Mission Statement

The Theriogenology Foundation is a global resource that supports education and research in reproductive medicine; ensuring that future generations of animals continue to enrich our lives through service, companionship, and food for a growing human population while conserving our natural resources.

From the pen of the president

My family has donated Green Bay Packers tickets to the Theriogenology Foundation live auction since 2009. The Packers are the only nonprofit, publicly owned, major professional sports team in the nation. In 1923, the team was nearly bankrupt, and out of desperation, the club held a stock sale. Today, the franchise has about 112,000 shareholders who own 4.7 million shares. Nobody gets free tickets or dividends. Instead, all profits are invested back into the team. Public ownership meant that the fans invested in the club, emotionally and financially, and the Packers were in Green Bay to stay.

Putting “people power” behind their sports organization attracted and motivated investors to catch the spirit of the team. Never fear, I am not advocating a referendum to sell TF stock. But I am all about our present stability, our future security and a shared sense of purpose between our Foundation and all members of our discipline.

The Working Dog Project (www.workingdogproject.org) is our public offering. The Theriogenology Foundation was presented with a problem: America has a giant shortfall of sniffer dogs to keep us safe, whether we are at a concert, attending a sports event, sitting on an Amtrak train or standing at the finish line of the Boston Marathon. In even scarcer supply are those elite dogs which protect our military from IED’s overseas. Disabled Americans, civilian or military, wait years for available service dogs which help them regain independence and confidence.

Despite decades of pedigree analysis and focused breeding programs, the training success rate for service dogs hovers at only around 50% and even lower for military canines. Our goal is to find the genetic loci associated with key behavioral traits such as scenting and retrieving of military and service dogs. Through genomics, the TF proposes to not simply breed more dogs; but to breed dogs who are more likely to succeed.

To accomplish this task, the TF has partnered with the Broad Institute of MIT and Harvard. In 2005, Broad scientists led an international team to decode the DNA of Tasha, the first dog ever sequenced. The use of genomics has led to major discoveries in canine disease and we now look to genetics to guide our selection of dogs for specific training and career paths. Genetic tests focused on behavior or temperament would help solve the central challenge: Accurate prediction at an early age for successful training.

The TF and AKC Reunite enabled the Broad Institute to begin work in September, 2017 with a $350,000 gift. To sustain proposed phases for a 7 year plan for the Working Dog Project, veterinarians involved with reproductive medicine must own this project. By personally contributing or influencing your clients, kennel clubs and business contacts, we are investing in ourselves. It works in Green Bay.

Go Pack Go.

Anita M. Migday, DVM, MS
President, Theriogenology Foundation

www.theriofoundation.org
TF Grants at Work

Megan Foley Externship Grant Report

I spent my canine theriogenology intensive externship at Veterinary Village in Lomira, WI. I was interested in this practice because Dr. Greer is a well-known contributor to canine theriogenology.

I was involved in blood draws for progesterone testing and interpreting these results on both the front end timing to determine ovulation timing and subsequent breeding timing as well as on the back end to determine if and when a bitch was ready to whelp or proceed to having a Caesarean section. I also assisted with semen collection for use as fresh, fresh-chilled, or frozen semen for future breedings. Veterinary Village is an International Canine Semen Bank with semen freezing, storage, and shipping capabilities. I was also included in various insemination procedures from vaginal artificial insemination to transcervical insemination using the endoscope to surgical insemination.

I was an active part of nearly a dozen Caesarean sections. Some of these were planned and scheduled ahead of time and a few were emergencies. It is common to plan and schedule a Caesarean section in a bitch that has over ten puppies because it is common for them to not have the endurance to complete the whelping process with that many puppies. It is also common to plan and schedule a Caesarean section in a bitch that only has one or two puppies because it is common that they will not have a strong enough signal to the body to initiate whelping. I helped to resuscitate puppies and to process the puppies following a Caesarean section.
2017 Canine Breeder Excellence Seminar Track Events

Canine Breeder Excellence Seminar Track Report - Penn Vet
A 2017 Canine Breeder Excellence Seminar Track was held on Saturday, March 4 at Penn Vet. The seminar featured keynote speaker Dr. Shelley Rankin and covered topics including Canine Dentistry, Pet First Aid, and Female Fertility. The program was expanded this year to include veterinary CE credits and AKC Bred with H.E.A.R.T. CE credits.

Canine Breeder Excellence Seminar Track Report - Michigan State University
A CBEST program was held Saturday, March 18 at Michigan State University CVM. Topics included: Canine Reproduction, Neonatology, PennHip, and New “Puppy Saving” Techniques and Equipment. The seminar offered onsite participation and a webinar.

Canine Breeder Excellence Seminar Track Report - Auburn University
A CBEST program was held Saturday, August 26 at the Auburn University CVM. Program topics included: Radiographic exams for common problems: OFA vs PennHip Evaluation, OFA Exam, Cardiology screening tests, Supplements, and a Round Table Discussion with the Theriogenology Team.

Canine Breeder Excellence Seminar Track Report - The Ohio State University
A CBEST program was held Saturday, September 30 at The Ohio State University CVM. Topics included: Breeding Management: Timing is Everything, Neonatal Care, Updates in Female Infertility Diagnostics, Pregnancy Diagnosis, Whelping, and Dystocia.

Canine Breeder Excellence Seminar Track Report - Virginia - Maryland
A CBEST program was held Saturday, October 14 at the Virginia-Maryland CVM. This seminar featured onsite participation and a webinar. Topics included: Genetic decision making-sound breed, sound lines, Gonadectomy: Is it black and white or rainbow colored?, Nutrition and the gestating bitch, and included a Question & Answer Session.

Upcoming Events:
The TF is also partnering with AKC again this year to host a CBEST program as part of the AKC National Championship in Orlando, Florida. The date of the seminar is Friday, December 15 and there is no charge for registration.

Several other schools will partner with TF to host their own Canine Breeder Excellence Seminar Track coming up in 2018. Check the calendar on the TF website to see what may be in your area. If you or your school is interested in partnering with TF for one of these worthwhile events, please email CBEST@Franzmgt.com or call 334.395.4666.
Research Grants
The Theriogenology Foundation offers research grants up to $5,000 for proposals that focus on all aspects of theriogenology including (infertility, endocrinology, neonatology, obstetrics, etc.). In exceptional circumstances, grants up to $10,000 may be considered. Active Diplomates, Honorary Members of the American College of Theriogenologists, veterinarians who are Society for Theriogenology members in private practice, industry or on faculty, or residents enrolled in ACT approved residency programs (including the alternate route) and have a minimum of one year remaining in their training program are eligible to apply for these grants.

One bovine research grant was awarded in 2017: Dr. Jennifer Koziol, Purdue University “Description of the preputial microbiota of bulls using 16S r-DNA profiling”

One small animal research grant was awarded in 2017: Dr. Meghann Haase-Berglund, Red Dog Veterinary Relief Services, LLC “Histologic evaluation of parovarian nodules in the cat”

One equine research grant was awarded in 2017: Dr. Natalie Fraser, University of Queensland “Evaluation of cytokine and chemokine profile of equine seminal plasma”

Travel Grants
In 2017 the TF also awarded $15,200 in Student Travel Grants to assist veterinary students who were travelling to attend the Therio Conference in Fort Collins, CO. These students were presenting abstracts, posters, student case presentations or taking part as a quiz bowl team member at the conference. $550.00 was awarded in a Resident/Intern Travel Grant this year and $750 was awarded in New Faculty Travel Grants.

AKC, AKC-CHF, TF Residency Travel Grants
All of the residencies are made possible by generous grants from the American Kennel Club and the AKC Canine Health Foundation. Each resident was awarded $750 towards their travel to the annual Therio Conference.

Student Externship Grants
Student Externship Grants are grants intended to support experiential educational advancement of students interested in theriogenology. So far in 2017, $2,900 in externship grants have been awarded.

Student Chapter Grants
The TF receives and considers requests for funding of student chapter grants intended to provide educational advancement of students interested in theriogenology. Furthermore, primary consideration is given to funding requests which provide an educational experience in theriogenology that is beyond the scope of the basic curriculum. The TF may consider all or partial funding of a request based on the annual budget and the merit of the educational experience to students. Funding to cover a speaker’s travel expense is also available.

One student chapter grant in the amount of $700 has been awarded in 2017: University of California-Davis
Zemjanis Outreach Fund
This grant is intended to aid veterinarians traveling from developing countries to the United States for educational purposes or for sending a trainer to a developing country to conduct training on-site. One request has been awarded for 2017 in the amount of $500.

2017 TF Grants Awarded as of 11/1/17

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2017 Funds Raised at Annual Theriogenology Conference

Thank you to all of the individuals, companies, and organizations that supported the Theriogenology Foundation by donating or participating in the 2017 Live and Silent Auctions at the annual Therio Conference in Fort Collins!

- Craft Beer Tasting $5,360.00
- 2018 Conference Raffle Tickets $4,300.00
- 50/50 Raffle Tickets $1,375.50
- Live Auction $60,000.00
- Silent Auction $5,097.00

**Total** $76,132.50

Complete report of 2017 support will be included in the summer issue.

SAVE THE DATE!

2018 Therio Conference | August 1-4 | Milwaukee, Wisconsin

Make plans now to join us for the 2018 Therio Conference in the beautiful city of Milwaukee, Wisconsin.

Millions of people visit this naturally beautiful, central Midwestern city each year. Milwaukee borders Lake Michigan and offers plenty in exceptional outdoor adventures with over 150 state and county parks, 75 golf courses, and over 130 miles of bike trails. Explore revitalized architecture throughout downtown, take in the rich brewing history at one of the many craft breweries, or experience one of the city’s famous festivals, museums, or theaters.

Enjoy the 2018 Therio Conference at the historical Hilton City Center Milwaukee. The 2018 conference will feature Small Animal, Equine and Production Animal Tracks and a Bovine Pre-conference Seminar.

www.therio.org
Our goal is to find the genetic loci associated with key behavioral traits of military and service dogs. While decades of selective breeding practices have shaped the canine genome, we now look to genetics to guide our selection of dogs for specific training and career paths.

THE BROAD INSTITUTE

The Broad Institute of MIT and Harvard was launched in 2004 to use genomics to advance science and human health. In 2005, Broad scientists led an international team to decode the DNA of Tasha, the first dog ever sequenced. Since then, scientists have compared the DNA of hundreds of dogs and found millions of differences. Hidden in this complexity are the genetic variants shaping each dog’s behavior.

INVEST IN IN-GENE-UNITY!

We have a unique opportunity today to apply cutting edge technology to identify the genes driving dog behavior. This is a critical first step. With the key genetic factors found, we can strategically select better working dogs, saving time, energy and dollars. Rarely do we have the opportunity to make such an impact for our national security and our disabled Americans. Please consider supporting the effort.

For the Working Dog Project, it is critically important that we include both successful and unsuccessful dogs. We are interested in:

- Dogs who about to enter a training program
- Dogs who are currently enrolled in training
- Successful working dogs
- Dogs who were unable to complete their training program for behavioral reasons

We will compare the behavioral and genetic profiles of successful and unsuccessful dogs to identify genes associated with working dog performance. By setting concrete and measurable goals with the two year Working Dog Project, we expect to powerfully advance any future phases, which may take years to explore. Our long term goal is to provide our partners with practical guidance, based on our research, that will increase the number of dogs succeeding in our program.

To donate to the Working Dog Project or learn more, please visit: www.workingdogproject.org

AKC Reunite Mission Statement

AKC Reunite, formerly AKC Companion Animal Recovery (AKC CAR), founded in 1995, is North America’s largest not for profit pet ID and recovery service.

Microchips and Pet ID

AKC Reunite is committed to Pet Identification, specifically ensuring pets have two forms of ID, a collar or pet id tag and a microchip (or tattoo), to aid in their quick identification and return home if they get lost.

Recovery

With your help, AKC Reunite will maintain its position as the national recovery database of choice in the companion animal community. AKC Reunite offers an incredible value for its microchip and ID service, with proceeds supporting the needs of the animals that inhabit and enrich our lives.

Giving Back

Our reach goes beyond identifying and reuniting pets, one-at-a-time. It is our hope to remain a pipeline of support through microchip and scanner donations, the AKC Pet Disaster Relief program, and our many other charitable programs.

Thank you to AKC Reunite for their continued support!
Dogs have always worked alongside the men and women in our armed services, which currently enlists about 2,300 Military War Dogs in the fighting force. In America today, detection dogs that can sweep large areas or track the vapor of carried explosives are also in high demand and critical to our national security. By having these working dogs on the job, we can all safely enjoy public transportation, concerts, marathons, shopping malls, sporting events and tourist attractions. With the surging global demand, prices now exceed $25,000 for a dog as the United States relies on brokers who source dogs from Eastern Europe.

According to the NYTimes, T.S.A. agents and United States Army officers who go on overseas buying trips say they are lucky if they look at 110 dogs and have 50 pass their preliminary behavioral and medical screenings. Of those dogs, another 15 to 20 percent don’t make it through training in the United States to be put into service. The ones that wash out are shopped to other agencies or put up for adoption. Once it has a promising pup, the Pentagon spends an additional $42,000 to train a K9 unit, a process that starts with obedience and drug and/or bomb detection at Lackland Air Force Base in San Antonio, Texas. Some of the dogs get a second round of training in how to patrol, detain an enemy and attack. A “dual-purpose” dog spends about 120 days completing both training cycles. The U.S. military spends up to $283,000 to train one working war dog.

The scarcity of these dogs for both military and public safety use prompted the American Kennel Club (AKC) to investigate the possibility of creating either a cooperative of private dog breeders in the United States or a federally funded breeding program to provide the military and law enforcement agencies with high-quality dogs. However, with training success rates hovering between 20—50% in the military and service dog populations, simply increasing puppy numbers still translates into wasted training dollars, puppies pushed into roles in which they cannot succeed, unmet client needs and dogs that cannot fulfill the elite requirements to protect and serve.

How do we increase success rates when decades of pedigree analysis and focused breeding programs have fallen short. That question was brought to the Theriogenology Foundation (TF), the charitable arm that unites the American College of Theriogenologists and the Society for Theriogenology. These veterinarians, dedicated to responsible breeding and genetic practices, recognized that there are no useful genetic tests for behavioral traits, suggesting a fundamentally new approach is needed. Genetic tests focused on behavior or temperament would help solve today’s clear and present challenge, to accurately predict the potential for specific task training at an early age in an individual puppy.

Recognizing the need for new tools and technology to study genomics, the TF has now partnered with the Broad Institute of MIT and Harvard. The Broad Institute is a world renowned genomic institute launched in 2004 by MIT and Harvard University in collaboration with the Eli & Edythe Broad Foundation. Staffed by leading genomic scientists and equipped with cutting edge production platforms and analysis technologies, the Broad’s primary mission is to use genomics to advance our understanding of biology and the treatment of disease.

With this directive, The Working Dog Project (WDP) was launched in September 2017. This project is the first step on the path to predicting temperament and working skills using genomic tools. The goal is to find the genetic loci associated with key behavioral traits of military and service dogs in order to guide our selection of puppies for specific training and career paths. This program will leverage the power of genomics to support better working dog breeding and training programs.

The WDP is the first project in a comprehensive program that engages working dog organizations, scientists and dog breeders. The AKC and TF have a history of collaboration for the well-being of purpose bred dogs. Since 2014, they have partnered to establish 9 residencies in companion animal theriogenology in colleges of veterinary medicine to advance post graduate veterinary education in reproductive medicine and increase clinical competency in veterinarians serving companion animal owners. AKC Reunite, North America's largest not for profit pet ID and recovery service, joins the Theriogenology Foundation as a major financial supporter of the WDP. Historically, the canine fancier and veterinarians have been diligently committed to supporting research aimed to unlock the genetic code of many physical diseases. The current commitment is to examine the canine genome as critically for predicting behavior as we have for predicting disease.
Be part of the future of theriogenology!

Donating to the Theriogenology Foundation

Did you know that there are several ways that you can make a donation to the Theriogenology Foundation that will not affect your current lifestyle, or will even pay you an income? You can leave benefits from a Retirement Account, Life Insurance policy, real estate or personal property (collectibles, art, books). Take advantage of the many creative ways to benefit yourself, your beneficiaries and the Theriogenology Foundation while saving tax dollars in the process. Please take a moment to explore the Planned Giving page on the Theriogenology Foundation's website, [http://therio.plannedgiving.org](http://therio.plannedgiving.org). There are worksheets available and additional information to help you consider all of the options.

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