



### Collie Health Foundation Pasts Grants

(AKC CHF) signifies grants that were in conjunction with the American Kennel Club's Canine Health Foundation

	TOTAL GRANTS	EPILEPSY	BLOAT	MDR-1	PRA	AUTOIMMUNE DISEASE	CANCER	OTHER
	\$934,263	\$111,664	\$110,389	\$25,952	\$194,666	\$283,603	\$47,655	\$160,334
2014	\$104,726	Epilepsy Initiative - Joined the AKC Canine Health Foundation's Epilepsy Initiative as a Champion Sponsor \$50,000				Pilot Trial of Autogenous Stem Cell Treatment of Dermatomyositis - Tufts Dr. Ferrer \$18,000		Defining the Genetic Basis of Inflammatory Bowel Disease (AKC CHF) \$3,000  Profiling the Metabolic and Lipid Imbalances that are Causitive of Gallbladder Disease in Dogs (AKC CHF) \$4,000  Mapping of Genetic Risk Factors for Canine Hip Dysplasia (AKC CHF) \$5,000  Defining Novel Drug Targets to Treat Chronic and Neuropathic Pain in the Dog (AKC CHF) \$5,000  WSU Grant - To Develop a Cell Culture Based Method of Screening Drugs to Determine Whether or Not They are P-go Substrates \$19,726
2013	\$26,430							Identification and Validation of the Genes that Define Abnormal Development of the Kidney in Dogs (AKC CHF) \$7,500  Treatment of Urinary Incontinence with Multipotent Muscle Cells (AKC CHF) \$5,000  Filling the Gaps in the Canine Genome (AKC CHF) \$3,000  DLA Research Grant: Investigation of Diversity at the Dog Leukocyte Antigen Class II Loci in American and International Collies \$10,930
2012	\$68,940	Identifying Epilepsy causing mutation (AKC CHF) \$2000  Identification of Idiopathic Epilepsy Genes in Australian Shepherds (AKC CHF) \$2,500	Bloat Initiative: Joined the AKC Canine Health Foundation's Bloat Initiative as a Champion Sponsor \$50,000			Apsosis-Not Just Nucleated Cells: The Contribution of Programmed Cell Death to Red Cell Destruction in Immune Mediated Hemolytic Anemia (AKC CHF) \$1,000	Isolation and Characterization of Tumor Initiating Cells in Canine Osteosarcoma Cell Lines (AKC CHF) \$1,000	Sequencing and Functional Analysis of the Canine Y Chromosomes (AKC CHF) \$2,500 Urinary Incontinence Study: Extension of Grant too Add More Dogs to the Study \$3,600 Polyneuopathy Study - The Use of Skin Punch Biopsy to Diagnose Polyneuopathy \$5,340 Plasma Cortisol Concentrations in Dogs with Pituitary Dependent Hyper-adrenalcorticism & Atypical Cushing Syndrome (AKC CHF) \$1,000

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2011	\$19,820		\$5,000 DOGenes: Candidate gene analysis for Gastric Dilatation - Volvulus					\$14,820 GnRH Immunization for the Treatment of Urinary Incontinence in Spayed Bitches Researcher: Dr Michelle Kutzler, DVM, PhD, DACT and Dr Timothy Hazzard, DVM Ph Institution: Oregon State University
2010	\$150,954		\$20,976 Clinical Evaluation of NOTES Gastropexy as a Prophylactic Procedure for Prevention of Gastric Dilatation and Volvulus in Collie Dogs Purdue University Dr. Lynetta Freeman			\$119,978 Collie whole-genome sequence and genome-wide association studies Assemble full- genome, high- resolution sequence data using pooled DNA from genetically diverse Collies. Completely sequencing the Collie genome will allow for the identification of DNA sequence variations and other polymorphisms that make the breed unique. Leigh Anne Clark, PhD, Clemson University		\$10,000 Identification of a VWD (von Willebrands Disease) causal mutation and development of a direct DNA test - Dr. George Brewer & Robert H. Loechel, MS.
2009	\$15,947		\$10,497 Clinical Evaluation of NOTES Gastropexy as a Prophylactic Procedure for Prevention of Gastric Dilatation and Volvulus in Collie Dogs Purdue University Dr. Lynetta Freeman  \$5,000 DOGenes: Candidate gene analysis for Gastric Dilatation - Volvulus					
2008	\$7,500						\$2,500 AKC/CHF Grant #1113 - Dr. Timothy D. O'Brien, DVM, PhD - Univ of Minnesota - Canine Non-Hodgkin Lymphoma: Characterization and Prognostic Value of Cancer Stem Cells Amount: \$150,071.40  \$2,500 AKC/CHF Grant #1139 - Dr. Nicola Mason, BVetMed, DACVIM, PhD - Univ of Penn - Immune Targeting of Canine Hemangiosarcoma Using a Canine Derived Single Chain Antibody Approach Amount: \$123,125.40	\$2,500 AKC/CHF Grant #1142 - Dr. Amara H. Estrada, DVM, DACVIM - Univ of FL - Cutting Balloon Valvuloplasty for Dogs with Subaortic Stenosis Amount: \$38,433.60

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2006	\$113,600	\$1,000 With AKCCHF, Dr. Kate Chandler Royal Veterinary College, England • Canine Idiopathic Familial Epilepsies are Associated with Ion Channel Mutation. \$1,000			\$23,000 Gregory Acland– Baker Institute for Animal Health, College of Veterinary Medicine, Cornell University • Identification of the Mutation Causing Collie PRA \$7,900 w/ AKCCHF, Simon Peterson-Jones, DVM, PhD, MI State University - Investigation of the Genetic Mutations Underlying Progressive Retinal Atrophy 3 yrs	\$20,000 Dr. Keith Murphy, Texas A&M Univ • Analysis for Linkage Disequilibrium with Dermatomyositis of the Collie \$45,000 With AKCCHF, Grant #792: Dermatomyositis in the Collie Dr. Leigh Anne Clark, Texas A & M University. Propose to collect DNA from affected Collies and family members for use in linkage studies. Our goal is to identify a marker, or markers, that can be used by breeders to identify dogs that are predisposed to develop DM. We also aim to identify the gene(s) that may be causative for DM.	\$1,700 With AKCCHF Grant 652: William Kisseberth, DVM, PhD, Ohio State University • MicroRNAs and Canine Lymphoma \$5,000 With AKCCHF #615B, North Carolina State University • Heritable and Sporadic Genetic Lesions in Canine Lymphoma Two years	\$10,000 Mandi J. Lopez, DVM, PhD, Louisiana State University • Quantification of osteoprotegerin (OPG) and receptor activator of nuclear factor kappa B ligand (Ranel) expression in normal and osteoarthritic canine coxofemoral articular cartilage.
2005	\$41,944	\$13,744 University of Minnesota • Determination of Breed Specific Reference Intervals for Assessing Thyroid Function in American Collies.				\$20,700 Texas A&M Univ • Gene Expression Profile of Dermatomyositis in the Shetland Sheepdog \$20,700	\$5,000 With AKCCHF, Auburn University • Investigation of Predicators of Outcome for Canine Mast Cell Tumors \$2,500 With AKCCHF, Cornell University • Anti-HLA-DR Antibody Therapy in Canine B-Cell Lymphoma: Preliminary Clinical Evaluation	
2004	\$59,943			\$10,694 Washington State University, Comparison of the Hypothalamic-pituitary-adrenal response in MDR1 Collies		\$1,749 With AKCCHF, Texas A&M Univ • Background Information study for Future development of a Molecular Genetics Study in Collie and Shetland Sheepdogs with Dermatomyositis	\$2,500 With AKCCHF, University of Wisconsin • An Investigation into Combined Molecular Approaches to Treat Hemangiosarcoma \$5,000 With AKCCHF, Ohio State University • Oligonucleotide Microarray Gene Expression Profiling of Canine Lymphoma -	\$20,000 Inclusion of Collies in the Canine Phenome Project, University of Missouri \$10,000 With AKCCHF, Fred Hutchinson Cancer Research Center • Development of a New Resource for Positional Cloning of Hip Dysplasia Genes: A High Density SNP Map of Canine Chromosome One \$10,000 With AKCCHF, University of Alaska, Fairbanks • Genetic Determinants of Hypothyroid Disease in Dogs
2003	\$29,310			\$14,718 Dr. Katrina Mealey, WA State Univ • What drugs in addition to Ivermectin can cause a problem for Collies with the MDR1 mutation?			\$10,000 With AKC CHF: Matthew Breen, PhD, at North Carolina State University, "Cellular Genomics - A Cytogenetic Investigation of Canine Soft Tissue Sarcomas"	\$2,600 With AKC/CHF Recombinant Thyrotropin (TSH) Standard -- Immunoassay with Improved Sensitivity \$2,000 With AKCCHF • Role of Circulating Endothelial Progenitor Cells
2002	\$24,550				\$14,750 With AKCCHF * Investigation of Candidate Loci for Progressive Retinal Atrophy in the Collie		\$9,800 With AKCCHF • Identification of Characterization of Genetic Mutation in Canine Cell Tumors	
2001	\$16,070	\$6,820 With AKCCHF • Epilepsy Grant No. 2304 (2 year study - \$3,410 per year)				\$6,500 Dr. Christine Rees, Texas A&M • Isolation of DNA from Blood Samples in Normal Collies and Collies with Dermatomyositis		\$2,750 With AKCCHF • Mechanisms for Hypercoagulability in Immune Mediated Hemolytic Anemia and Early Disseminated Intravascular Coagulation (2 yr. study - \$1,375 per year)

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1999	\$42,000	\$18,000 Dr. George Brewer, University of Michigan • Epilepsy	\$12,000 Purdue University- Dr. Glickman Bloat Study			\$9,000 Dr. Harm HogenEsch, Purdue Unversity • Dermatomyositis \$3,000 Drs Rees and Boothe, Texas A&M • Pentoxifylline		
1998	\$33,297	\$9,100 Dr. C. W. Dewey, Texas A&M University • Seizure disorders (epilepsy) \$9,100.00			\$19,197 Dr. Aguirre, James Baker Institute (Cornell) • PRA	\$5,000 Dr. Patrick Venta, Michigan State University • DM (gene study)		
1997	\$35,136				\$18,460 Dr. Aguirre, James Baker Institute (Cornell) • PRA	\$11,176 Drs. Snyder, Reberg & Glickman, Purdue University • DM \$5,500 Drs. Rees and Boothe, Texas A&M University • Pentoxifyllin (DM treatment drug)		
1996	\$33,000				\$17,000 Dr. Aguirre, James Baker Institute • PRA	\$11,000 Drs. Snyder, Reberg & Glickman, Purdue University • DM \$5,000 Drs. Rees and Boothe, TX A & M • Pentoxifylline (Dermatomyositis drug)		
1995	\$21,000				\$17,000 Dr. Aguirre, James Baker Institute • PRA			\$2,000 Drs. Breitschwerdt & Hegarty, No Carolina State • Erlchia \$2,000 James Baker Institute • Erythropoietin
1994	\$9,000				\$9,000 Dr. Aguirre, James Baker Institute • PRA			
1993	\$11,000				\$6,000 Dr. Aguirre, James Baker Institute, MI  \$5,000 David McConnell, MI			
1992	\$12,000				\$7,000 Dr. G. Aguirre • Rod-Cone Dysplasia \$5,000 C. Wheeler, MI • Canine Rhodopsin Gene			
1991	\$12,300				\$8,200 Dr. Aguirre, PA • Rod- Cone Dysplasia \$4,100 C. Wheeler, MI • PRA			
1990	\$12,764				\$5,820 Dr. G. Aguirre • Canine Retina Dr. G. Aguirre • Explant Retina Tissue (PRA)			\$1,000 Dog Owners Assn. Canine Defense League \$3,944 William Hammond, WA • Grey Collies \$2,000 Gary Johnson, MO • Collie Diseases
1989	\$11,279			\$540 Stephen Greene, WA • Effect of Diazepam	\$5,539 Dr. G. Aguirre, PA • PRA			\$4,000 Patricia Olson, CO • Research Feeding Puppies \$1,200 Thomas Yang, CT • Grey Collies
1988	\$7,000	\$500 Betsy Dayrell- Hart, PA • Epilepsy	\$1,200 Colin Burrows, FL • Bloat		\$3,700 Dr. G. Aguirre, PA • PRA Trustees- U. of PA • PRA			\$600 Thomas Yang, CT • Grey Collies \$1,000 Hammond Research • Grey Collies
1987	\$2,300		\$500 Colin Burrows- Fla • Bloat					\$300 Janet Holbrook • Training Collies  \$1,500 Dr. Wm. Hammond • Grey Collies