



# 2019 Peer-Reviewed Publications

Resulting from AKC Canine Health Foundation research grants

CHF Grant ID	APA Citation	Institution; Principal Investigator
02436	Adin, D., Kurtz, K., Atkins, C., Papich, M. G., & Vaden, S. (2019). Role of electrolyte concentrations and renin-angiotensin-aldosterone activation in the staging of canine heart disease. <i>Journal of Veterinary Internal Medicine</i> , 1–12. <a href="https://doi.org/10.1111/jvim.15662">https://doi.org/10.1111/jvim.15662</a>	North Carolina State University; Papich
00572-A	Agler, C. S., Friedenberg, S., Olivry, T., Meurs, K. M., & Olby, N. J. (2019). Genome-wide association analysis in West Highland White Terriers with atopic dermatitis. <i>Veterinary Immunology and Immunopathology</i> , 209, 1–6. <a href="https://doi.org/10.1016/j.vetimm.2019.01.004">https://doi.org/10.1016/j.vetimm.2019.01.004</a>	North Carolina State University; Olivry
01986	Aicher, K. M., Cullen, J. M., Seiler, G. S., Lunn, K. F., Mathews, K. G., & Gookin, J. L. (2019). Investigation of adrenal and thyroid gland dysfunction in dogs with ultrasonographic diagnosis of gallbladder mucocele formation. <i>PLOS ONE</i> , 14(2), e0212638. <a href="https://doi.org/10.1371/journal.pone.0212638">https://doi.org/10.1371/journal.pone.0212638</a>	North Carolina State University; Gookin
02343-A	Azevedo, C. N., Lidbury, J. A., & Jeffery, U. (2019). Effects of marked hypertriglyceridemia and lipid clearance techniques on canine biochemistry testing. <i>Journal of Veterinary Diagnostic Investigation</i> , 1040638719858690. <a href="https://doi.org/10.1177/1040638719858690">https://doi.org/10.1177/1040638719858690</a>	Texas A&M University; Jeffery
02252	Berk, B. A., Packer, R. M. A., Law, T. H., Wessmann, A., Bathan-Nöthen, A., Jokinen, T. S., Knebel, A., Tipold, A., Pelligand, L., & Volk, H. A. (2019). A double-blinded randomised dietary supplement crossover trial design to investigate the short-term influence of medium chain fatty acid (MCT) supplement on canine idiopathic epilepsy: Study protocol. <i>BMC Veterinary Research</i> , 15(1), 181. <a href="https://doi.org/10.1186/s12917-019-1915-8">https://doi.org/10.1186/s12917-019-1915-8</a>	Royal Veterinary College, University of London; Volk
02518	Bray, E. E., Levy, K. M., Kennedy, B. S., Duffy, D. L., Serpell, J. A., & MacLean, E. L. (2019). Predictive Models of Assistance Dog Training Outcomes Using the Canine Behavioral Assessment and Research Questionnaire and a Standardized Temperament Evaluation. <i>Frontiers in Veterinary Science</i> , 6. <a href="https://doi.org/10.3389/fvets.2019.00049">https://doi.org/10.3389/fvets.2019.00049</a>	University of Arizona; Bray

02066	Chu, C. P., & Nabity, M. B. (2019). Comparison of RNA isolation and library preparation methods for small RNA sequencing of canine biofluids. <i>Veterinary Clinical Pathology</i> , 0(0). <a href="https://doi.org/10.1111/vcp.12743">https://doi.org/10.1111/vcp.12743</a>	Texas A&M University; Nabity
02066	Clark, S. D., Song, W., Cianciolo, R., Lees, G., Nabity, M., & Liu, S. (2019). Abnormal Expression of miR-21 in Kidney Tissue of Dogs With X-Linked Hereditary Nephropathy: A Canine Model of Chronic Kidney Disease. <i>Veterinary Pathology</i> , 56(1), 93–105. <a href="https://doi.org/10.1177/0300985818806050">https://doi.org/10.1177/0300985818806050</a>	Texas A&M University; Nabity
02522-A	Finotello, R., Schiavo, L., Ressel, L., Frohmader, A., Silvestrini, P., & Verin, R. (2019). Lipoxygenase-5 Expression in Canine Urinary Bladder: Normal Urothelium, Cystitis and Transitional Cell Carcinoma. <i>Journal of Comparative Pathology</i> , 170, 1–9. <a href="https://doi.org/10.1016/j.jcpa.2019.05.001">https://doi.org/10.1016/j.jcpa.2019.05.001</a>	University of Liverpool; Finotello
02233-A	Fox-Alvarez, W. A., Case, J. B., Lewis, D. D., Joyce, A. C., Cooke, K. L., & Toskich, B. (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-	University of Florida; Case
02192-A	Fuente-Lara, A. de la, Hesser, A., Christensen, B., Gonzales, K., & Meyers, S. (2019). Effects from aging on semen quality of fresh and cryopreserved semen in Labrador Retrievers. <i>Theriogenology</i> . <a href="https://doi.org/10.1016/j.theriogenology.2019.04.013">https://doi.org/10.1016/j.theriogenology.2019.04.013</a>	University of California, Davis; Meyers
01236-A	Gershony, L. C., Belanger, J. M., Hytönen, M. K., Lohi, H., & Oberbauer, A. M. (2019). Novel Locus Associated with Symmetrical Lupoid Onychodystrophy in the Bearded Collie. <i>Genes</i> , 10(9), 635. <a href="https://doi.org/10.3390/genes10090635">https://doi.org/10.3390/genes10090635</a>	University of California, Davis; Oberbauer
01236-A	Gershony, L. C., Belanger, J. M., Short, A. D., Le, M., Hytönen, M. K., Lohi, H., ... Oberbauer, A. M. (2019). DLA class II risk haplotypes for autoimmune diseases in the Bearded Collie offer insight to autoimmunity signatures across dog breeds. <i>Canine Genetics and Epidemiology</i> , 6(1), 2. <a href="https://doi.org/10.1186/s40575-019-0070-7">https://doi.org/10.1186/s40575-019-0070-7</a>	University of California, Davis; Oberbauer
02604	Guo, J., Johnson, G. S., Cook, J., Harris, O. K., Mhlanga-Mutangadura, T., Schnabel, R. D., Jensen, C. A., & Katz, M. L. (2019). Neuronal ceroid lipofuscinosis in a German Shorthaired Pointer associated with a previously reported CLN8 nonsense variant. <i>Molecular Genetics and Metabolism Reports</i> , 21, 100521. <a href="https://doi.org/10.1016/j.ymgmr.2019.100521">https://doi.org/10.1016/j.ymgmr.2019.100521</a>	University of Missouri; Johnson

00610	Hess, R., Henthorn, P., Devoto, M., Wang, F., & Feng, R. (2019). An exploratory association analysis of the insulin gene region with diabetes mellitus in two dog breeds. <i>The Journal of Heredity</i> . <a href="https://doi.org/10.1093/jhered/esz059">https://doi.org/10.1093/jhered/esz059</a>	University of Pennsylvania; Hess
02204-T	Holt, D., Singhal, S., & Selmic, L. E. (2019). Near-infrared imaging and optical coherence tomography for intraoperative visualization of tumors. <i>Veterinary Surgery</i> , 1–11. <a href="https://doi.org/10.1111/vsu.13332">https://doi.org/10.1111/vsu.13332</a>	The Ohio State University; Selmic
01982	Johnson, L. R., & Stern, J. A. (2019). Clinical features and outcome in 25 dogs with respiratory-associated pulmonary hypertension treated with sildenafil. <i>Journal of Veterinary Internal Medicine</i> . <a href="https://doi.org/10.1111/jvim.15679">https://doi.org/10.1111/jvim.15679</a>	University of California, Davis; Stern
01557	Kennedy, K., Thomas, R., Durrant, J., Jiang, T., Motsinger-Reif, A., & Breen, M. (2019). Genome-wide DNA copy number analysis and targeted transcriptional analysis of canine histiocytic malignancies identifies diagnostic signatures and highlights disruption of spindle assembly complex. <i>Chromosome Research</i> . <a href="https://doi.org/10.1007/s10577-019-09606-0">https://doi.org/10.1007/s10577-019-09606-0</a>	University of California, Davis; Breen
02324-E	Lau, J., Nettifee, J. A., Early, P. J., Mariani, C. L., Olby, N. J., & Muñana, K. R. (2019). Clinical characteristics, breed differences, and quality of life in North American dogs with acute steroid-responsive meningitis-arteritis. <i>Journal of Veterinary Internal Medicine</i> . <a href="https://doi.org/10.1111/jvim.15543">https://doi.org/10.1111/jvim.15543</a>	North Carolina State University; Muñana
CBTC	LeBlanc, A. (2019). A Report from the NCI Comparative Brain Tumor Consortium (CBTC) Glioma Pathology Board: A Revised Diagnostic Classification in Support of Validation of the Canine Glioma Patient as a Model for Humans. <i>Veterinary Pathology</i> , 300985818819179. <a href="https://doi.org/10.1177/0300985818819179">https://doi.org/10.1177/0300985818819179</a>	National Cancer Institute; LeBlanc
02161-A	Martel, D. P., Fox, P. R., Lamb, K. E., & Carmichael, D. T. (2019). Comparison of closed root planing with versus without concurrent doxycycline hydrate or clindamycin hydrochloride gel application for the treatment of periodontal disease in dogs. <i>Journal of the American Veterinary Medical Association</i> , 254(3), 373–379. <a href="https://doi.org/10.2460/javma.254.3.373">https://doi.org/10.2460/javma.254.3.373</a>	The Animal Medical Center; Martel
02242	Martinez, S. E., Shi, J., Zhu, H.-J., Jimenez, T. E. P., Zhu, Z., & Court, M. H. (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. <i>Drug Metabolism and Disposition</i> , dmd.119.088070. <a href="https://doi.org/10.1124/dmd.119.088070">https://doi.org/10.1124/dmd.119.088070</a>	Washington State University; Court

01075-A	May, E. R., Frank, L. A., & Sula, M.-J. M. (2019). Description and characterization of a hair coat disorder in Schipperkes. <i>Veterinary Dermatology</i> , 30(1), 36-e10. <a href="https://doi.org/10.1111/vde.12711">https://doi.org/10.1111/vde.12711</a>	Iowa State University; May
02529	Mealey, K. L., Martinez, S. E., Villarino, N. F., & Court, M. H. (2019). Personalized medicine: Going to the dogs? <i>Human Genetics</i> . <a href="https://doi.org/10.1007/s00439-019-02020-w">https://doi.org/10.1007/s00439-019-02020-w</a>	Washington State University; Court
01131	Megquier, K., Turner-Maier, J., Swofford, R., Kim, J.-H., Sarver, A. L., Wang, C., Sakthikumar, S., Johnson, J., Koltookian, M., Lewellen, M., Scott, M. C., Schulte, A. J., Borst, L., Tonomura, N., Alfoldi, J., Painter, C., Thomas, R., Karlsson, E. K., Breen, M., ... Lindblad-Toh, K. (2019). Comparative Genomics Reveals Shared Mutational Landscape in Canine Hemangiosarcoma and Human Angiosarcoma. <i>Molecular Cancer Research</i> , 17(12), 2410–2421. <a href="https://doi.org/10.1158/1541-7786.MCR-19-0221">https://doi.org/10.1158/1541-7786.MCR-19-0221</a>	University of Minnesota; Modiano
01828	Mikkola, L., Holopainen, S., Pessa-Morikawa, T., Lappalainen, A. K., Hytönen, M. K., Lohi, H., & Iivanainen, A. (2019). Genetic dissection of canine hip dysplasia phenotypes and osteoarthritis reveals three novel loci. <i>BMC Genomics</i> , 20(1027), 1–13. <a href="https://doi.org/10.1186/s12864-019-6422-6">https://doi.org/10.1186/s12864-019-6422-6</a>	University of Helsinki and the Folkhälsan Institute of Genetics; Iivanainen
01828	Mikkola, L. I., Holopainen, S., Lappalainen, A. K., Pessa-Morikawa, T., Augustine, T. J. P., Arumilli, M., Hytönen, M. K., Hakosalo, O., Lohi, H., & Iivanainen, A. (2019). Novel protective and risk loci in hip dysplasia in German Shepherds. <i>PLOS Genetics</i> , 15(7), e1008197. <a href="https://doi.org/10.1371/journal.pgen.1008197">https://doi.org/10.1371/journal.pgen.1008197</a>	University of Helsinki and the Folkhälsan Institute of Genetics; Iivanainen
02327-MOU	Ontiveros, E. S., Fousse, S. L., Crofton, A. E., Hodge, T. E., Gunther-Harrington, C. T., Visser, L. C., & Stern, J. A. (2019). Congenital Cardiac Outflow Tract Abnormalities in Dogs: Prevalence and Pattern of Inheritance From 2008 to 2017. <i>Frontiers in Veterinary Science</i> , 6. <a href="https://doi.org/10.3389/fvets.2019.00052">https://doi.org/10.3389/fvets.2019.00052</a>	University of California, Davis; Stern
02228-MOU	Ontiveros, E. S., Hughes, S., Penedo, M. C. T., Grahn, R. A., & Stern, J. A. (2019). Genetic heterogeneity and diversity of North American Golden Retrievers using a low density STR marker panel. <i>PLOS ONE</i> , 14(2), e0212171. <a href="https://doi.org/10.1371/journal.pone.0212171">https://doi.org/10.1371/journal.pone.0212171</a>	University of California, Davis; Stern
02188-A	Place, N. J., Cheraskin, J.-L., & Hansen, B. S. (2019). Evaluation of combined assessments of serum anti-Müllerian hormone and progesterone concentrations for the diagnosis of ovarian remnant syndrome in dogs. <i>Journal of the American Veterinary Medical Association</i> , 254(9), 1067–1072. <a href="https://doi.org/10.2460/javma.254.9.1067">https://doi.org/10.2460/javma.254.9.1067</a>	Cornell University; Place

02182-A	Santoro, D., Archer, L., & Kelley, K. (2019). A defective release of host defense peptides is present in canine atopic skin - ScienceDirect. <i>Comparative Immunology, Microbiology and Infectious Diseases</i> . <a href="https://doi.org/Comparative Immunology, Microbiology and Infectious Diseases">https://doi.org/Comparative Immunology, Microbiology and Infectious Diseases</a>	University of Florida; Santoro
02321	Schlein, L. J., Fadl-Alla, B., Pondenis, H. C., Lezmi, S., Eberhart, C. G., LeBlanc, A. K., ... Fan, T. M. (2019). Immunohistochemical Characterization of Procaspsase-3 Overexpression as a Druggable Target With PAC-1, a Procaspsase-3 Activator, in Canine and Human Brain Cancers. <i>Frontiers in Oncology</i> , 9(96). <a href="https://doi.org/10.3389/fonc.2019.00096">https://doi.org/10.3389/fonc.2019.00096</a>	University of Illinois; Fan
02380-A	Smith, A. M., Arruda, A. G., Evason, M. D., Weese, J. S., Wittum, T. E., Szlosek, D., & Stull, J. W. (2019). A cross-sectional study of environmental, dog, and human-related risk factors for positive canine leptospirosis PCR test results in the United States, 2009 to 2016. <i>BMC Veterinary Research</i> , 15(1), 412. <a href="https://doi.org/10.1186/s12917-019-2148-6">https://doi.org/10.1186/s12917-019-2148-6</a>	The Ohio State University; Stull
01265	Sophocleous, R. A., Sluyter, V., Curtis, B. L., Curtis, S. J., Jurak, L. M., Faulks, M., Spildejorje, M., Gates, S., Proctor, E.-J., Seavers, A., Watson, D., Kuit, T., Dowton, M., Stokes, L., & Sluyter, R. (2019). Association of a P2RX7 gene missense variant with brachycephalic dog breeds. <i>Animal Genetics</i> . <a href="https://doi.org/10.1111/age.12884">https://doi.org/10.1111/age.12884</a>	University of Wollongong; Sluyter
02162-MOU	Sparks, C. R., Robertson, I., & Olby, N. J. (2019). Morphometric analysis of spinal cord termination in Cavalier King Charles Spaniels. <i>Journal of Veterinary Internal Medicine</i> . 1-9. <a href="https://doi.org/10.1111/jvim.15437">https://doi.org/10.1111/jvim.15437</a>	North Carolina State University; Olby
02326-E	Taguchi, D. T., Borjesson, D. L., Osmond, D. C., & Griffon, D. D. J. (2019). Influence of Donor's Age on Immunomodulatory Properties of Canine Adipose Tissue-Derived Mesenchymal Stem Cells. <i>Stem Cells and Development</i> . <a href="https://doi.org/10.1089/scd.2019.0118">https://doi.org/10.1089/scd.2019.0118</a>	Western University of Health Sciences; Griffon
02171-MOU	Takada, M., Smith, L. A., Hix, J. M. L., Corner, S. M., O'Reilly, S., Kiupel, M., & Yuzbasiyan-Gurkan, V. (2019). Development of an Orthotopic Intrasplenic Xenograft Mouse Model of Canine Histiocytic Sarcoma and Its Use in Evaluating the Efficacy of Treatment with Dasatinib. <i>Comparative Medicine</i> , 69(1), 22–28. <a href="http://dx.doi.org/10.30802/AALAS-CM-18-000065">http://dx.doi.org/10.30802/AALAS-CM-18-000065</a>	Michigan State University; Yuzbasiyan-Gurkan
01426	Thamm, D. H., Weishaar, K. M., Charles, J. B., & Ehrhart, E. J. (2019). Phosphorylated KIT as a Predictor of Outcome in Canine Mast Cell Tumours Treated with Toceranib Phosphate or Vinblastine. <i>Veterinary and Comparative Oncology</i> . <a href="https://doi.org/10.1111/vco.12525">https://doi.org/10.1111/vco.12525</a>	Colorado State University; Thamm

**01896-A**

Thomovsky, S. A., Chen, A. V., Deavila, D. M., & Kiszonas, A. M. (2019). Serum Melatonin Values in Normal Dogs and Dogs with Seizures. *Journal of the American Animal Hospital Association*.  
<https://doi.org/10.5326/JAAHA-MS-6669>

Washington State University; Thomovsky

**2015 Clinician Scientist Fellowship Program**

Toedebusch, C. M., Garcia, V. B., Snyder, J. C., Jones, M. R., Schulz, D. J., Johnson, G. C., Villalón, E., Coates, J. R., & Garcia, M. L. (2019). Lumbar spinal cord microglia exhibited increased activation in aging dogs compared with young adult dogs. *GeroScience*.  
<https://doi.org/10.1007/s11357-019-00133-8>

University of Missouri; Coates

**02241**

Tsou, P.-Y., McCormack, M. C., Matsui, E. C., Peng, R. D., Diette, G. B., Hansel, N. N., & Davis, M. F. (2019). The Effect of Dog Allergen Exposure on Asthma Morbidity among Inner-city Children with Asthma. *Pediatric Allergy and Immunology*, 0(ja).  
<https://doi.org/10.1111/pai.13144>

Johns Hopkins University; Davis

**01982**

Ueda, Y., Johnson, L. R., Ontiveros, E. S., Visser, L. C., Gunther-Harrington, C. T., & Stern, J. A. (2019). Effect of a phosphodiesterase-5A (PDE5A) gene polymorphism on response to sildenafil therapy in canine pulmonary hypertension. *Scientific Reports*, 9(1), 6899.  
<https://doi.org/10.1038/s41598-019-43318-z>

University of California, Davis; Stern

**02257**

Villani, N. A., Bullock, G., Michaels, J. R., Yamato, O., O'Brien, D. P., Mhlanga-Mutangadura, T., ... Katz, M. L. (2019). A mixed breed dog with neuronal ceroid lipofuscinosis is homozygous for a CLN5 nonsense mutation previously identified in Border Collies and Australian Cattle Dogs. *Molecular Genetics and Metabolism*.  
<https://doi.org/10.1016/j.ymgme.2019.04.003>

University of Missouri, Columbia; Johnson

**2527-E  
Clinician-  
Scientist  
Program**

Withers, S. S., York, D., Choi, J. W., Woolard, K. D., Laufer-Amorim, R., Sparger, E. E., ... Rebhun, R. B. (2019). Metastatic Immune Infiltrates Correlate with Those of the Primary Tumor in Canine Osteosarcoma. *Veterinary and Comparative Oncology*.  
<https://doi.org/10.1111/vco.12459>

University of California, Davis; Withers

**01660**

Zapata, I., Moraes, L. E., Fiala, E. M., Zaldivar-Lopez, S., Couto, C. G., Rowell, J. L., & Alvarez, C. E. (2019). Risk-modeling of dog osteosarcoma genome scans shows individuals with Mendelian-level polygenic risk are common. *BMC Genomics*, 20(1), 226.  
<https://doi.org/10.1186/s12864-019-5531-6>

The Research Institute at Nationwide Children's Hospital; Alvarez