



Borzoi Club of America



CHF Peer-Reviewed Publications Resulting from Research Sponsorship

4/25/2023

02242: Understanding the Genetics of Adverse Drug Reactions in Sighthounds

Principal Investigator: Michael H. Court, BVSc, PhD, Washington State University

Research Program Area: Gastrointestinal Disease

Martinez, S. E., Pandey, A. V., & Court, M. H. (2019). Isoform-Dependent Effects of Cytochrome P450 Oxidoreductase Polymorphisms on Drug Metabolism by Cytochrome P450 Enzymes in Dogs. *The FASEB Journal*, 33(1_supplement), 506.9-506.9. https://doi.org/10.1096/fasebj.2019.33.1_supplement.506.9

Martinez, Stephanie E., Jian Shi, et al. (2019) "Absolute Quantitation of Drug Metabolizing Cytochrome P450 Enzymes and Accessory Proteins in Dog Liver Microsomes Using Label-Free Standard-Free Analysis Reveals Inter-Breed Variability." *Drug Metabolism and Disposition*, Jan., dmd.119.088070, <https://doi.org/10.1124/dmd.119.088070>

Martinez, Stephanie E., Marie C. Andresen, et al. (2020) "Pharmacogenomics of Poor Drug Metabolism in Greyhounds: Cytochrome P450 (CYP) 2B11 Genetic Variation, Breed Distribution, and Functional Characterization." *Scientific Reports*, 10(60), <https://doi.org/doi:10.1038/s41598-019-56660-z>

02233-A: Evaluation of a Novel Technique for Gastric Decompression in Dogs with Gastric Dilatation and Volvulus

Principal Investigator: J. Brad Case, DVM, MS, University of Florida

Research Program Area: Gastrointestinal Disease

Fox-Alvarez, W. Alexander, et al. (2019) "Evaluation of a Novel Technique Involving Ultrasound-Guided, Temporary, Percutaneous Gastropexy and Gastrostomy Catheter Placement for Providing Sustained Gastric Decompression in Dogs with Gastric Dilatation-Volvulus." *Journal of the American Veterinary Medical Association*, 255(9), 1027–34, <https://doi.org/10.2460/javma.255.9.1027>

01937-B: Evaluating the Complex Genetic Basis of Bloat

Principal Investigator: Elizabeth A Rozanski, DVM, Tufts University

Research Program Area: Gastrointestinal Disease

Bell, J. S. (2014). Inherited and Predisposing Factors in the Development of Gastric Dilatation Volvulus in Dogs. *Topics in Companion Animal Medicine*, 29(3), 60–63. <https://doi.org/10.1053/j.tcam.2014.09.002>



Sharp, C. R., & Rozanski, E. A. (2014). Cardiovascular and Systemic Effects of Gastric Dilatation and Volvulus in Dogs. *Topics in Companion Animal Medicine*, 29(3), 67–70, <https://doi.org/10.1053/j.tcam.2014.09.007>

Piras, Ignazio S., et al. (2020) "Identification of Genetic Susceptibility Factors Associated with Canine Gastric Dilatation-Volvulus." *Genes*, 11(11), p. 1313, <https://doi.org/10.3390/genes11111313>

Sharp, Claire R., et al. (2020) "The Pattern of Mortality in Dogs with Gastric Dilatation and Volvulus." *Journal of Veterinary Emergency and Critical Care*, <https://doi.org/10.1111/vec.12932>

01753: Identification of Genetic Factors That Alter the Severity of Cardiomyopathy

Principal Investigator: Kathryn M Meurs, DVM, PhD, North Carolina State University

Research Program Area: Cardiology

Meurs, K. M., Stern, J. A., Reina-Doreste, Y., Spier, A. W., Koplitz, S. L., & Baumwart, R. D. (2014). Natural History of Arrhythmogenic Right Ventricular Cardiomyopathy in the Boxer Dog: A Prospective Study. *Journal of Veterinary Internal Medicine*, 28(4), 1214–1220. <https://doi.org/10.1111/jvim.12385>

01467: Understanding Laryngeal Paralysis to Provide Better Treatment

Principal Investigator: Bryden J. Stanley, BVMS, MVetSc., Michigan State University

Research Program Area: Neurology

Maurer, M., Mary, J., Guillaud, L., Fender, M., Pelé, M., Bilzer, T., ... Tiret, L. (2012). Centronuclear Myopathy in Labrador Retrievers: A Recent Founder Mutation in the PTPLA Gene Has Rapidly Disseminated Worldwide. *PLoS ONE*, 7(10), e46408. <https://doi.org/10.1371/journal.pone.0046408>

01227-A: Specificity and Sensitivity of the Pancreatic Lipase Immunoreactivity (SPEC cPL) Test for the Diagnosis of Canine Pancreatitis

Principal Investigator: Stanley L. Marks, BVSc, PhD, University of California, Davis

Research Program Area: Gastrointestinal Disease

Trivedi, S., Marks, S. L., Kass, P. H., Luff, J. A., Keller, S. M., Johnson, E. G., & Murphy, B. (2011). Sensitivity and Specificity of Canine Pancreas-Specific Lipase (cPL) and Other Markers for Pancreatitis in 70 Dogs with and without Histopathologic Evidence of Pancreatitis. *Journal of Veterinary Internal Medicine*, 25(6), 1241–1247. <https://doi.org/10.1111/j.1939-1676.2011.00793.x>



00373A: Mapping Genes Associated with Osteosarcoma in Large Dog Breeds

Principal Investigator: Kerstin Lindblad-Toh, PhD, Broad Institute

Research Program Area: Oncology - Osteosarcoma

Karlsson, E. K., Baranowska, I., Wade, C. M., Salmon Hillbertz, N. H. C., Zody, M. C., Anderson, N., ... Lindblad-Toh, K. (2007). Efficient mapping of mendelian traits in dogs through genome-wide association. *Nature Genetics*, 39(11), 1321–1328. <https://doi.org/10.1038/ng.2007.10>

Salmon Hillbertz, Nicolette H. C., et al. (2007) “Duplication of FGF3, FGF4, FGF19 and ORAOV1 Causes Hair Ridge and Predisposition to Dermoid Sinus in Ridgeback Dogs.” *Nature Genetics*, 39(11), 1318–20, <https://doi.org/10.1038/ng.2007.4>

Karlsson, E. K., & Lindblad-Toh, K. (2008). Leader of the pack: Gene mapping in dogs and other model organisms. *Nature Reviews Genetics*, 9(9), 713–725. <https://doi.org/10.1038/nrg2382>

Karlsson, Elinor K., Snaevar Sigurdsson, et al. (2013) “Genome-Wide Analyses Implicate 33 Loci in Heritable Dog Osteosarcoma, Including Regulatory Variants near CDKN2A/B.” *Genome Biology*, 14(12), R132, <https://doi.org/10.1186/gb-2013-14-12-r132>

0002434: Recombinant Thyrotropin (TSH): Standard for the Next Generation of Canine TSH Immunoassays with Improved Sensitivity

Principal Investigator: Duncan Ferguson, DVM PhD, University of Georgia

Research Program Area: Endocrinology

Ferguson, D. C. (2007). Testing for Hypothyroidism in Dogs. *Veterinary Clinics of North America: Small Animal Practice*, 37(4), 647–669. <https://doi.org/10.1016/j.cvsm.2007.05.015>