

2021 Peer-Reviewed Publications

Resulting from AKC Canine Health Foundation research grants



CHF Grant ID	APA Citation	Institution; Principal Investigator
02661	Adin, D., Freeman, L., Stepien, R., Rush, J. E., Tjostheim, S., Kelliham, H., Aherne, M., Vereb, M., & Goldberg, R. (2021). Effect of type of diet on blood and plasma taurine concentrations, cardiac biomarkers, and echocardiograms in 4 dog breeds. <i>Journal of Veterinary Internal Medicine</i> , 1–9. https://doi.org/10.1111/jvim.16075	University of Florida; Adin
02773	Arnold, L., Hendricks-Wenger, A., Coutermarsh-Ott, S., Gannon, J., Hay, A. N., Dervisis, N., Klahn, S., Allen, I. C., Tuohy, J., & Vlaisavljevich, E. (2021). Histotripsy Ablation of Bone Tumors: Feasibility Study in Excised Canine Osteosarcoma Tumors. <i>Ultrasound in Medicine & Biology</i> . https://doi.org/10.1016/j.ultrasmedbio.2021.08.004	Virginia-Maryland Regional College of Veterinary Medicine; Tuohy
02456-A	Barr, C. A., Alvarado, F., Chang, Y.-M., Luo, J., & Garden, O. A. (2021). The impact of alfaxalone, propofol and ketamine on canine peripheral blood lymphocyte cytotoxicity in vitro. <i>Research in Veterinary Science</i> , 136, 182–184. https://doi.org/10.1016/j.rvsc.2021.02.019	University of Pennsylvania; Garden
02157-MOU	Brancalion, L., Haase, B., Mazrier, H., Willet, C. E., Lindblad-Toh, K., Lingaas, F., & Wade, C. M. (2021). Roan, ticked and clear coat patterns in the canine are associated with three haplotypes near usherin on CFA38. <i>Animal Genetics</i> . https://doi.org/10.1111/age.13040	University of Sydney; Wade
02518	Bray, E. E., Gnanadesikan, G. E., Horschler, D. J., Levy, K. M., Kennedy, B. S., Famula, T. R., & MacLean, E. L. (2021). Early-emerging and highly heritable sensitivity to human communication in dogs. <i>Current Biology</i> , 31, 1–5. https://doi.org/10.1016/j.cub.2021.04.055	University of Arizona; Bray
02518	Bray, E. E., Otto, C. M., Udell, M. A. R., Hall, N. J., Johnston, A. M., & MacLean, E. L. (2021). Enhancing the Selection and Performance of Working Dogs. <i>Frontiers in Veterinary Science</i> , 8, 430. https://doi.org/10.3389/fvets.2021.644431	University of Arizona; Bray
02448	Busselman, R. E., Meyers, A. C., Zecca, I. B., Auckland, L. D., Castro, A. H., Dowd, R. E., Curtis-Robles, R., Hodo, C. L., Saunders, A. B., & Hamer, S. A. (2021). High incidence of <i>Trypanosoma cruzi</i> infections in dogs directly detected through longitudinal tracking at 10 multi-dog kennels, Texas, USA. <i>PLOS Neglected Tropical Diseases</i> , 15(11), e0009935. https://doi.org/10.1371/journal.pntd.0009935	Texas A&M AgriLife Research; Hamer

01988	Callan, M. B., Thawley, V. J., Marryott, K. A., Shabro, A., Fernando, S., Kahn, S., Hudson, K. E., & Hod, E. A. (2021). Hemolytic anemia blunts the cytokine response to transfusion of older red blood cells in mice and dogs. <i>Transfusion</i> . https://doi.org/10.1111/trf.16690	University of Pennsylvania; Callan
02066	Chu, C. P., Liu, S., Song, W., Xu, E. Y., & Nabity, M. B. (2021). Small RNA sequencing evaluation of renal microRNA biomarkers in dogs with X-linked hereditary nephropathy. <i>Scientific Reports</i> , <i>11</i> (1), 17437. https://doi.org/10.1038/s41598-021-96870-y	Texas A&M AgriLife Research; Nabity
2016 Clinician-Scientist Fellowship Program	Chu, S., Skidmore, Z. L., Kunisaki, J., Walker, J. R., Griffith, M., Griffith, O. L., & Bryan, J. N. (2021). Unraveling the chaotic genomic landscape of primary and metastatic canine appendicular osteosarcoma with current sequencing technologies and bioinformatic approaches. <i>PLOS ONE</i> , <i>16</i> (2), e0246443. https://doi.org/10.1371/journal.pone.0246443	University of Missouri; Bryan
02646-A	Davis, M. S., & Barrett, M. R. (2021). Effect of conditioning and physiology hyperthermia on canine skeletal muscle mitochondrial oxygen consumption. <i>Journal of Applied Physiology</i> . https://doi.org/10.1152/jappphysiol.00969.2020	Oklahoma State University; Davis
02660-E	DeProspero, D. J., O'Donnell, K. A., DeFrancesco, T. C., Keene, B. W., Tou, S. P., Adin, D. B., Atkins, C. E., & Meurs, K. M. (2021). Myxomatous mitral valve disease in Miniature Schnauzers and Yorkshire Terriers: 134 cases (2007–2016). <i>Journal of the American Veterinary Medical Association</i> , <i>1</i> (aop), 1–5. https://doi.org/10.2460/javma.20.05.0291	North Carolina State University; Meurs
02651	Franco, J., Rajwa, B., Gomes, P., & HogenEsch, H. (2021). Local and Systemic Changes in Lipid Profile as Potential Biomarkers for Canine Atopic Dermatitis. <i>Metabolites</i> , <i>11</i> (10), 670. https://doi.org/10.3390/metabo11100670	Purdue University; HogenEsch
02526-E Clinician-Scientist Fellowship Program	Gasson, S. B., Dobson, L. K., Chow, L., Dow, S., Gregory, C. A., & Saunders, W. B. (2021). Optimizing In Vitro Osteogenesis in Canine Autologous and Induced Pluripotent Stem Cell-Derived Mesenchymal Stromal Cells with Dexamethasone and BMP-2. <i>Stem Cells and Development</i> , <i>30</i> (4), 214–226. https://doi.org/10.1089/scd.2020.0144	Texas A&M University; Saunders
01236-A	Gershony, L. C., Belanger, J. M., Hytönen, M. K., Lohi, H., & Oberbauer, A. M. (2021). Whole Genome Sequencing Reveals Multiple Linked Genetic Variants on Canine Chromosome 12 Associated with Risk for Symmetrical Lupoid Onychodystrophy (SLO) in the Bearded Collie. <i>Genes</i> , <i>12</i> (8), 1265. https://doi.org/10.3390/genes12081265	University of California, Davis; Oberbauer

02700	Hare, B., & Ferrans, M. (2021). Is cognition the secret to working dog success? <i>Animal Cognition</i> , 24(2), 231–237. https://doi.org/10.1007/s10071-021-01491-7	Duke University; Hare
02446	Hédan, B., Cadieu, É., Rimbault, M., Vaysse, A., Citres, C. D. de, Devauchelle, P., Botherel, N., Abadie, J., Quignon, P., Derrien, T., & André, C. (2021). Identification of common predisposing loci to hematopoietic cancers in four dog breeds. <i>PLOS Genetics</i> , 17(4), e1009395. https://doi.org/10.1371/journal.pgen.1009395	CNRS - University of Rennes; Hédan
02390-E	Helms, A. B., Balogh, O., Franklin-Guild, R., Lahmers, K., Caswell, C. C., & Cecere, J. T. (2021). Presumptive Identification of Smooth Brucella Strain Antibodies in Canines. <i>Frontiers in Veterinary Science</i> , 8, 749. https://doi.org/10.3389/fvets.2021.697479	Virginia-Maryland Regional College of Veterinary Medicine; Cecere
02232-MOU	Johnson, L. R., Mayhew, P. D., Culp, W. T. N., & Stanley, B. J. (2021). Results of owner questionnaires describing long-term outcome in Norwich terriers with upper airway syndrome: 2011-2018. <i>Journal of Veterinary Internal Medicine</i> , 1–7. https://doi.org/10.1111/jvim.16180	Michigan State University; Stanley
01889-G	Kim, J. H., Megquier, K., Thomas, R., Sarver, A. L., Song, J. M., Kim, Y. T., Cheng, N., Schulte, A. J., Linden, M. A., Murugan, P., Oseth, L., Forster, C. L., Elvers, I., Swofford, R., Turner-Maier, J., Karlsson, E. K., Breen, M., Lindblad-Toh, K., & Modiano, J. F. (2021). Genomically Complex Human Angiosarcoma and Canine Hemangiosarcoma Establish Convergent Angiogenic Transcriptional Programs Driven by Novel Gene Fusions. <i>Molecular Cancer Research</i> . https://doi.org/10.1158/1541-7786.MCR-20-0937	University of Minnesota; Modiano, Broad Institute; Karlsson, North Carolina State University; Breen
02204-T	Lages, M., & Selmic, L. E. (2021). Exploring optical coherence tomography imaging depth to differentiate tissues at surgical margins. <i>Veterinary and Comparative Oncology</i> . https://doi.org/10.1111/vco.12745	The Ohio State University; Selmic
02519	Lashnits, E., Neupane, P., Bradley, J. M., Richardson, T., Maggi, R. G., & Breitschwerdt, E. B. (2021). Comparison of Serological and Molecular Assays for Bartonella Species in Dogs with Hemangiosarcoma. <i>Pathogens</i> , 10(7), 794. https://doi.org/10.3390/pathogens10070794	North Carolina State University; Breitschwerdt and Breen
02773	Latifi, M., Hay, A., Carroll, J., Dervis, N., Arnold, L., Coutermarsh-Ott, S. L., Kierski, K. R., Klahn, S., Allen, I. C., Vlaisavljevich, E., & Tuohy, J. (2021). Focused ultrasound tumour ablation in small animal oncology. <i>Veterinary and Comparative Oncology</i> , 19(3), 411–419. https://doi.org/10.1111/vco.12742	Virginia-Maryland Regional College of Veterinary Medicine; Tuohy

02165-MOU	<p>Lewis, M. J., Shomper, J. L., Williamson, B. G., Vansteenkiste, D. P., Bibi, K. F., Lim, S. H. Y., Kowal, J. B., & Coates, J. R. (2021). Brain diffusion tensor imaging in dogs with degenerative myelopathy. <i>Journal of Veterinary Internal Medicine</i>. https://doi.org/10.1111/jvim.16248</p>	University of Missouri, Columbia; Coates
01986	<p>Lindaberry, C., Vaden, S., Aicher, K. M., Seiler, G., Robertson, J., Cianciolo, R., Yang, C., & Gookin, J. L. (2021). Proteinuria in dogs with gallbladder mucocele formation: A retrospective case control study. <i>Journal of Veterinary Internal Medicine</i>, n/a(n/a). https://doi.org/10.1111/jvim.16051</p>	North Carolina State University; Gookin
02164-MOU	<p>Meurs, K. M., Montgomery, K., Friedenber, S. G., Williams, B., & Gilger, B. C. (2021). A defect in the NOG gene increases susceptibility to spontaneous superficial chronic corneal epithelial defects (SCCED) in boxer dogs. <i>BMC Veterinary Research</i>, 17(1), 254. https://doi.org/10.1186/s12917-021-02955-1</p>	North Carolina State University; Meurs
01828	<p>Mikkola, L., Kyöstiä, K., Donner, J., Lappalainen, A. K., Hytönen, M. K., Lohi, H., & Iivanainen, A. (2021). An across-breed validation study of 46 genetic markers in canine hip dysplasia. <i>BMC Genomics</i>, 22(1), 68. https://doi.org/10.1186/s12864-021-07375-x</p>	University of Helsinki and the Folkhälsan Institute of Genetics; Iivanainen
02782	<p>Momen, M., Kohler, N. L., Binversie, E. E., Dentino, M., & Sample, S. J. (2021). Heritability and genetic variance estimation of Osteosarcoma (OSA) in Irish Wolfhound, using deep pedigree information. <i>Canine Medicine and Genetics</i>, 8(1), 9. https://doi.org/10.1186/s40575-021-00109-y</p>	University of Wisconsin, Madison; Sample
02417-A	<p>Nivy, R., Kuzi, S., Yochai, A., Aroch, I., & Bruchim, Y. (2021). Evaluation of serum histone concentrations and their associations with hemostasis, markers of inflammation, and outcome in dogs with naturally occurring acute pancreatitis. <i>American Journal of Veterinary Research</i>, 82(9), 701–711. https://doi.org/10.2460/ajvr.82.9.701</p>	The Koret School of Veterinary Medicine, The Hebrew University of Jerusalem; Nivy
02575-MOU	<p>Norton, E. M., Minor, K. M., Taylor, S. M., McCue, M. E., & Mickelson, J. R. (2021). Heritability and Genomic Architecture of Episodic Exercise-Induced Collapse in Border Collies. <i>Genes</i>, 12(12), 1927. https://doi.org/10.3390/genes12121927</p>	University of Minnesota; Mickelson
02292	<p>Oney, K., Koo, M., Roy, C., Ren, S., Quorollo, B., Juhasz, N. B., Vasconcelos, E. J. R., Oakley, B., & Diniz, P. P. V. P. (2021). Evaluation of a commercial microbial enrichment kit used prior DNA extraction to improve the molecular detection of vector-borne pathogens from naturally infected dogs. <i>Journal of Microbiological Methods</i>, 106163. https://doi.org/10.1016/j.mimet.2021.106163</p>	Western University of Health Sciences; Diniz

02327-MOU	<p>Ontiveros, E. S., & Stern, J. A. (2021). Genetics of canine subvalvular aortic stenosis (SAS). <i>Canine Medicine and Genetics</i>, 8(1), 4. https://doi.org/10.1186/s40575-021-00103-4</p>	University of California, Davis; Stern
02847-A	<p>Perry, E. B., Discepolo, D. R., Liang, S. Y., & Jenkins, E. K. (2021). Removal of Aerosolized Contaminants from Working Canines via a Field Wipe-Down Procedure. <i>Animals</i>, 11(1), 120. https://doi.org/10.3390/ani11010120</p>	Southern Illinois University-Carbondale; Perry
01609	<p>Pilla, R., Guard, B. C., Blake, A. B., Ackermann, M., Webb, C., Hill, S., Lidbury, J. A., Steiner, J. M., Jergens, A. E., & Suchodolski, J. S. (2021). Long-Term Recovery of the Fecal Microbiome and Metabolome of Dogs with Steroid-Responsive Enteropathy. <i>Animals</i>, 11(9), 2498. https://doi.org/10.3390/ani11092498</p>	Iowa State University; Jergens
02446	<p>Prouteau, A., Denis, J. A., De Fornel, P., Cadieu, E., Derrien, T., Kergal, C., Botherel, N., Ulvé, R., Rault, M., Bouzidi, A., François, R., Dorso, L., Lespagnol, A., Devauchelle, P., Abadie, J., André, C., & Hédan, B. (2021). Circulating tumor DNA is detectable in canine histiocytic sarcoma, oral malignant melanoma, and multicentric lymphoma. <i>Scientific Reports</i>, 11(1), 877. https://doi.org/10.1038/s41598-020-80332-y</p>	CNRS - University of Rennes; Hédan
02700	<p>Salomons, H., Smith, K. C. M., Callahan-Beckel, M., Callahan, M., Levy, K., Kennedy, B. S., Bray, E. E., Gnanadesikan, G. E., Horschler, D. J., Gruen, M., Tan, J., White, P., vonHoldt, B. M., MacLean, E. L., & Hare, B. (2021). Cooperative Communication with Humans Evolved to Emerge Early in Domestic Dogs. <i>Current Biology</i>, 0(0). https://doi.org/10.1016/j.cub.2021.06.051</p>	Duke University; Hare
02172-MOU	<p>Seddon, J. M., Fortes, M., Kelly-Smith, M., Sommerlad, S. F., Hayward, J. J., Burmeister, L., Risio, L. D., Mellersh, C., Freeman, J., & Strain, G. M. (2021). Deafness in Australian Cattle Dogs associated to QTL on chromosome 20 in genome-wide association study analyses. <i>Animal Genetics</i>. https://doi.org/10.1111/age.13115</p>	Louisiana State University; Strain
02380-A	<p>Smith, A. M., Stull, J. W., Evason, M. D., Weese, J. S., Wittum, T. E., Szlosek, D., & Arruda, A. G. (2021). Investigation of spatio-temporal clusters of positive leptospirosis polymerase chain reaction test results in dogs in the United States, 2009 to 2016. <i>Journal of Veterinary Internal Medicine</i>, 35, 1355–1360. https://doi.org/10.1111/jvim.16060</p>	The Ohio State University; Stull
02318	<p>Smith, N., Luethcke, K. R., Craun, K., & Trepanier, L. (2021). Risk of bladder cancer and lymphoma in dogs is associated with pollution indices by county of residence. <i>Veterinary and Comparative Oncology</i>. https://doi.org/10.1111/vco.12771</p>	University of Wisconsin, Madison; Trepanier

02162-MOU	Sparks, C. R., Woelfel, C., Robertson, I., & Olby, N. J. (2021). Association between filum terminale internum length and pain in Cavalier King Charles spaniels with and without syringomyelia. <i>Journal of Veterinary Internal Medicine</i> , 35, 363–371. https://doi.org/10.1111/jvim.16023	North Carolina State University; Olby
02489	Terajima, M., Taga, Y., Brisson, B. K., Durham, A. C., Sato, K., Uzawa, K., Saito, T., Hattori, S., Sørenmo, K. U., Yamauchi, M., & Volk, S. W. (2021). Collagen molecular phenotypic switch between non-neoplastic and neoplastic canine mammary tissues. <i>Scientific Reports</i> , 11(1), 8659. https://doi.org/10.1038/s41598-021-87380-y	University of Pennsylvania; Volk
02321	Tonogai, E. J., Huang, S., Botham, R. C., Berry, M. R., Joslyn, S. K., Daniel, G. B., Chen, Z., Rao, J., Zhang, X., Basuli, F., Rossmesl, J. H., Riggins, G. J., LeBlanc, A. K., Fan, T. M., & Hergenrother, P. J. (2021). Evaluation of a procaspase-3 activator with hydroxyurea or temozolomide against high-grade meningioma in cell culture and canine cancer patients. <i>Neuro-Oncology</i> , noab161. https://doi.org/10.1093/neuonc/noab161	University of Illinois; Fan
02292	Vasconcelos, E. J. R., Roy, C., Geiger, J. A., Oney, K. M., Koo, M., Ren, S., Oakley, B. B., & Diniz, P. P. V. P. (2021). Data analysis workflow for the detection of canine vector-borne pathogens using 16 S rRNA Next-Generation Sequencing. <i>BMC Veterinary Research</i> , 17(1), 262. https://doi.org/10.1186/s12917-021-02969-9	Western University of Health Sciences; Diniz
02502	Wang, G., Wu, M., Durham, A. C., Mason, N. J., & Roth, D. B. (2021). Canine Oncopanel: A capture-based, NGS platform for evaluating the mutational landscape and detecting putative driver mutations in canine cancers. <i>Veterinary and Comparative Oncology</i> . https://doi.org/10.1111/vco.12746	University of Pennsylvania; Mason
02368	Williams, B., Friedenber, S. G., Keene, B. W., Tou, S. P., DeFrancesco, T. C., & Meurs, K. M. (2021). Use of whole genome analysis to identify shared genomic variants across breeds in canine mitral valve disease. <i>Human Genetics</i> . https://doi.org/10.1007/s00439-021-02297-w	North Carolina State University; Meurs
02204-T	Ye, Y., Sun, W. W., Xu, R. X., Selmic, L. E., & Sun, M. (2021). Intraoperative assessment of canine soft tissue sarcoma by deep learning enhanced optical coherence tomography. <i>Veterinary and Comparative Oncology</i> . https://doi.org/10.1111/vco.12747	The Ohio State University; Selmic
02390-E	Zuercher, J., Boes, K. M., Balogh, O., Helms, A. B., & Cecere, J. T. (2021). Comparison of a Point-of-Care Analyzer With a Chemiluminescent Immunoassay for Serum Progesterone Measurement in Breeding Management of the Bitch. <i>Frontiers in Veterinary Science</i> , 8, 458. https://doi.org/10.3389/fvets.2021.660923	Virginia-Maryland Regional College of Veterinary Medicine; Cecere