

# Introducing Advanced Imaging for Canine Prostate Cancer

## PET-CT Evaluation of Metastatic Prostate Cancer using $^{18}\text{F}$ DCF-PYL

Historically, no type of imaging has been capable of diagnosing the spread of metastatic prostate cancer to bone and soft tissues in the dog. In addition, it has been difficult to differentiate between prostate adenocarcinoma in dogs and other diseases of the genitourinary system, such as transitional cell carcinoma. For humans suffering from prostate cancer,  $^{18}\text{F}$  DCF-PYL, a small molecule inhibitor of prostate-specific membrane antigen (PSMA) has been shown to have high uptake at sites of metastases. This radiotracer is currently undergoing rigorous phase III clinical trials in people in order to gain FDA-approval. In dogs, staging tests and therapies have been inconsistently applied to canine patients because prostate cancer can be difficult to diagnose. In addition, since prostate cancer diagnosis is often made when the patient has end-stage disease, there has been little development in therapies. The current study goal is to confirm that  $^{18}\text{F}$  DCF-PYL PET-CT offers an improved sensitivity for the early detection of metastatic prostate cancer.

If interested, please contact:

Dr. Rebecca Krimins and Dr. Dara Kraitchman

The Center for Image-Guided Animal Therapy

Johns Hopkins University

Email: [cigat@jhmi.edu](mailto:cigat@jhmi.edu)

Phone: 410-502-7325

Website: <http://www.hopkinscigat.org>

