

2017 Peer-Reviewed Publications

Resulting from AKC Canine Health Foundation research grants



CHF Grant ID	APA Citation	Institution; Principal Investigator
02078	Bearden, R. N., Huggins, S. S., Cummings, K. J., Smith, R., Gregory, C. A., & Saunders, W. B. (2017). In-vitro characterization of canine multipotent stromal cells isolated from synovium, bone marrow, and adipose tissue: a donor-matched comparative study. <i>Stem Cell Research & Therapy</i> , 8(1). https://doi.org/10.1186/s13287-017-0639-6	Texas A&M AgriLife Research; Saunders
01892-A	Bertocci, G. E., Brown, N. P., & Mich, P. M. (2017). Biomechanics of an orthosis-managed cranial cruciate ligament-deficient canine stifle joint predicted by use of a computer model. <i>American Journal of Veterinary Research</i> , 78(1), 27–35. https://doi.org/10.2460/ajvr.78.1.27	University of Louisville; Bertocci
01889-G	Borgatti, A., Koopmeiners, J. S., Sarver, A. L., Winter, A. L., Stuebner, K., Todhunter, D., ... Vallera, D. A. (2017). Safe and Effective Sarcoma Therapy through Bispecific Targeting of EGFR and uPAR. <i>Molecular Cancer Therapeutics</i> , 16(5), 956–965. https://doi.org/10.1158/1535-7163.MCT-16-0637	University of Minnesota; Modiano, Broad Institute; Karlsson, North Carolina State University; Breen
01782	Brown, N. P., Bertocci, G. E., & Marcellin-Little, D. J. (2017). Canine cranial cruciate ligament deficient stifle biomechanics associated with extra-articular stabilization predicted using a computer model: BROWN et al. <i>Veterinary Surgery</i> , 46(5), 653–662. https://doi.org/10.1111/vsu.12652	University of Louisville; Bertocci
01584	Cunningham, D. P., Mostafa, A. A., Gordan-Evans, W. J., Boudrieau, R. J., & Griffon, D. J. (2017). Factors contributing to the variability of a predictive score for cranial cruciate ligament deficiency in Labrador Retrievers. <i>BMC Veterinary Research</i> , 13(1). https://doi.org/10.1186/s12917-017-1154-9	Western University of Health Sciences; Griffon
01188-A	Davis, M. S., Cummings, S. L., & Payton, M. E. (2017). Effect of brachycephaly and body condition score on respiratory thermoregulation of healthy dogs. <i>Journal of the American Veterinary Medical Association</i> , 251(10), 1160–1165. https://doi.org/10.2460/javma.251.10.1160	Oklahoma State University; Davis
02261-MOU	Evans, J. M., Noorai, R. E., Tsai, K. L., Starr-Moss, A. N., Hill, C. M., Anderson, K. J., ... Clark, L. A. (2017). Beyond the MHC: A canine model of dermatomyositis shows a complex pattern of genetic risk involving novel loci. <i>PLOS Genetics</i> , 13(2), e1006604. https://doi.org/10.1371/journal.pgen.1006604	Clemson University; Clark

01762 Fazio, C. G., Muir, P., Schaefer, S. L., & Waller, K. R. (2017). Accuracy of 3 Tesla magnetic resonance imaging using detection of fiber loss and a visual analog scale for diagnosing partial and complete cranial cruciate ligament ruptures in dogs. *Veterinary Radiology & Ultrasound*, 59(1), 64–78. <https://doi.org/10.1111/vru.12567>

University of Wisconsin,
Madison; Muir

02142-A Franklin, S. P., Burke, E. E., & Holmes, S. P. (2017). Utility of MRI for Characterizing Articular Cartilage Pathology in Dogs with Medial Coronoid Process Disease. *Frontiers in Veterinary Science*, 4. <https://doi.org/10.3389/fvets.2017.00025>

University of Georgia
Research Foundation, Inc;
Franklin

02078 Gacasan, E. G., Sehnert, R. M., Ehrhardt, D. A., & Grunlan, M. A. (2017). Templated, Macroporous PEG-DA Hydrogels and Their Potential Utility as Tissue Engineering Scaffolds. *Macromolecular Materials and Engineering*, 302(5), 1600512. <https://doi.org/10.1002/mame.201600512>

Texas A&M AgriLife
Research; Saunders

02148-A Goulet, S., Giger, U., Arsenault, J., Abrams-Ogg, A., Euler, C. C., & Blais, M.-C. (2017). Prevalence and Mode of Inheritance of the *Dal* Blood Group in Dogs in North America. *Journal of Veterinary Internal Medicine*, 31(3), 751–758. <https://doi.org/10.1111/jvim.14693>

University of Montreal;
Blais

01584 Griffon, D. J., Cunningham, D., Gordon-Evans, W. J., Tanaka, R., Bruecker, K. A., & Boudrieau, R. J. (2017). Evaluation of a scoring system based on conformation factors to predict cranial cruciate ligament disease in Labrador Retrievers. *Veterinary Surgery*, 46(2), 206–212. <https://doi.org/10.1111/vsu.12593>

Western University of
Health Sciences; Griffon

01426 Halsey, C. H. C., Thamm, D. H., Weishaar, K. M., Burton, J. H., Charles, J. B., Gustafson, D. L., ... Ehrhart, E. J. (2017). Expression of Phosphorylated KIT in Canine Mast Cell Tumor. *Veterinary Pathology*, 54(3), 387–394. <https://doi.org/10.1177/0300985816688943>

Colorado State University;
Thamm

01771 Harkey, M. A., Villagran, A. M., Venkataraman, G. M., Leisenring, W. M., Hullar, M. A. J., & Torok-Storb, B. J. (2017). Associations between gastric dilatation-volvulus in Great Danes and specific alleles of canine immune-system genes DLA88, DRB1, and TLR5. *American Journal of Veterinary Research*. 78(8), 12.

Fred Hutchinson Cancer
Research Center; Torok-
Storb

00652-A Harms, A., Segers, F. H. I. D., Quebatte, M., Mistl, C., Manfredi, P., Körner, J., ... Dehio, C. (2017). Evolutionary Dynamics of Pathoadaptation Revealed by Three Independent Acquisitions of the VirB/D4 Type IV Secretion System in *Bartonella*. *Genome Biology and Evolution*, 9(3), 761–776. <https://doi.org/10.1093/gbe/evx042>

University of California,
Davis; Chomel

02124-A	<p>Hesser, A., Darr, C., Gonzales, K., Power, H., Scanlan, T., Thompson, J., ... Meyers, S. (2017). Semen evaluation and fertility assessment in a purebred dog breeding facility. <i>Theriogenology</i>, 87, 115–123.</p> <p>https://doi.org/10.1016/j.theriogenology.2016.08.012</p>	University of California, Davis; Meyers
01759	<p>Im, K. S., Kim, J. H., Graef, A. J., Cornax, I., Seelig, D. M., O'Sullivan, M. G., ... Modiano, J. F. (2017). Establishment of a Patient-Derived Xenograft of Canine Enteropathy-Associated T-Cell Lymphoma, Large Cell Type. <i>Journal of Comparative Pathology</i>, 156(1), 37–41.</p> <p>https://doi.org/10.1016/j.jcpa.2016.11.271</p>	University of Minnesota; Modiano
02248	<p>James, F. M. K., Cortez, M. A., Monteith, G., Jokinen, T. S., Sanders, S., Wielander, F., ... Lohi, H. (2017). Diagnostic Utility of Wireless Video-Electroencephalography in Unsedated Dogs. <i>Journal of Veterinary Internal Medicine</i>, 31(5), 1469–1476.</p> <p>https://doi.org/10.1111/jvim.14789</p>	The Folkhälsan Institute of Genetics; Lohi
01731	<p>Jeffery, N. D., Barker, A. K., Alcott, C. J., Levine, J. M., Meren, I., Wengert, J., ... Suchodolski, J. S. (2017). The Association of Specific Constituents of the Fecal Microbiota with Immune-Mediated Brain Disease in Dogs. <i>PLOS ONE</i>, 12(1), e0170589.</p> <p>https://doi.org/10.1371/journal.pone.0170589</p>	Iowa State University; Jeffery
01900-A	<p>Kidd, L., Quroollo, B., Lappin, M., Richter, K., Hart, J. R., Hill, S., ... Breitschwerdt, E. B. (2017). Prevalence of Vector-Borne Pathogens in Southern California Dogs with Clinical and Laboratory Abnormalities Consistent with Immune-Mediated Disease. <i>Journal of Veterinary Internal Medicine</i>, 31(4), 1081–1090.</p> <p>https://doi.org/10.1111/jvim.14735</p>	Western University of Health Sciences; Kidd
02257	<p>Kolicheski, A., Barnes Heller, H. L., Arnold, S., Schnabel, R. D., Taylor, J. F., Knox, C. A., ... Katz, M. L. (2017). Homozygous <i>PPT1</i> Splice Donor Mutation in a Cane Corso Dog with Neuronal Ceroid Lipofuscinosis. <i>Journal of Veterinary Internal Medicine</i>, 31(1), 149–157.</p> <p>https://doi.org/10.1111/jvim.14632</p>	University of Missouri, Columbia; Johnson
02257	<p>Kolicheski, A., Johnson, G. S., Villani, N. A., O'Brien, D. P., Mhlanga-Mutangadura, T., Wenger, D. A., ... Katz, M. L. (2017). GM2 Gangliosidosis in Shiba Inu Dogs with an In-Frame Deletion in <i>HEXB</i>. <i>Journal of Veterinary Internal Medicine</i>, 31(5), 1520–1526.</p> <p>https://doi.org/10.1111/jvim.14794</p>	University of Missouri, Columbia; Johnson
01425	<p>Koskinen, L. L. E., Seppälä, E. H., Weissl, J., Jokinen, T. S., Viitmaa, R., Hänninen, R. L., ... Lohi, H. (2017). ADAM23 is a common risk gene for canine idiopathic epilepsy. <i>BMC Genetics</i>, 18(1).</p> <p>https://doi.org/10.1186/s12863-017-0478-6</p>	University of Helsinki and the Folkhälsan Institute of Genetics; Lohi

01995	<p>MacLean, E. L., Herrmann, E., Suchindran, S., & Hare, B. (2017). Individual differences in cooperative communicative skills are more similar between dogs and humans than chimpanzees. <i>Animal Behaviour</i>, 126, 41–51.</p> <p>https://doi.org/10.1016/j.anbehav.2017.01.005</p>	Duke University; MacLean
02118-A	<p>Mair, G., Unger, H., & Gabriel, C. (2017). Combining RPL27 with OAZ1 or RPL8 as Universal Normalizers of Gene Expression in Canine Endometrial Studies. <i>International Journal of Veterinary Science and Technology</i>, 1(1), 23–24.</p>	University of Veterinary Medicine of Vienna; Bartel
02204	<p>Mesa, K. J., Selmic, L. E., Pande, P., Monroy, G. L., Reagan, J., Samuelson, J., ... Boppart, S. A. (2017). Intraoperative optical coherence tomography for soft tissue sarcoma differentiation and margin identification. <i>Lasers in Surgery and Medicine</i>, 49(3), 240–248.</p> <p>https://doi.org/10.1002/lsm.22633</p>	The Ohio State University; Selmic
02123-A	<p>Meyers-Wallen, V. N., Boyko, A. R., Danko, C. G., Grenier, J. K., Mezey, J. G., Hayward, J. J., ... Sinclair, A. H. (2017). XX Disorder of Sex Development is associated with an insertion on chromosome 9 and downregulation of RSPO1 in dogs (<i>Canis lupus familiaris</i>). <i>PLOS ONE</i>, 12(10), e0186331. https://doi.org/10.1371/journal.pone.0186331</p>	Cornell University; Meyers-Wallen
2015 Clinician-Scientist Fellowship Program	<p>Noh, H. J., Tang, R., Flannick, J., O'Dushlaine, C., Swofford, R., Howrigan, D., ... Lindblad-Toh, K. (2017). Integrating evolutionary and regulatory information with a multispecies approach implicates genes and pathways in obsessive-compulsive disorder. <i>Nature Communications</i>, 8(1). https://doi.org/10.1038/s41467-017-00831-x</p>	Broad Institute; Noh
02252	<p>Packer, R. M. A., Volk, H. A., & Fowkes, R. C. (2017). Physiological reactivity to spontaneously occurring seizure activity in dogs with epilepsy and their carers. <i>Physiology & Behavior</i>, 177, 27–33.</p> <p>https://doi.org/10.1016/j.physbeh.2017.04.008</p>	Royal Veterinary College, University of London; Volk
01762	<p>Sample, S. J., Racette, M. A., Hans, E. C., Volstad, N. J., Holzman, G., Bleedorn, J. A., ... Muir, P. (2017). Radiographic and magnetic resonance imaging predicts severity of cruciate ligament fiber damage and synovitis in dogs with cranial cruciate ligament rupture. <i>PLOS ONE</i>, 12(6), e0178086. https://doi.org/10.1371/journal.pone.0178086</p>	University of Wisconsin, Madison; Muir
01893-A	<p>Sherwood, J. M., Roush, J. K., Armbrust, L. J., & Renberg, W. C. (2017). Prospective Evaluation of Intra-Articular Dextrose Prolotherapy for Treatment of Osteoarthritis in Dogs. <i>Journal of the American Animal Hospital Association</i>, 53(3), 135–142. https://doi.org/10.5326/JAAHA-MS-6508</p>	Kansas State University; Roush

00898-A	Stepien, R. L., Kellihan, H. B., & Luis Fuentes, V. (2017). Prevalence and diagnostic characteristics of non-clinical mitral regurgitation murmurs in North American Whippets. <i>Journal of Veterinary Cardiology</i> , 19(4), 317–324. https://doi.org/10.1016/j.jvc.2017.04.004	University of Wisconsin, Madison; Stepien
0195	Thierry, F., Handel, I., Hammond, G., King, L. G., Corcoran, B. M., & Schwarz, T. (2017). Further characterization of computed tomographic and clinical features for staging and prognosis of idiopathic pulmonary fibrosis in West Highland White Terriers. <i>Veterinary Radiology & Ultrasound</i> , 58(4), 381–388. https://doi.org/10.1111/vru.12491	University of Edinburgh; Corcoran
01822	Thompson, M. J., vonHoldt, B., Horvath, S., & Pellegrini, M. (2017). An epigenetic aging clock for dogs and wolves. <i>Aging</i> , 9(3), 1055–1068. https://doi.org/10.18632/aging.101211	University of California, Los Angeles; Wayne
02165-MOU	Toedebusch, C. M., Bachrach, M. D., Garcia, V. B., Johnson, G. C., Katz, M. L., Shaw, G., ... Garcia, M. L. (2017). Cerebrospinal Fluid Levels of Phosphorylated Neurofilament Heavy as a Diagnostic Marker of Canine Degenerative Myelopathy. <i>Journal of Veterinary Internal Medicine</i> , 31(2), 513–520. https://doi.org/10.1111/jvim.14659	University of Missouri, Columbia; Coates
01894-A	Trout Fryxell, R. T., Hendricks, B. M., Pompo, K., Mays, S. E., Paulsen, D. J., Operario, D. J., & Houston, A. E. (2017). Investigating the Adult Ixodid Tick Populations and Their Associated <i>Anaplasma</i> , <i>Ehrlichia</i> , and <i>Rickettsia</i> Bacteria at a Rocky Mountain Spotted Fever Hotspot in Western Tennessee. <i>Vector-Borne and Zoonotic Diseases</i> , 17(8), 527–538. https://doi.org/10.1089/vbz.2016.2091	University of Tennessee; Trout-Fryxell
00927	Urkasemsin, G., Nielsen, D. M., Singleton, A., Arepalli, S., Hernandez, D., Agler, C., & Olby, N. J. (2017). Genetics of Hereditary Ataxia in Scottish Terriers. <i>Journal of Veterinary Internal Medicine</i> , 31(4), 1132–1139. https://doi.org/10.1111/jvim.14738	North Carolina State University; Olby
01771	Venkataraman, G. M., Kennedy, L. J., Little, M.-T. E., Graves, S. S., Harkey, M. A., Torok-Storb, B. J., & Storb, R. (2017). Thirteen novel canine dog leukocyte antigen-88 alleles identified by sequence-based typing. <i>HLA</i> , 90(3), 165–170. https://doi.org/10.1111/tan.13077	Fred Hutchinson Cancer Research Center; Torok- Storb
02248	Wielander, F., Sarviah, R., James, F., Hytönen, M. K., Cortez, M. A., Kluger, G., ... Lohi, H. (2017). Generalized myoclonic epilepsy with photosensitivity in juvenile dogs caused by a defective DIRAS family GTPase 1. <i>Proceedings of the National Academy of Sciences</i> , 114(10), 2669–2674. https://doi.org/10.1073/pnas.1614478114	The Folkhälsan Institute of Genetics; Lohi

01866-A	<p>Winter, R. L., Saunders, A. B., Gordon, S. G., Buch, J. S., & Miller, M. W. (2017). Biologic variability of N-terminal pro-brain natriuretic peptide in healthy dogs and dogs with myxomatous mitral valve disease. <i>Journal of Veterinary Cardiology</i>, 19(2), 124–131.</p> <p>https://doi.org/10.1016/j.jvc.2016.11.001</p>	Texas A&M AgriLife Research; Saunders
01866-A	<p>Winter, R. L., Saunders, A. B., Gordon, S. G., Miller, M. W., Fosgate, G. T., Suchodolski, J. S., & Steiner, J. M. (2017). Biologic variability of cardiac troponin I in healthy dogs and dogs with different stages of myxomatous mitral valve disease using standard and high-sensitivity immunoassays. <i>Veterinary Clinical Pathology</i>, 46(2), 299–307.</p> <p>https://doi.org/10.1111/vcp.12495</p>	Texas A&M AgriLife Research; Saunders
01660	<p>Zaldívar-López, S., Rowell, J. L., Fiala, E. M., Zapata, I., Couto, C. G., & Alvarez, C. E. (2017). Comparative genomics of canine hemoglobin genes reveals primacy of beta subunit delta in adult carnivores. <i>BMC Genomics</i>, 18(1). https://doi.org/10.1186/s12864-017-3513-0</p>	The Research Institute at Nationwide Children's Hospital; Alvarez