies require blood samples from dogs with pedigrees and a definitive diagnosis of one of the cancers we are researching. To a somewhat lesser extent, we can use blood samples from healthy pedigreed dogs that are 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 tumor samples, even in untreated dogs, is of somewhat lower priority than blood with tumor samples. Mostly these samples will go to mapping studies being done by our collaborators, which may have additional criteria for inclusion. We will nevertheless bank samples we receive even if they are currently ineligible (for example, when they are excluded because of age or breed), as they may one day be vital for future research efforts. Blood, unlike tumor, is quite stable at room temperature for up to one week in EDTA purple top tubes and can be mailed, USPS.

The first step to any sample submission is to contact Mitzi (<u>lewel001@umn.edu</u> or 612-626-6890) at the Modiano Lab. She coordinates sample submissions and will provide you with forms and shipping information, and, if appropriate, provide your vet with a sample collection kit