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Guide Dogs

Researchers are comparing the similarities between men and male dogs when it comes to prostate cancer.

Story by Marcus Wilkins

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Dog might be man's best friend, but he's also his best medical model when it comes to prostate cancer. Like men, canines are one of the only mammals that naturally develop prostate cancer.

Jeffrey Bryan, associate professor of oncology at the College of Veterinary Medicine, is studying the genetic markers in men and dogs with and without prostate cancer.

“We’re trying to sort out which genes are ‘disregulated’ that are



Jeffrey Bryan, associate professor of oncology at the College of Veterinary Medicine, with Gracy Wade, a 6-year-old terrier mix being treated for lymphoma at the Veterinary Medical Teaching Hospital. Photo by Karen Clifford.

similar in dog and man,” says Bryan, MS ’04, PhD ’07. He says the goal is to compare the findings and predict which patients will do well with treatment.

Meanwhile, fellow researcher Sandra Bechtel runs the clinical side of the study that treats the dogs using radioactive gold nanoparticles.

“We’re injecting these particles directly into the dogs’ prostates,” Bechtel says. “We’re hoping the gold will be more effective with fewer side effects than traditional radiation therapy.”

The two-pronged study has treated 15 dogs from around the country, and the doctors aren’t picky about breeding, be it mutt or mastiff.

“Dobermans, shelties, beagles, German shorthairs, Norwegian elk hounds,” Bryan says. “While some breeds have a predisposition for these cancers, we are looking for broad themes, applicable to all breeds as well as to men.”

Editor’s note: *An earlier version of this story specified a source for the nanoparticles.*

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