Partially Funded Clinical Trial
for Soft Tissue Sarcomas and Mammary Tumors in Dogs

**Study title:** Using optical coherence tomography for margin evaluation of canine soft tissue sarcomas and mammary tumors.

**Purpose of the study:** To evaluate a new imaging method to detect cancer cells left behind following removal of soft tissue sarcomas and mammary tumors in client-owned dogs undergoing surgery. This technology is used successfully in human breast cancer surgery, providing microscopic assessment of surgical margins within minutes. Identifying a rapid and thorough imaging method to detect any remaining cancer cells during surgery for sarcomas and mammary tumors, will support targeted treatment management decisions and improve outcomes for dogs with cancer.

**Inclusion criteria:** We will be enrolling 30 dogs with soft tissue sarcoma and 30 dogs with mammary tumor for inclusion in this study. **START DATE: January 1, 2016.**

- Cytology or histopathology confirmation of soft tissue sarcoma or mammary tumor
- Dermal, subcutaneous, or muscular tumor location of soft tissue sarcoma
- Animal owner committed to surgical excision of sarcoma or mammary tumor

**Treatment:** Dogs will undergo surgery to remove their tumor(s), following removal the tumor and the surgical site will be scanned with optical coherence tomography to assess the surgical margins for residual cancer cells. The specimen will then undergo thorough histopathological assessment.

**Benefits or risks:** Intraoperative scanning of the surgical site will be performed to assess for residual cancer cells and tiny tissue samples will be taken. This will take between 5-10 minutes; in the event of instability under anesthesia this would not be performed. Following tumor removal, the tissue will undergo a thorough assessment for residual cancer. The results of this assessment will be reported to the primary clinician for notification of the referring veterinarian and the animal owner.

**Incentives:** Pet owners are financially responsible for all costs associated with evaluation and surgery. Each pet owner will receive $200 credit to their Veterinary Teaching Hospital account to cover the costs of the histopathology evaluation.

**Contact information:** Please feel free to call Michelle Jaeger or Rebecca Kamerer at (217) 333-5311 to refer a patient or for any additional information. Inquiries from both veterinarians and clients are welcome. Owners may schedule appointments by calling (217) 333-5300 and requesting a new appointment with Soft Tissue Surgery.