

The Rottweiler Health
Foundation is a
registered non-profit
(1997; tax ID 621699829) devoted to the
financial support of
research for the health
and longevity of our
dogs. All donations,
including membership
dues, are tax deductible.

To read RHF's goals and objectives, visit us on the web: http://www.rottweilerhealth.org

General Information Email

info@rottweilerhealth.org

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Spring 2018

From the Editor

This issue is designed to update RHF members on the canine health research that our organization is currently supporting through grants and our partnership with the AKC Canine Health Foundation.

It is Spring and ticks are becoming a problem for dogs and humans alike, therefore I chose to feature the research that addresses tick born diseases. We will be sharing information regarding current research grants that address cancer, SAS, and cruciate ligament ruptures in upcoming issues.

I am pleased to be able to make a contribution to the RHF as your new HealthNotes Editor.

Pamela Grant

From the President

We are continuing our funding of Dr. Muir's research concerning SAS. We have recently committed ourselves to \$48,432.70.

Pledge name/number: 02520-MOU Identification of Genetic Markers for Familial Subvalvular Aortic Stenosis in Rottweilers

Date pledge made: July 26, 2017

Original pledge amount: \$45,000.00

Purpose of pledge/restriction: 02520-MOU Identification of Genetic Markers for Familial Subvalvular Aortic Stenosis in Rottweilers

On behalf of the RHF, I thank everyone for their continued support.

Roberta Kelley-Martin, President Rottweiler Health Foundation

Upcoming Events

May 15, 16, 17, 2018

<u>Complimentary DNA Blood Drive</u>

ARC National Specialty

Purina Farms Great Hall

May 16-18, 2018

Dog Night

RHF Silent Auction
ARC National Specialty
Purina Farms Great Hall
Auction Concludes During Top

Contact Donna Rice, dbrrhf@gmail.com, if you have items you wish to donate to the Rottweiler Health Foundation



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Find us on





The Rottweiler Health Foundation counts on the support of its members to help improve the quality of life for Rottweilers and their human companions. Gifts of at least \$50 are credited as annual membership dues.

All gifts and dues are tax deductible.

The member year is July 1 to June 30. Join now or renew: Pay online:

rottweilerhealthfoundation.wildapricot.org/donate

Or Mail donations to: Ellen Calnan, 3752 Rodeo Rd, Missoula, MT 59803.



Did you know you can donate to RHF when you shop on Amazon? Make your purchases at www.smile.amazon.com and choose Rottweiler Health Foundation as your charity. RHF will receive 10% of your purchase total.



Blood Drive for the OFA / CHF DNA Bank



The Rottweiler Health Foundation will be offering a complimentary DNA collection at the ARC 2018 National Specialty to be held at Purina Farms, May 12 - 20. Samples are to be submitted to The DNA Repository.

Standard fee for each sample submitted - \$20.00. Zero cost to the you!

The DNA Repository, co-sponsored by the Orthopedic Foundation for Animals (OFA) and the AKC Canine Health Foundation (AKC CHF), collects and stores canine DNA samples along with corresponding pedigree and health history information to facilitate future research and testing aimed at reducing the incidence of inherited disease in dogs.

The program objectives are:

- Facilitate more rapid research progress by expediting the sample collection process
- Provide researchers with optimized family groups needed for research
- Allow breeders to take advantage of future DNA based disease tests as they become available
- Foster a team environment between breeders/owners and the research community improving the likelihood of genetic discovery

You will find the collection location in The Great Hall at Purina Event Center Tuesday, Wednesday & Thursday, May 15, 16 & 17 Hours: 1:00 PM - 4:00 PM

> Thank you for caring! Thank you for sharing!



Download & fill out the necessary form & health questionnaire ahead of time. Required information for form can be found on dog's AKC registration papers.

DNA Repository Application Form and Health Survey

More information regarding the DNA Repository -

See detailed instructions for blood samples.

Questions? Contact Roberta - RobertaRHFoundation@gmail.com

Email us and let us know you're planning on participating. We want to have enough collection kits available for everyone.

CIRCLE 2000 NEWS

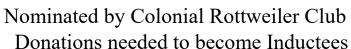


New Inductee



Outstanding Nominations







New Nominee



Monica Silvers

Sponsors: Francis Keays, Ann Glynn, Roberta Martin **Pledge:** Ann Glynn, Debbie McIntyre, Lore Owens-Brownfield, Howard Bernier, Roberta Martin

Online Donations: rottweilerhealthfoundation.wildapricot.org/donate Or Mail to: Ellen Calnan, 3752 Rodeo Rd., Missoula, MT 59803

2018 RHF Auction

Greetings to All Rottweiler Enthusiasts!!

The American Rottweiler Club National Specialty is rapidly approaching. The National will be held at the Purina Event Center May 13-19, 2018.

The Rottweiler Health Foundation will once again hold a combined raffle & auction at the National. Our hope is for this fundraising opportunity to be spectacular, and we need your help in order to accomplish this goal. We're contacting your club to ask if you won't participate by creating a basket of items that highlight your state (or area of your state). It's suggested that when you create your basket that you include a list of the contents and your club's name on an easily read tag, so everyone will know what goodies are included and who it's from.

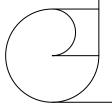
Baskets can travel to the national with one of your club members or can be shipped to Purina Farms Event Center, C/O American Rottweiler Club [ATTN: Donna Rice - RHF], 300 Checkerboard Loop, Gray Summit, MO 63039. All items that are shipped must **NOT** be delivered prior to **May 4, 2018**. Storage room is limited, and Purina will not accept shipments prior to 5/4/18 earmarked for ARC.

Thank you so much for your consideration to support the Rottweiler Health Foundation. All fundraisers help fund critical research into the genetic, communicable and acquired diseases that plague our beloved breed. You can also donate items to benefit the American Rottweiler Club and/or the Rottweiler Rescue Foundation. Please remember to mark your item(s) that you donate with a tag stating which organization the proceeds should go to.

It would be extremely helpful if you contact Donna Rice to let her know you'll be participating so we can reserve the correct number of tables.

Please contact Donna dbr803rhf@gmail.com to answer any questions you may have, and, especially if you're planning to participate. Come on – highlight your club and support the RHF. It's always fun to see what the clubs have included in their baskets!

Thank you, *Roberta*Roberta Kelley-Martin
Rottweiler Health Foundation, President



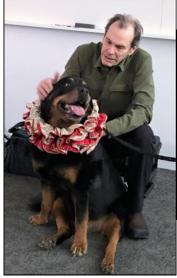
Individuals who wish to donate items for the Auction may ship to Purina Farms using the address above, or bring your items in person to Donna at the Auction tables at the show site on Thursday, May 17th.



On February 15, 2018 Skip and I, accompanied by all of our "boys", traveled to Cornell University Hospital for Animals in Ithaca, New York where we filmed a segment for an upcoming documentary on canine osteosarcoma. We discussed Benny's Osteosarcoma case, and his awesome life after his treatment at Cornell. He survived bone cancer for more than five years, and did hundreds of pet therapy visits during that time. Skip, a human radiologist, also filmed an additional segment with a veterinary radiologist from Cornell, Dr. Thompson. The documentary entitled My Friend: Standing Strong which focuses on canine osteosarcoma is being filmed by Terry Simons of CLEAR- Canine Lymphoma Education Awareness & Research.

We are so grateful that Osteosarcoma is being highlighted in this upcoming documentary film!!! We hope it will raise awareness about the disease, and generate more funding for much needed research!

Kelly Skiptunas







Filmmaker, Terry Simons

Spencer & cameraman

We are proud to announce that principal photography has begun on our next documentary My Friend: Standing Strong, a full-length feature on canine osteosarcoma.

Osteosarcoma (OSA) makes up about 5% of all canine tumors, but is by far the most common bone tumor of the dog. Signs of this aggressive bone cancer are subtle, such as minor lameness, a hitch in the dog's gate, a bit of swelling and maybe even some joint pain. As in all cancers, early detection is important, so shining a light on symptoms so that owners can be proactive is one of the many reasons we decided to tackle OSA in this, our third canine cancer project.

Because of the aggressiveness of OSA, many owners are faced with very frightening choices. Amputation of the affected limb is quite often necessary, leaving owners in turmoil. Chemotherapy is needed due to the cancer's high rate of metastasis. The average life expectancy with amputation and chemotherapy is about one *human* year, but the equivalent of seven *dog* years.

We want to show dog owners that there is more to this disease than amputation. Dogs are resilient and as some say are born with three legs and a spare. Osteosarcoma is not the end of the world for your dog, it is just a new beginning, whether it is amputation or limb-sparing there is a solution and an option for everyone.



CLEAR IS A 501(C)(3) NONPROFIT ORGANIZATION THAT IS DEDICATED TO INCREASING AWARENESS AND UNDERSTANDING OF CANINE LYMPHOMA THROUGH CLINICAL RESEARCH, AND AS A RESOURCE TO DOG OWNERS INTERESTED IN PREVENTION AND TREATMENT OF THIS DEVASTATING DISEASE www.clearcaninecancer.com



February 14, 2018

Ms. Lin Beenen Rottweiler Health Foundation, Inc. 975 Cumberland Ave SE Lowell, MI 49331-8685

Dear Ms. Beenen:

Thank you for your recent gift of \$48,423.70 to fund much-needed scientific research to help dogs live longer, healthier lives. Your donation will support the Rottweiler Health Foundation Donor Advised Fund and 02520-MOU.

In partnership with you, the AKC Canine Health Foundation has awarded funding for groundbreaking studies to address the immediate health needs of dogs and their people, from vaccine research for bone cancer, to personalized medicine for dogs undergoing anesthesia, to finding new ways for our dogs' own immune systems to fight diseases from atopy to cancer.

Thanks to your support, researchers are currently conducting innovative studies in the areas of canine cancer, cardiac disease, tick-borne disease, epilepsy, gastrointestinal disease, and more. To learn more about the exciting canine health research your gift helps make possible, please visit www.akcchf.org/researchportfolio. This important work can only happen with you. Your donation to canine health helps build on the important scientific advances in veterinary medicine and biomedical science.

Again, thank you for making a difference.

Diane Burn

With gratitude.

Diane E. Brown, DVM, PhD

Chief Executive Officer

Dear Jin,
We are thankful for the
Augsport of the Rothweiler
Augsport of the Rothweiler
Health Foundation, and so
pleased to be working with
pleased to be working with
you on SAS in Rothweilers to
you on SAS in Rothweilers to
find an answer to this serious
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health wisne.
Warmest regards,
Warmest regards,

Your donation is tax-deductible to the fullest extent of the law. In accordance with IRS regulations no goods or services were extended to you in exchange for this charitable contribution. Please retain this letter for your tax purposes. Tax ID# 13-3813813



In 2016, the American Kennel Club (AKC) launched its Canine Health Foundation (CHF) Tick-Borne Disease Research Initiative, and the research is continuing this year. Thanks to the generosity of our donors, the challenge to collect \$250,000 in donations for this initiative, matched dollar-for-dollar by the AKC, was reached in 2016 and again in 2017. Putting these funds right to work has resulted in the awarding of seven new grants to date. It is important to examine why this type of research is critical for the sustained health of dogs and their humans.

Tick-borne diseases are a growing nationwide threat. They occur when ticks infected with a pathogen bite a dog or human and transmit the pathogen to the host. It does not take long for some of the diseases to be passed to the host; some transmissions take place in as little as 3-to-6 hours after the initial bite. To combat these diseases, it is important to learn the current best practice for prevention, diagnostics, and treatments. The most important tick-borne diseases that affect dogs include ehrlichiosis, anaplasmosis, Rocky Mountain spotted fever, hepatozoonosis, babesiosis, bartonellosis, hemotropic mycoplasmosis, and Lyme disease. Recent shifts in tick populations and the expanded geographical range of some species of ticks are believed to be the result of a combination of climate change, host animal migration, and man-made changes to the environment. Changes in tick behavior that make them more likely to encounter potential hosts have also been attributed to climate change.

In 2017, the journal Vector-Borne and Zoonotic Diseases and the Journal of Veterinary Internal Medicine published two new research articles resulting from CHF-funded grants. The first publication, titled "Investigating the Adult Ixodid Tick Populations and Their Associated Anaplasma, Ehrlichlia, and Rickettsia Bacteria at a Rocky Mountain Spotted Fever Hotspot in Western Tennessee" used varying collection methods to capture adult ticks across Tennessee and assess them for the presence of different disease-causing pathogens, including anaplasma, ehrlichlia, and rickettsia. This publication resulted from CHF acorn grant 01894-A.

Another publication, entitled "Prevalence of Vector-Borne Pathogens in Southern California Dogs with Clinical and Laboratory Abnormalities Consistent With Immune-Mediated Disease," resulted from CHF support for grant 01900-A. This study concluded that serology and PCR testing enhances the detection of infection by vector-borne pathogens such as rickettsia, ehrlichia, bartonella, babesia, borrelia, and anaplasma in dogs that have clinical signs of immune-mediated disease. These findings will allow veterinarians to better distinguish vector-borne diseases from immune-mediated disorders, leading to improved diagnosis and treatment. The lead investigator for this grant and publication, Linda Kidd DVM, PhD was also awarded one of the 2016 CHF Tick-Borne Disease Initiative grants (02285-A). Dr. Kidd will be presenting on this topic in a live VetVine webinar entitled "Immune-Mediated Hemolytic Anemia (IMHA): Underlying Disease Screening in Dogs" on Aug. 22, 2018 at 8 p.m. ET.

CHF remains committed to research that will help to build a better understanding of the growing and shifting patterns of tick-borne diseases in dogs. A call for new research proposals to CHF will happen in Spring 2018. The current grants that have been awarded will continue to advance the understanding of tick-borne diseases to help keep our family members, both canine and human, healthy.

The Rottweiler Health Foundation supported this research through donations to AKC Canine Health Foundation.

Report of Donna Rice, RHF/CHF Health Liaison

Thank you to the Rottweiler Health Foundation and the American Rottweiler Club for giving me the opportunity to attend the 2017 AKC CHF Parent Club Conference. It is a fabulous conference for learning about new research, networking with other Foundation attendees, and reconnecting with old friends.

In previous years, we were given the slide presentations, and I made those available to the members of ARC and RHF. That was not the case this year. If anyone is interested in more information, the best thing to do is look up publications by the author.

The three most important things I took away from the conference were:

Without samples, researchers cannot perform research.

Nutrition controls healing and correct nutrition has a beneficial effect on neurological function (epilepsy in particular).

Tick borne disease and Brucellosis are two of the most important (and scary) "One Health" problems today because of the zoonotic potential. They should not be underestimated.

Three presenters at the conference reported on grant research findings that relate to tick born diseases:

Anne Avery, VMD, PhD is the director of the Clinical Immunology Lab at CSU. Her laboratory's research is directed at using canine and feline lymphoproliferative disorders as models for human disease, and for what they teach us about the biology and function of the immune system. Current CHF Grant—2295-A: The Role of Lymphocytes in Canine Monocytic Ehrlichiosis

Presentation Abstract: *Ehrilichia canis* is a rickettsia that infects canine monocytes and causes a variety of unique clinical and hematologic signs, including monoclonal gammopathy and clonal expansion of CD8 T cells. *E. canis* infection can be confounding in dogs with a clinical suspicion of T cell leukemia, because common diagnostic methods (flow cytometry and clonality) may not be able to distinguish between these entities. The goals of this study conducted at Ross University in St. Kitts, where *E. canis* is endemic, were to better define the nature of the hematologic response to naturally acquired *E. canis* infection. This data allows us to diagnose T cell leukemia in clinical situations where patients also have evidence of *E. canis* exposure.

[Note from Donna Rice: "It is hard to distinguish E.Canis from lymphoma. Dr. Avery's study collected data to distinguish E. canis from lymphoma."]

Jason Stull, VMD, PhD, DACVPM is a Diplomat of the American College of Veterinary Preventive Medicine. His research focuses on veterinary infectious disease epidemiology, promoting the human-animal bond and preventing and controlling zoonotic infectious disease in veterinary care, households, and unique environments. Current CHF Grants—2284-A: Lyme Disease in Dogs: Prevalence, Clinical Illness, and Prognosis. 2380-A: Estimating Prevalence and Identifying Risk Factors for Canine Leptospirosis in North America.

Presentation Abstract: Lyme disease is a poorly understood condition in dogs. The range of Borrelia-infected ticks, responsible for transmitting Lyme disease, continues to expand in the US and Canada resulting in many infected dogs. Infected dogs rarely show signs of illness, however, Lyme disease can be severe (e.g., kidney disease). This talk will review our current knowledge of canine Lyme disease risk and forecasted emergence and recommendations for prevention and control. Preliminary results from a large on-going US and Canada study will be presented.

Edward Breitschwerdt, DVM, DACVIM is a Diplomate, ACVIM who directs the intracellular Pathogens Research Laboratory in the Comparative Medicine Institute at North Carolina State University, co-directs the Vector Borne Diseases Diagnostic Laboratory, and is the director of NCSU-CVM Biosafety Level 3 Laboratory. Breitschwerdt's clinical interests include infectious diseases, immunology, and nephrology. His research

group has contributed to cutting-edge research in the areas of animal and human bartonellosis. Current CHF Grant—2287: Enhanced Testing for the Diagnosis of Bartonellosis in Dogs.

Presentation Abstract:

Bartonella species are fastidious Gram-negative bacteria that are highly adapted to a mammalian reservoir host and within which the bacteria usually cause a long-lasting, intra-erythrocytic and endotheliotropic blood-stream infection. These facts are of particular importance to veterinarians, physicians, diagnosticians, public health officials, and pet owners as an increasing number of animals have been identified as reservoir hosts for zoonotic Bartonella species. Among numerous examples, *Bartonella henselae*, *Bartonella koehlerae* and *Bartonella clarridgeae* have co-evolved with casts, *Bartonella vinsonii* subsp. *Berkhoffii* and *Bartonella rochalimae* have co-evolved with dogs and wild canines, and *Bartonella bovis* has co-evolved with cattle. Importantly, the list of reservoir-adapted *Bartonella* species, including a large number of recently identified bat and rodent species, continues to expand exponentially, as new *Bartonella* spp. And additional reservoir hosts are discovered throughout the world.

Bartonellosis is a zoonotic infectious disease of worldwide distribution, caused by an expanding number of recently discovered *Bartonella* spp. Of comparative medical importance, *Bartonella* spp. Are transmitted by several arthropod or insect vectors, including fleas, keds, lice, sand flies, ticks and potentially mites and spiders. Prior to 1990, there was only one named *Bartonella* species (B. *bacilliformis*), whereas there are now over 36 species, of which 17 have been associated with an expanding spectrum of disease in dogs and human patients. Recent advances in diagnostic techniques have facilitated documentation of chronic bloodstream infections with *Bartonella* spp. In healthy and sick animals, and in immunocompetent and immunocompromised human patients with cardiovascular, neurological and rheumatologic symptoms.

In 1993, I examined a 3 year-old Labrador retriever that had experienced a chronic, insidious and progressive illness during the preceding 9 months. Dr. Dorsey Kordick, then a Ph.D student in my research laboratory, successfully isolate a *Bartonella* species from this dog, representing the first time this genus of bacteria was isolated from a dog anywhere in the world. Subsequently, in collaboration with bacteriologists at Centers for Disease Control and Prevention, the newly isolated bacteria was defined as microbiologically unique and named **Bartonella vinsonii subsp. Berkhoffii.** To a substantial degree, this young retriever and this bacterial isolate served as the foundation for a research program that has generated an important and controversial body of medical evidence related to canine and human baronellosis. Not only are dogs our best friends, but naturally-infected dogs continue to provide important comparative medical insights that have enhanced our understanding of human bartonellosis.

In recent years, physicians, veterinarians and other scientists have called for a **One Health** approach to this emerging zoonotic infectious disease. Comparative medial research is needed to more fully define disease manifestations, to clarify the pathogenesis of disease induced by this stealth pathogen, to validate effective treatment regimens, and to develop vaccines and other strategies that prevent zoonotic disease transmission from animals to humans. With additional research, it is likely that the genus Bartonella and the disease Bartonellosis will represent major microbiological and clinical paradigm changers in the future.

[Note from Donna Rice: "Reservoirs of Bartonellosis are rodents, cats, dogs, wildlife. Cats and dogs can transfer Bartonellosis to people. The importance of this cannot be underestimated. Fleas transmit Bartonella for life. Children with cat scratch disease were misdiagnosed with cancer. 20% of all human cancers are thought to be caused by infectious agents. This is one of the most important "One Health" problems.]

Promising Researchers Named 2018 AKC Canine Health Foundation Clinician-Scientist Fellows

RALEIGH, N.C. (December 11, 2017) To sustain future advancements in canine health, the AKC Canine Health Foundation (CHF) is pleased to announce and congratulate recipients of the 2018 AKC Canine Health Foundation Clinician-Scientist Fellowships:

<u>Kathryn Dalton, VMD, MPH,</u> is a PhD student in the Department of Environmental Health and Engineering at The Johns Hopkins Bloomberg School of Public Health. Under the mentorship of Dr. Meghan Davis, Dr. Dalton is researching microbial communities and how they relate to human and canine health.

<u>Shelby Gasson, DVM,</u> is a PhD student in the Department of Small Animal Clinical Sciences at Texas A&M University. Dr. Gasson is this year's **AKC Canine Health Foundation GCHP Hill Country's Let's Get Ready To Rumble "Rumble" Clinician-Scientist Fellow** (akcchf.org/rumble). Under the mentorship of Dr. Brian Saunders, Dr. Gasson is researching the development of tissue engineering constructs for treatment of osteochondral defects.

<u>Mariah Gentry, DVM,</u> is a veterinary post-doctoral fellow at the University of Pennsylvania. Under the mentorship of Dr. Margret Casal, Dr. Gentry is researching the heritability of renal dysplasia in Cairn Terriers, and aims to develop a DNA-based marker test so the disorder can be diagnosed at an early age.

<u>Sita Withers, BVSc(Hons)</u>, is a PhD student at the University of California, Davis. Her mentor is Dr. Robert B. Rebhun. Dr. Withers is studying how naturally occurring canine cancers can contribute to the understanding of immunotherapeutics in dogs as well as people, with a focus on osteosarcoma.

Established in 2013, the AKC Canine Health Foundation Clinician-Scientist Fellowship Program seeks to encourage and support the next generation of canine health researchers to sustain future advancements in canine and one health. According to Dr. Diane Brown, AKC Canine Health Foundation Chief Executive Officer, "This class of Fellows was selected from a highly competitive field of candidates. We look forward to their progress in advancing the health of dogs."

Additional considerations for selection of awardees include conducting research in line with CHF's <u>mission</u>, and with preference given to residents/graduate students at institutions which have demonstrated progress and success with current and prior CHF funding. Each fellowship includes \$10,000 for research and \$2,000 for presentation of results at a national scientific meeting.

For the latest portfolio of CHF research grants outlining active studies being supported for the health of dogs, please see the <u>2018 AKC Canine Health Foundation Research Grants Portfolio</u>.



Our Mission

To raise money to fund critical research into the genetic, communicable and acquired diseases that plague our beloved breed; the Rottweiler

AKC Canine Health Foundation

Research Support History Rottweiler Health Foundation

January 23, 2018

		Commitment	
Grant and Research Program Area	Fund	Date	Support Amount
02215: A GD2/GD3 (Ganglioside) targeted cancer vaccine for canine osteosarcoma Dr. Rowan J Milner, BVSc; University of Florida	DAF	4/21/2017	\$2,500.00
Program Area: Oncology - Osteosarcoma			
Project Dates: 1/1/2016 to 4/30/2018; Grant Amount: \$80,974.00			
02217: Beta adrenergic signaling drives hemangiosarcoma growth by regulating the tumor microenvironment	DAF	4/21/2017	\$2,500.00
Dr. Erin B. Dickerson, PhD; University of Minnesota			
Program Area: Oncology - Hemangiosarcoma			
Project Dates: 1/1/2016 to 6/30/2018; Grant Amount: \$86,206.00			
02292: Improving and Expanding the Broad-Range Detection of Canine Tick-Borne Disease Diagnostics Using Next-Generation Sequencing	DAF	4/21/2017	\$2,500.00
Dr. Pedro Paul Diniz, DVM, PhD; Western University of Health Sciences			
Program Area: Tick-Bome Disease Project Dates: 9/1/2016 to 4/30/2018; Grant Amount: \$60,717.00			
01889-Ga: Developing Markers to Diagnose and Guide Cancer Treatment in Golden Retrievers Based on Newly Discovered Heritable and Acquired Mutations Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Oncology Project Dates: 1/1/2014 to 12/31/2017; Grant Amount: \$360,933.00	Cash	6/11/2015	\$5,000.00
01889-Ga: Developing Markers to Diagnose and Guide Cancer Treatment in Golden Retrievers Based on Newly Discovered Heritable and Acquired Mutations Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Oncology Project Dates: 1/1/2014 to 12/31/2017; Grant Amount: \$360,933.00	DAF	6/1/2015	\$5,000.00
	D. I.D.	. / /	** *** **
01828: Mapping of Genetic Risk Factors for Canine Hip Dysplasia	DAF	1/15/2015	\$2,500.00
Dr. Antti Iivanainen, DVM, PhD; University of Helsinki and the Folkhälsan Institute of Genetics			
Program Area: Musculoskeletal Conditions and Disease			
Project Dates: 1/1/2014 to 12/31/2016; Grant Amount: \$79,207.71			

Grant and Research Program Area	Fund	Commitment Date	Support Amount
01949-A: Abnormal Activation of Receptor Activator of NF- kappa-b (Rank) Signaling in Canine Osteosarcoma Dr. Shay Bracha, DVM, MS; Oregon State University Program Area: Oncology - Osteosarcoma Project Dates: 4/1/2014 to 3/31/2015; Grant Amount: \$12,960.00	DAF	1/15/2015	\$2,500.00
01557: High-Resolution Cytogenetic Analysis of Histiocytic Malignancies and Development of a Targeted Assay to Screen for Expression Level Changes Dr. Matthew Breen, PhD; North Carolina State University Program Area: Oncology Project Dates: 7/1/2012 to 9/30/2015; Grant Amount: \$125,000.00	DAF	1/15/2015	\$2,500.00
01872-A: Evaluation of ultrasound elastography in the differentiation between normal and abnormal sentinel lymph nodes in dogs affected with neoplasms Dr. Nathalie Rademacher, Med.Vet.; Louisiana State University Program Area: Oncology Project Dates: 9/1/2012 to 2/28/2015; Grant Amount: \$3,478.41	DAF	1/15/2015	\$2,500.00
01585: Phase I Study of Involved-Field Radiotherapy (IFRT) for Advanced Stage Canine Lymphoma Dr. Michael A. Deveau, DVM, MS; Texas A&M Research Foundation Program Area: Oncology - Lymphoma Project Dates: 1/1/2012 to 6/30/2015; Grant Amount: \$75,942.61	DAF	1/15/2015	\$2,500.00
01787: Clinical advancement of RNA-transfected CD40-B cell vaccine technology for cancer therapy Dr. Nicola J Mason, BVetMed, PhD; University of Pennsylvania Program Area: Oncology - Lymphoma Project Dates: 1/1/2013 to 12/31/2016; Grant Amount: \$96,660.00	DAF	1/15/2015	\$2,500.00
01762: Use of a platelet rich plasma-collagen scaffold to stimulate healing of cruciate rupture in dogs Dr. Peter Muir, BVSc, PhD; University of Wisconsin, Madison Program Area: Musculoskeletal Conditions and Disease Project Dates: 1/1/2013 to 6/30/2015; Grant Amount: \$160,246.00	DAF	3/17/2014	\$2,500.00
01889-Ga: Developing Markers to Diagnose and Guide Cancer Treatment in Golden Retrievers Based on Newly Discovered Heritable and Acquired Mutations Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Oncology Project Dates: 1/1/2014 to 12/31/2017; Grant Amount: \$360,933.00	DAF	3/17/2014	\$5,000.00
02078: Regenerative Osteochondral Plugs (ROPs) for the Treatment of Osteochondral Defects in Dogs Dr. William Brian Saunders, DVM, PhD; Texas A&M AgriLife Research Program Area: Canine Athlete Initiative Project Dates: 1/1/2014 to 12/31/2016; Grant Amount: \$120,871.43	DAF	3/17/2014	\$2,500.00

Grant and Research Program Area	Fund	Commitment Date	Support Amount
02078: Regenerative Osteochondral Plugs (ROPs) for the Treatment of Osteochondral Defects in Dogs Dr. William Brian Saunders, DVM, PhD; Texas A&M AgriLife Research Program Area: Canine Athlete Initiative Project Dates: 1/1/2014 to 12/31/2016; Grant Amount: \$120,871.43	DAF	3/17/2014	\$2,500.00
01759: Targeting Multipotency to Arrest Hemangiosarcoma Progression and Improve Outcomes Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Oncology - Hemangiosarcoma Project Dates: 1/1/2013 to 12/31/2015; Grant Amount: \$233,914.00	DAF	3/22/2013	\$2,500.00
01759: Targeting Multipotency to Arrest Hemangiosarcoma Progression and Improve Outcomes Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Oncology - Hemangiosarcoma Project Dates: 1/1/2013 to 12/31/2015; Grant Amount: \$233,914.00	DAF	3/22/2013	\$2,500.00
01806: Evaluation of a conditionally replicative adenoviral vector for the treatment of canine osteosarcoma Dr. Bruce F Smith, VMD PhD; Aubum University Program Area: Oncology - Osteosarcoma Project Dates: 3/1/2013 to 8/31/2015; Grant Amount: \$118,840.03	DAF	3/22/2013	\$2,500.00
01806: Evaluation of a conditionally replicative adenoviral vector for the treatment of canine osteosarcoma Dr. Bruce F Smith, VMD PhD; Aubum University Program Area: Oncology - Osteosarcoma Project Dates: 3/1/2013 to 8/31/2015; Grant Amount: \$118,840.03	DAF	3/22/2013	\$2,500.00
01843: Identification of diagnostic DNA copy number aberrations in canine leukemia Dr. Matthew Breen, PhD; North Carolina State University Program Area: Oncology Project Dates: 1/1/2013 to 12/31/2015; Grant Amount: \$131,265.00	DAF	3/22/2013	\$2,500.00
01843: Identification of diagnostic DNA copy number aberrations in canine leukemia Dr. Matthew Breen, PhD; North Carolina State University Program Area: Oncology Project Dates: 1/1/2013 to 12/31/2015; Grant Amount: \$131,265.00	DAF	3/22/2013	\$2,500.00
01557: High-Resolution Cytogenetic Analysis of Histiocytic Malignancies and Development of a Targeted Assay to Screen for Expression Level Changes Dr. Matthew Breen, PhD; North Carolina State University Program Area: Oncology Project Dates: 7/1/2012 to 9/30/2015; Grant Amount: \$125,000.00	DAF	3/21/2012	\$5,000.00

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Grant and Research Program Area	Fund	Date	Support Amount
01557: High-Resolution Cytogenetic Analysis of Histiocytic Malignancies and Development of a Targeted Assay to Screen for Expression Level Changes Dr. Matthew Breen, PhD; North Carolina State University Program Area: Oncology Project Dates: 7/1/2012 to 9/30/2015; Grant Amount: \$125,000.00	DAF	3/21/2012	\$5,000.00
01533-A: Development of a Canine Stifle Computer Model for Evaluation of Cranial Cruciate Ligament Deficiency	DAF	6/29/2011	\$1,000.00
Dr. Gina E Bertocci, PhD; University of Louisville Program Area: Treatment Project Dates: 12/1/2010 to 2/29/2012; Grant Amount: \$12,591.63			
00947A: Heritable and Sporadic Genetic Lesions in Canine Osteosarcoma Dr. Matthew Breen, PhD; North Carolina State University Program Area: Oncology - Osteosarcoma Project Dates: 8/1/2008 to 11/30/2011; Grant Amount: \$147,482.64	DAF	6/29/2011	\$2,500.00
01503-A: Rational Development of Targeted Therapy - Aurora Kinase Inhibition in Osteosarcoma Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Treatment Project Dates: 8/1/2010 to 1/31/2012; Grant Amount: \$12,960.00	DAF	6/29/2011	\$1,000.00
01313: Identification of a Genetic Marker for Familial Aortic Stenosis in the Rottweiler Dr. Kathryn M Meurs, DVM, PhD; Washington State University Program Area: Prevention Project Dates: 1/1/2010 to 12/31/2010; Grant Amount: \$27,651.00	DAF	3/30/2010	\$7,500.00
00947B: Heritable and Sporadic Genetic Lesions in Canine Osteosarcoma Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Oncology - Osteosarcoma Project Dates: 7/1/2008 to 12/31/2010; Grant Amount: \$184,443.00	DAF	3/22/2010	\$7,000.00
01313: Identification of a Genetic Marker for Familial Aortic Stenosis in the Rottweiler Dr. Kathryn M Meurs, DVM, PhD; Washington State University Program Area: Prevention Project Dates: 1/1/2010 to 12/31/2010; Grant Amount: \$27,651.00	DAF	3/22/2010	\$7,500.00
00982: Evaluation of Efficacy of Fasaret in Dogs with Osteosarcoma Dr. Don Bellgrau, Ph.D.; ApopLogic Pharmaceuticals, LLC Program Area: Treatment Project Dates: 4/1/2008 to 3/31/2010; Grant Amount: \$199,692.00	DAF	10/16/2009	\$2,500.00

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Grant and Research Program Area	Fund	Date	Support Amount
00976: Investigating the Role of STAT3 Activation in Canine Osteosarcoma Dr. Cheryl A. London, DVM PhD; Ohio State University Program Area: Treatment Project Dates: 4/1/2008 to 3/31/2010; Grant Amount: \$44,361.00	DAF	10/16/2009	\$1,000.00
00947B: Heritable and Sporadic Genetic Lesions in Canine Osteosarcoma Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Oncology - Osteosarcoma Project Dates: 7/1/2008 to 12/31/2010; Grant Amount: \$184,443.00	DAF	2/27/2008	\$0.00
00947B: Heritable and Sporadic Genetic Lesions in Canine Osteosarcoma Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Oncology - Osteosarcoma Project Dates: 7/1/2008 to 12/31/2010; Grant Amount: \$184,443.00	DAF	2/27/2008	\$0.00
00947A: Heritable and Sporadic Genetic Lesions in Canine Osteosarcoma Dr. Matthew Breen, PhD; North Carolina State University Program Area: Oncology - Osteosarcoma Project Dates: 8/1/2008 to 11/30/2011; Grant Amount: \$147,482.64	DAF	2/27/2008	\$3,616.15
00947A: Heritable and Sporadic Genetic Lesions in Canine Osteosarcoma Dr. Matthew Breen, PhD; North Carolina State University Program Area: Oncology - Osteosarcoma Project Dates: 8/1/2008 to 11/30/2011; Grant Amount: \$147,482.64	DAF	2/27/2008	\$7,000.00
00757A: Hereditary Mutations in Genes Associated with Osteosarcoma in Large Dog Breeds Dr. Kerstin Lindblad-Toh, PhD; Broad Institute Program Area: Prevention Project Dates: 4/1/2007 to 9/30/2009; Grant Amount: \$91,481.04	DAF	2/27/2008	\$20,000.00
00778: Role of Regulatory T Cells in Dogs with Osteosarcoma Dr. Barbara J Biller, D.V.M.; Colorado State University Program Area: Treatment Project Dates: 4/1/2007 to 9/30/2009; Grant Amount: \$67,388.48	DAF	2/27/2008	\$5,000.00
00947A: Heritable and Sporadic Genetic Lesions in Canine Osteosarcoma Dr. Matthew Breen, PhD; North Carolina State University Program Area: Oncology - Osteosarcoma Project Dates: 8/1/2008 to 11/30/2011; Grant Amount: \$147,482.64	DAF	2/27/2008	\$9,383.85

Grant and Research Program Area	Fund	Commitment Date	Support Amount
00613: The Prognostic Significance of Chromosome Aneuploidy in Canine Lymphoma Dr. Matthew Breen, PhD; North Carolina State University Program Area: Prevention Project Dates: 8/1/2008 to 7/31/2011; Grant Amount: \$113,929.00	DAF	2/27/2008	\$5,000.00
00778: Role of Regulatory T Cells in Dogs with Osteosarcoma Dr. Barbara J Biller, D.V.M.; Colorado State University Program Area: Treatment Project Dates: 4/1/2007 to 9/30/2009; Grant Amount: \$67,388.48	DAF	4/12/2007	\$1,500.00
00768: A Collaborative Study by Veterinary Oncologists, Pathologists and Diagnostic Laboratories to Enhance the Detection, Diagnosis and Treatment of Canine Lymphoma Dr. Ted Valli, DVM; University of Illinois Program Area: Oncology - Lymphoma Project Dates: 7/1/2007 to 12/31/2012; Grant Amount: \$40,816.14	DAF	4/12/2007	\$1,000.00
00790: MicroRNA Profiling and MicroRNA-Based Treatment of Canine Cancers Dr. William C Kisseberth, DVM PhD; Ohio State University Program Area: Oncology Project Dates: 4/1/2007 to 12/31/2012; Grant Amount: \$94,290.22	DAF	4/12/2007	\$2,500.00
00615A-T: Heritable and Sporadic Genetic Lesions in Canine Lymphoma Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Prevention Project Dates: 10/1/2007 to 3/31/2009; Grant Amount: \$77,066.00	DAF	5/19/2006	\$2,500.00
00615A-T: Heritable and Sporadic Genetic Lesions in Canine Lymphoma Dr. Jaime F Modiano, VMD, PhD; University of Minnesota Program Area: Prevention Project Dates: 10/1/2007 to 3/31/2009; Grant Amount: \$77,066.00	Cash	5/19/2006	\$2,500.00
00247: The Study of the Genetics of Cranial Cruciate Ligament Disease in the Dog Dr. Max F. Rothschild, PhD; Iowa State University Program Area: Prevention Project Dates: 4/1/2004 to 3/31/2006; Grant Amount: \$96,392.00	Cash	5/19/2006	\$2,500.00
00632: MicroRNAs and Canine Lymphoma Dr. William C Kisseberth, DVM PhD; Ohio State University Program Area: Treatment Project Dates: 10/1/2005 to 9/30/2010; Grant Amount: \$98,766.00	Cash	5/19/2006	\$1,700.00

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Grant and Research Program Area	Fund	Date	Support Amount
00705-A: Characterization of Fluorine-18- Fluorodeoxyglucose Uptake in Dogs with Cutaneous Mast Cell Tumor and Malignant Lymphoma Dr. Amy K LeBlanc, DVM; University of Tennessee Program Area: Treatment Project Dates: 1/1/2006 to 12/31/2006; Grant Amount: \$12,922.00	Cash	5/19/2006	\$500.00
00615B: Heritable and Sporadic Genetic Lesions in Canine Lymphoma Dr. Matthew Breen, PhD; North Carolina State University Program Area: Prevention Project Dates: 8/1/2008 to 7/31/2011; Grant Amount: \$149,369.00	Cash	5/19/2006	\$0.00
00305: Histocompatibility Alleles Conferring Susceptibility to Canine Diabetes, Immune-Mediated Thyroiditis and Immune-Mediated Hemolytic Anemia Dr. Wayne Potts, PhD; University of Utah Program Area: Prevention Project Dates: 7/1/2004 to 6/30/2006; Grant Amount: \$120,960.00	Cash	12/24/2004	\$1,250.00
00305: Histocompatibility Alleles Conferring Susceptibility to Canine Diabetes, Immune-Mediated Thyroiditis and Immune-Mediated Hemolytic Anemia Dr. Wayne Potts, PhD; University of Utah Program Area: Prevention Project Dates: 7/1/2004 to 6/30/2006; Grant Amount: \$120,960.00	Cash	12/24/2004	\$1,250.00
00415: Anti-HLA-DR Antibody Therapy in Canine B-cell Lymphoma: Preliminary Clinical Evaluation Dr. Rodney Page, DVM; Cornell University Program Area: Treatment Project Dates: 10/1/2004 to 9/30/2005; Grant Amount: \$32,970.00	Cash	12/15/2004	\$2,500.00
00373A: Mapping Genes Associated with Osteosarcoma in Large Dog Breeds Dr. Kerstin Lindblad-Toh, PhD; Broad Institute Program Area: Prevention Project Dates: 1/1/2005 to 12/31/2006; Grant Amount: \$105,592.00	Cash	12/14/2004	\$10,000.00
00373A: Mapping Genes Associated with Osteosarcoma in Large Dog Breeds Dr. Kerstin Lindblad-Toh, PhD; Broad Institute Program Area: Prevention Project Dates: 1/1/2005 to 12/31/2006; Grant Amount: \$105,592.00	Cash	2/14/2004	\$10,000.00
0002629: Clinical and Immunological Outcomes in Dogs with Osteosarcoma Treated with Intratumoral Interleukin-12 Microspheres Dr. Stuart Helfand, DVM; University of Wisconsin, Madison Program Area: Treatment Project Dates: 1/1/2004 to 12/31/2005; Grant Amount: \$43,800.03	DAF	5/12/2003	\$3,000.00

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Grant and Research Program Area	Fund	Date	Support Amount
2002629: Clinical and Immunological Outcomes in Dogs with Osteosarcoma Treated with Intratumoral Interleukin-12 Microspheres Or. Stuart Helfand, DVM; University of Wisconsin, Madison Program Area: Treatment	DAF	5/12/2003	\$3,000.00
roject Dates: 1/1/2004 to 12/31/2005; Grant Amount: \$43,800.03			
20002616: Molecular Analysis of Contributory Factors of Osteoarthritis in Canine Hip Dysplasia Or. Alpana Ray, PhD; University of Missouri, Columbia Program Area: Treatment Project Dates: 4/1/2004 to 3/31/2006; Grant Amount: \$46,100.00	DAF	5/12/2003	\$3,000.00
2002620: Determination of the Clinical Phenotype and inherited Nature of Familial Subvalvular Aortic Stenosis in the Rottweiler Or. Kathryn M Meurs, DVM, PhD; Ohio State University Program Area: Treatment Project Dates: 10/1/2003 to 9/30/2005; Grant Amount: \$15,438.37	DAF	5/12/2003	\$2,518.00
2002620: Determination of the Clinical Phenotype and inherited Nature of Familial Subvalvular Aortic Stenosis in the Rottweiler Or. Kathryn M Meurs, DVM, PhD; Ohio State University Program Area: Treatment Project Dates: 10/1/2003 to 9/30/2005; Grant Amount: \$15,438.37	DAF	5/12/2003	\$2,518.00
2002038T: The Molecular Cytogenetics of Canine Cymphosarcoma: Correlating Chromosomal Changes with Clinical Disease Or. Matthew Breen, PhD; North Carolina State University Program Area: Prevention Project Dates: 9/30/2002 to 9/30/2003; Grant Amount: \$66,781.68	Cash	8/23/2000	\$3,000.00
2002025: Growth Signaling Pathways in the Pathogenesis and Treatment of Canine Cancer Or. Stuart Helfand, DVM; University of Wisconsin, Madison Program Area: Treatment Project Dates: 8/1/2000 to 9/30/2002; Grant Amount: \$162,122.00	Cash	8/3/2000	\$3,200.00
2001626T: Significance of Tumor Suppressor Genes in Canine Cancer Or. Jaime F Modiano, VMD, PhD; University of Colorado Program Area: Treatment Project Dates: 11/12/1999 to 8/31/2000; Grant Amount: \$93,570.63	Cash	5/13/2000	\$5,000.00
2001836: Identifying the Genetic Cause of Canine Hip Dysplasia Dr. George J. Brewer, MD; University of Michigan Program Area: Prevention Project Dates: 7/29/1999 to 7/28/2002; Grant Amount: \$165,000.00	Cash	9/2/1999	\$2,000.00

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Grant and Research Program Area	Fund	Date	Support Amount
Total Rottweiler Health Foundation (62 items)			\$216,936.00



Our Mission

To raise money to fund critical research into the genetic, communicable and acquired diseases that plaque our beloved breed: the Rottweiler