

2015 Peer-Reviewed Publications

Resulting from AKC Canine Health Foundation research grants



CHF Grant ID	APA Citation	Institution; Principal Investigator
01594	Ahram, D. F., Grozdanic, S. D., Kecova, H., Henkes, A., Collin, R. W. J., & Kuehn, M. H. (2015). Variants in Nebulin (NEB) Are Linked to the Development of Familial Primary Angle Closure Glaucoma in Basset Hounds. <i>PLOS ONE</i> , 10(5), e0126660. https://doi.org/10.1371/journal.pone.0126660	University of Iowa; Kuehn
01911-A	Andersen, N. J., Boguslawski, E. B., Kuk, C. Y., Chambers, C. M., & Duesbery, N. S. (2015). Combined inhibition of MEK and mTOR has a synergic effect on angiosarcoma tumorgrafts. <i>International Journal of Oncology</i> , 47(1), 71–80. https://doi.org/10.3892/ijo.2015.2989	Van Andel Research Institute; Duesbery
01712-A	Axiak-Bechtel, S. M., Tsuruta, K., Amorim, J., Donaldson, R., Lino, G., Honaker, A., ... DeClue, A. (2015). Effects of tramadol and o-desmethyltramadol on canine innate immune system function. <i>Veterinary Anaesthesia and Analgesia</i> , 42(3), 260–268. https://doi.org/10.1111/vaa.12201	University of Missouri, Columbia; DeClue
0002447	Bianchi, M., Dahlgren, S., Massey, J., Dietschi, E., Kierczak, M., Lund-Ziener, M., ... Rosengren Pielberg, G. (2015). A Multi-Breed Genome-Wide Association Analysis for Canine Hypothyroidism Identifies a Shared Major Risk Locus on CFA12. <i>PLOS ONE</i> , 10(8), e0134720. https://doi.org/10.1371/journal.pone.0134720	University of Alaska, Fairbanks; Happ
01783-A	Biskup, J. J., Balogh, D. G., Haynes, K. H., Freeman, A. L., & Conzemius, M. G. (2015). Mechanical strength of four allograft fixation techniques for ruptured cranial cruciate ligament repair in dogs. <i>American Journal of Veterinary Research</i> , 76(5), 411–419. https://doi.org/10.2460/ajvr.76.5.411	University of Minnesota; Biskup
01924-A	Blois, S. L., Lang, S. T., Wood, R. D., & Monteith, G. (2015). Biologic variability and correlation of platelet function testing in healthy dogs. <i>Veterinary Clinical Pathology</i> , 44(4), 503–510. https://doi.org/10.1111/vcp.12290	University of Guelph; Blois
01995	Bray, E. E., MacLean, E. L., & Hare, B. A. (2015). Increasing arousal enhances inhibitory control in calm but not excitable dogs. <i>Animal Cognition</i> , 18(6), 1317–1329. https://doi.org/10.1007/s10071-015-0901-1	Duke University; MacLean

01533-A	Brown, N. P., Bertocci, G. E., & Marcellin-Little, D. J. (2015). Influence of biomechanical parameters on cranial cruciate ligament-deficient or -intact canine stifle joints assessed by use of a computer simulation model. <i>American Journal of Veterinary Research</i> , 76(11), 952–958. https://doi.org/10.2460/ajvr.76.11.952	University of Louisville; Bertocci
01782	Brown, N. P., Bertocci, G. E., & Marcellin-Little, D. J. (2015). Canine Stifle Biomechanics Associated With Tibial Tuberosity Advancement Predicted Using a Computer Model. <i>Veterinary Surgery</i> , 44(7), 866–873. https://doi.org/10.1111/vsu.12363	University of Louisville; Bertocci
01503-A	Cannon, C. M., Pozniak, J., Scott, M. C., Ito, D., Gorden, B. H., Graef, A. J., & Modiano, J. F. (2015). Canine osteosarcoma cells exhibit resistance to aurora kinase inhibitors. <i>Veterinary and Comparative Oncology</i> , 13(1), 48–59. https://doi.org/10.1111/vco.12018	University of Minnesota; Modiano
01612	Chandler, H. L., Gervais, K. J., Lutz, E. A., Curto, E. M., Matusow, R. B., Wilkie, D. A., & Gemensky-Metzler, A. J. (2015). Cyclosporine A prevents ex vivo PCO formation through induction of autophagy-mediated cell death. <i>Experimental Eye Research</i> , 134, 63–72. https://doi.org/10.1016/j.exer.2015.03.020	The Ohio State University; Chandler
01660	Clemente-Vicario, F., Alvarez, C. E., Rowell, J. L., Roy, S., London, C. A., Kisselberth, W. C., & Lorch, G. (2015). Human Genetic Relevance and Potent Antitumor Activity of Heat Shock Protein 90 Inhibition in Canine Lung Adenocarcinoma Cell Lines. <i>PLOS ONE</i> , 10(11), e0142007. https://doi.org/10.1371/journal.pone.0142007	The Research Institute at Nationwide Children's Hospital; Alvarez
02092-A	Custead, M. R., An, R., Turek, J. J., Moore, G. E., Nolte, D. D., & Childress, M. O. (2015). Predictive value of ex vivo biodynamic imaging in determining response to chemotherapy in dogs with spontaneous non-Hodgkin's lymphomas: a preliminary study. <i>Convergent Science Physical Oncology</i> , 1(1), 015003. https://doi.org/10.1088/2057-1739/1/1/015003	Purdue University; Childress
00754A	Decker, B., Parker, H. G., Dhawan, D., Kwon, E. M., Karlins, E., Davis, B. W., ... Ostrander, E. A. (2015). Homologous Mutation to Human BRAF V600E Is Common in Naturally Occurring Canine Bladder Cancer—Evidence for a Relevant Model System and Urine-Based Diagnostic Test. <i>Molecular Cancer Research</i> , 13(6), 993–1002. https://doi.org/10.1158/1541-7786.MCR-14-0689	Purdue University; Knapp
01759	Dickerson, E., & Bryan, B. (2015). Beta Adrenergic Signaling: A Targetable Regulator of Angiosarcoma and Hemangiosarcoma. <i>Veterinary Sciences</i> , 2(3), 270–292. https://doi.org/10.3390/vetsci2030270	University of Minnesota; Modiano

01889-G	Elvers, I., Turner-Maier, J., Swofford, R., Koltookian, M., Johnson, J., Stewart, C., ... Alföldi, J. (2015). Exome sequencing of lymphomas from three dog breeds reveals somatic mutation patterns reflecting genetic background. <i>Genome Research</i> , 25(11), 1634–1645. https://doi.org/10.1101/gr.194449.115	University of Minnesota; Modiano, Broad Institute; Karlsson, North Carolina State University; Breen
01912-A	Ferguson, D. C., Cheng, Q., & Blanco, J. G. (2015). Characterization of the Canine Anthracycline-Metabolizing Enzyme Carbonyl Reductase 1 (cbr1) and the Functional Isoform cbr1 V218. <i>Drug Metabolism and Disposition</i> , 43(7), 922–927. https://doi.org/10.1124/dmd.115.064295	State University of New York; Blanco
01684-A	Frank, L. A., Henry, G. A., Whittemore, J. C., Enders, B. D., Mawby, D. I., & Rohrbach, B. W. (2015). Serum Cortisol Concentrations in Dogs with Pituitary-Dependent Hyperadrenocorticism and Atypical Hyperadrenocorticism. <i>Journal of Veterinary Internal Medicine</i> , 29(1), 193–199. https://doi.org/10.1111/jvim.12500	University of Tennessee; Frank
02011	Galac, S. (2016). Cortisol-secreting adrenocortical tumours in dogs and their relevance for human medicine. <i>Molecular and Cellular Endocrinology</i> , 421, 34–39. https://doi.org/10.1016/j.mce.2015.06.026	University of Utrecht; Galac
02011	Galac, S., & Wilson, D. B. (2015). Animal Models of Adrenocortical Tumorigenesis. <i>Endocrinology and Metabolism Clinics of North America</i> , 44(2), 297–310. https://doi.org/10.1016/j.ecl.2015.02.003	University of Utrecht; Galac
01986	Gookin, J. L., Correa, M. T., Peters, A., Malueg, A., Mathews, K. G., Cullen, J., & Seiler, G. (2015). Association of Gallbladder Mucocele Histologic Diagnosis with Selected Drug Use in Dogs: A Matched Case-Control Study. <i>Journal of Veterinary Internal Medicine</i> , 29(6), 1464–1472. https://doi.org/10.1111/jvim.13649	North Carolina State University; Gookin
01854-A	Hall, N. J., Protopopova, A., & Wynne, C. D. L. (2015). The role of environmental and owner-provided consequences in canine stereotypy and compulsive behavior. <i>Journal of Veterinary Behavior</i> , 10(1), 24–35. https://doi.org/10.1016/j.jveb.2014.10.005	University of Florida; Wynne
00372	Hegstad-Davies, R. L., Torres, S. M. F., Sharkey, L. C., Gresch, S. C., Muñoz-Zanzi, C. A., & Davies, P. R. (2015). Breed-specific reference intervals for assessing thyroid function in seven dog breeds. <i>Journal of Veterinary Diagnostic Investigation</i> , 27(6), 716–727. https://doi.org/10.1177/1040638715606953	University of Minnesota; Davies

02193-A 2014 Theriogenology Residency Program	Hekman, J. P., Johnson, J. L., & Kukekova, A. V. (2015). Transcriptome Analysis in Domesticated Species: Challenges and Strategies. <i>Bioinformatics and Biology Insights</i> , 9S4, BBI.S29334. https://doi.org/10.4137/BBI.S29334	University of Illinois; Kukekova
01683-A	Hesser, A. C., & Davidson, A. P. (2015). Spermatocele in a South African Boerboel dog. <i>Topics in Companion Animal Medicine</i> , 30(1), 28–30. https://doi.org/10.1053/j.tcam.2015.03.001	University of California, Davis; Hesser
01759	Holt, D., Parthasarathy, A. B., Okusanya, O., Keating, J., Venegas, O., Deshpande, C., ... Singhal, S. (2015). Intraoperative near-infrared fluorescence imaging and spectroscopy identifies residual tumor cells in wounds. <i>Journal of Biomedical Optics</i> , 20(7), 076002. https://doi.org/10.1117/1.JBO.20.7.076002	University of Pennsylvania; Holt
01759	Im, K. S., Graef, A. J., Breen, M., Lindblad-Toh, K., Modiano, J. F., & Kim, J.-H. (2015). Interactions between CXCR4 and CXCL12 promote cell migration and invasion of canine hemangiosarcoma: CXCR4/CXCL12 in HSA migration and invasion. <i>Veterinary and Comparative Oncology</i> , 15(2), 315–327. https://doi.org/10.1111/vco.12165	University of Minnesota; Modiano
01868-A	Jia, H., & Kerr, L. L. (2015). Kinetics of drug release from drug carrier of polymer/TiO ₂ nanotubes composite—pH dependent study. <i>Journal of Applied Polymer Science</i> , 132(7). https://doi.org/10.1002/app.41570	Miami University; Kerr
01584	Keebaugh, A. E., Redman-Bentley, D., & Griffon, D. J. (2015). Influence of leash side and handlers on pressure mat analysis of gait characteristics in small-breed dogs. <i>Journal of the American Veterinary Medical Association</i> , 246(11), 1215–1221. https://doi.org/10.2460/javma.246.11.1215	Western University of Health Sciences; Griffon
01759	Kim, J.-H., Graef, A., Dickerson, E., & Modiano, J. (2015). Pathobiology of Hemangiosarcoma in Dogs: Research Advances and Future Perspectives. <i>Veterinary Sciences</i> , 2(4), 388–405. https://doi.org/10.3390/vetsci2040388	University of Minnesota; Modiano
01425	Koskinen, L. L. E., Seppälä, E. H., Belanger, J. M., Arumilli, M., Hakosalo, O., Jokinen, P., ... Lohi, H. (2015). Identification of a common risk haplotype for canine idiopathic epilepsy in the ADAM23 gene. <i>BMC Genomics</i> , 16(1). https://doi.org/10.1186/s12864-015-1651-9	University of Helsinki and the Folkhälsan Institute of Genetics; Lohi

00848-A	LeBlanc, A. K., LeBlanc, C. J., Rohrbach, B. W., & Kania, S. A. (2015). Serial evaluation of neutrophil function in tumour-bearing dogs undergoing chemotherapy. <i>Veterinary and Comparative Oncology</i> , 13(1), 20–27. https://doi.org/10.1111/vco.12015	University of Tennessee; LeBlanc
01849	Liu, D., Xiong, H., Ellis, A. E., Northrup, N. C., Dobbin, K. K., Shin, D. M., & Zhao, S. (2015). Canine Spontaneous Head and Neck Squamous Cell Carcinomas Represent Their Human Counterparts at the Molecular Level. <i>PLOS Genetics</i> , 11(6), e1005277. https://doi.org/10.1371/journal.pgen.1005277	University of Georgia Research Foundation, Inc; Zhao
01674-A	Major, S., Pettigrew, R. W., & Fyfe, J. C. (2015). Molecular Genetic Characterization of Thyroid Dyshormonogenesis in a French Bulldog. <i>Journal of Veterinary Internal Medicine</i> , 29(6), 1534–1540. https://doi.org/10.1111/jvim.13651	Michigan State University; Fyfe
01704-A	Marley, K., Bracha, S., & Seguin, B. (2015). Osteoprotegerin activates osteosarcoma cells that co-express RANK and RANKL. <i>Experimental Cell Research</i> , 338(1), 32–38. https://doi.org/10.1016/j.yexcr.2015.08.001	Oregon State University; Seguin
01726-A	Marley, K., Gullaba, J., Seguin, B., Gelberg, H. B., & Helfand, S. C. (2015). Dasatinib Modulates Invasive and Migratory Properties of Canine Osteosarcoma and has Therapeutic Potential in Affected Dogs. <i>Translational Oncology</i> , 8(4), 231–238. https://doi.org/10.1016/j.tranon.2015.03.006	Oregon State University; Helfand
02111-A	Meason-Smith, C., Diesel, A., Patterson, A. P., Older, C. E., Mansell, J. M., Suchodolski, J. S., & Rodrigues Hoffmann, A. (2015). What is living on your dog's skin? Characterization of the canine cutaneous mycobiota and fungal dysbiosis in canine allergic dermatitis. <i>FEMS Microbiology Ecology</i> , 91(12), fiv139. https://doi.org/10.1093/femsec/fiv139	Texas A&M AgriLife Research; Suchodolski
01609	Minamoto, Y., Otoni, C. C., Steelman, S. M., Büyükleblebici, O., Steiner, J. M., Jergens, A. E., & Suchodolski, J. S. (2015). Alteration of the fecal microbiota and serum metabolite profiles in dogs with idiopathic inflammatory bowel disease. <i>Gut Microbes</i> , 6(1), 33–47. https://doi.org/10.1080/19490976.2014.997612	Iowa State University; Jergens
02071	Pluhar, G. E., Pennell, C. A., & Olin, M. R. (2015). CD8+ T Cell-Independent Immune-Mediated Mechanisms of Anti-Tumor Activity. <i>Critical Reviews in Immunology</i> , 35(2), 153–172. https://doi.org/10.1615/CritRevImmunol.2015013607	University of Minnesota; Pluhar

01759	Rodriguez, A. M., Graef, A. J., LeVine, D. N., Cohen, I. R., Modiano, J. F., & Kim, J.-H. (2015). Association of Sphingosine-1-phosphate (S1P)/S1P Receptor-1 Pathway with Cell Proliferation and Survival in Canine Hemangiosarcoma. <i>Journal of Veterinary Internal Medicine</i> , 29(4), 1088–1097. https://doi.org/10.1111/jvim.13570	University of Minnesota; Modiano
01843	Roode, S. C., Rotroff, D., Avery, A. C., Suter, S. E., Bienzle, D., Schiffman, J. D., ... Breen, M. (2015). Genome-wide assessment of recurrent genomic imbalances in canine leukemia identifies evolutionarily conserved regions for subtype differentiation. <i>Chromosome Research</i> , 23(4), 681–708. https://doi.org/10.1007/s10577-015-9475-7	North Carolina State University; Breen
01985	Sluyter, R. (2015). P2X and P2Y receptor signaling in red blood cells. <i>Frontiers in Molecular Biosciences</i> , 2(60), 1-7. https://doi.org/10.3389/fmolb.2015.00060	University of Wollongong; Sluyter
00593A	Tonomura, N., Elvers, I., Thomas, R., Megquier, K., Turner-Maier, J., Howald, C., ... Lindblad-Toh, K. (2015). Genome-wide Association Study Identifies Shared Risk Loci Common to Two Malignancies in Golden Retrievers. <i>PLOS Genetics</i> , 11(2), e1004922. https://doi.org/10.1371/journal.pgen.1004922	Broad Institute; Lindblad-Toh
01894-A	Trout Fryxell, R. T., Moore, J. E., Collins, M. D., Kwon, Y., Jean-Philippe, S. R., Schaeffer, S. M., ... Houston, A. E. (2015). Habitat and Vegetation Variables Are Not Enough When Predicting Tick Populations in the Southeastern United States. <i>PLOS ONE</i> , 10(12), e0144092. https://doi.org/10.1371/journal.pone.0144092	University of Tennessee; Trout-Fryxell
01362-A	Urkasemsin, G., & Olby, N. J. (2015). Clinical characteristics of Scottie Cramp in 31 cases. <i>Journal of Small Animal Practice</i> , 56(4), 276–280. https://doi.org/10.1111/jsap.12317	North Carolina State University; Olby
2013 Clinician-Scientist Fellowship Program	Visser, L. C., Scansen, B. A., Brown, N. V., Schober, K. E., & Bonagura, J. D. (2015). Echocardiographic assessment of right ventricular systolic function in conscious healthy dogs following a single dose of pimobendan versus atenolol. <i>Journal of Veterinary Cardiology</i> , 17(3), 161–172. https://doi.org/10.1016/j.jvc.2015.04.001	The Ohio State University; Visser
2013 Clinician-Scientist Fellowship Program	Visser, L. C., Scansen, B. A., Schober, K. E., & Bonagura, J. D. (2015). Echocardiographic assessment of right ventricular systolic function in conscious healthy dogs: Repeatability and reference intervals. <i>Journal of Veterinary Cardiology</i> , 17(2), 83–96. https://doi.org/10.1016/j.jvc.2014.10.003	The Ohio State University; Visser

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Wolf, Z. T., Brand, H. A., Shaffer, J. R., Leslie, E. J., Arzi, B., Willet, C. E., ... Bannasch, D. L. (2015). Genome-Wide Association Studies in Dogs and Humans Identify ADAMTS20 as a Risk Variant for Cleft Lip and Palate. *PLOS Genetics*, 11(3), e1005059.
<https://doi.org/10.1371/journal.pgen.1005059>

University of California,
Davis; Bannasch