

Penn Vet Working Dog Center

Volume 1, Issue 1

March 2011

Special points of interest:

- Dates for 2011 Working Dog Conference
- Check out our new DNA Bank project
- Calling all 9/11 study participants
- Puppies Behind Bars

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What's new at the PVWDC

It has been a busy and exciting time here at the Penn Vet Working Dog Center.

As we approach the 10th Anniversary of 9/11 we are continuing to monitor the health and behavior of over 50 dogs still active in the 9/11 study.

Dr. Otto has been working with Tails of Hope Foundation to serve as a Co-Chair for the [Finding One Another 9/11 Tribute](#).

We have also moved forward with the [AKC Companion Animal Recovery DNA Bank](#) project.

With over 140 DNA samples collected, we look forward to working with SAR, narcotics and explosive dog trainers and breeders to collect another 300+ samples in 2011.

With so much going on, and more to come in 2011, our goal is to keep you, the PVWDC

contributors and supporters, informed on all of our activities and progress.

We are excited to introduce our quarterly newsletter.

It will highlight advancements being made on research projects going on at the Center.

We will also bring you current updates and scientific findings from outside sources relevant to all aspects of the working dog.

Later this spring you will also see the launch of our new website.

The new site will offer improved survey technology making it easier to access and complete surveys for our study participants.

The site will also provide up to date information on events such as the 2011 Penn Vet Working Dog Conference.



Canine handlers Rosann DeLuca and John Gilkey heading towards Ground Zero.

9/11 study results published

The September 2010 issue of the Journal of Environmental Health published results of the first 5 years of data from the 9/11 Medical Surveillance study.

It compared the effects on the health of 95 dogs deployed to the World Trade Center, Pentagon and Fresh Kills Landfills to 55 control dogs.

We have gained a comprehensive understanding of the unique health issues affecting the SAR dogs of 9/11.

This knowledge allows us to better equip veterinarians to care for dogs who work under these unique conditions.

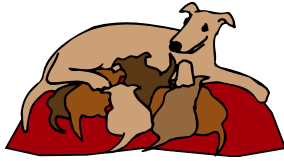
Studying the 9/11 dogs has also provided some insight for the

future medical care of human first responders also exposed to the toxic environments of 9/11.

For a copy of the journal article, please contact us directly at

kkelsey@vet.upenn.edu

Nurture v. Nature- Or is there more to it than that?



Time Magazine-www.time.com/time/health/article/0,8599,1951968,00.html

Although genes are passed down from parents to offspring, it is now recognized that environmental influences can alter the way genes are expressed.

The effects of these modifications can even be passed on to offspring.

For example, good mothering results in altered gene expres-

sion that promotes good mothering in offspring (a potentially important factor in selecting breeding bitches).

Stressors that occur during development can also alter gene regulation involved in social interactions having a similar multigenerational impact.

An introduction to the concepts of epigenetics was presented at the 2010 Penn Vet Working Dog Conference. Scott Thomas, TSA Breeding

and Development Program Manager, will present at the 2011 Conference to discuss how the field of epigenetics influences the TSA breeding program.

This is an important area of current research and it may help explain many of the questions that pure genetics has not.

“...you can change your epigenetics even when you make a dumb decision at 10 years old.”

Q & A

Dear Dr. Otto: I am beginning the process of selecting a new puppy for search work. There are so many opinions on what tests to use. Have any of these methods been proven?

-SAR Handler

Dear SAR Handler:

There is much discussion and need for research surrounding this very issue.

In fact, improving selection of

working dogs is one of the very reasons for the inception of the PVWDC.

To date, most of the "puppy tests" have not been proven to consistently predict adult behavior.

With that said, what tools then should you use.

One of the most likely predictors is previous success of the sire, dam and/or full siblings.

Note, even in programs that breed working dogs, it is not

unusual for only 30% of the litters to become successful detection dogs.

Evaluating structure of the dog is also important for longevity. It has been suggested that evaluations can be done between 5 and 8 weeks of age.

Several presenters at the 2011 Working Dog Conference will be sharing tools currently used in programs such as Puppies Behind Bars (see [page 4](#)).



Chris Selfridge and K9 Riley-photo by Preston Keres

9/11 Study– Your participation is needed now more than ever

2011 will mark the 10th Anniversary of that fateful day and brings back to mind the importance of the 9/11 Medical Surveillance Study.

Our ability to identify the long term health issues caused by the 9/11 deployment requires your continued participation.

We know that life sometimes get's hectic, but we are asking for your continued support.

Some key items to remember:

- We welcome your participation even if you missed submitting in past years.
- The cost of the exam, blood draw and radiographs are covered by the study-no expense to you.
- Merial has provided Frontline for all study participants.
- You receive veterinary insurance from VPI as part of your agreement to participate.
- We are updating our contact information list-if your dog has passed, or you choose to no longer participate, we ask that you still contact us to update your information so we can keep you informed of the results of the study and other endeavors of the PVWDC.

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• **THANK YOU!** We APPRECIATE your dedication to the study and to search and rescue.

What EXACTLY makes a successful detection dog??

That is the question the AKC Companion Animal Recovery Detection Dog DNA Bank was designed to answer.

A set of DNA samples from detection dogs working in explosives, narcotics and search and rescue are being compiled.

The objective is to identify genetic markers found in these dogs that are not present in their non-working counterparts.

This also includes the ability to identify markers of health is-

suues that effect overall comfort and working lifespan such as skin allergies.

Skin allergies are a leading cause of early retirement in guide dogs and a top reason for veterinary visits by police and search and rescue dogs.

Demand for quality working dogs by government and civilian organizations is at an all time high.

Information gained from the AKC CAR DNA Bank study will improve breeding and se-

lection practices in the working dog community.

The ability to increase accuracy in selecting a qualified and healthy prospect can save valuable time and money.

This study also addresses the environmental factors including training discipline and style, housing and other external environmental factors.

Please contact PVWDC if you would like to participate in the DNA Bank study

kkelsey@vet.upenn.edu



SAVE THE DATE: 2011 Penn Vet Working Dog Conference

September 7-9, 2011 - "Defining, developing and documenting success in working dogs"

This year's Working Dog Conference will be held in Pearl River, NY in conjunction with Finding One Another: a 10th anniversary tribute to the search & rescue community of 9/11.

The 10th anniversary serves as a stark reminder of the importance of the working dog.

We welcome you to join us for this unique opportunity to step out of your comfort zone, expand your education, and be inspired by the working dog. Through a comprehensive series of nationally recognized speakers, you will hear the latest in puppy selection and development, performance testing and certification, and physical conditioning.

The conference offers an open format designed to initiate

stimulating discussions among participants and presenters, foster the exchange of ideas between trainers, scientists and veterinarians, and inspire the overall advancement of the working dog.

Visit FindingOneAnother.org and PennVetWDC.org for more details.

"Skin allergies are a leading cause...for veterinary visits by police and search and rescue dogs."

Finding One Another: 10th Anniversary Tribute to 9/11 K9 Teams

Dr. Otto has joined Tails of Hope Foundation to serve as a Co-Chair of the Finding One Another Tribute.

Their mission: Pay tribute to the canine teams who served during 9/11 and the canine teams who still work diligently in search and rescue efforts.

Their goal: Improve the care of these valuable dogs by underwriting veterinary expenses, funding research, training

veterinarians and educating the public.

As the 10th Anniversary approaches, a variety of educational, fundraising, and tribute events will be going on in New York and across the country.

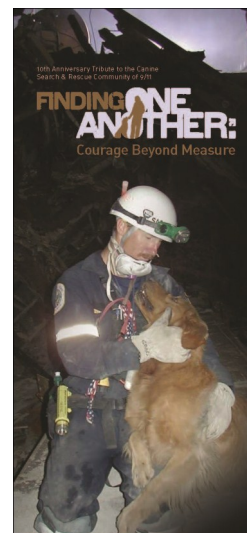
Macy's "Shop for the Cause" and the Amalgamate Dance Company Charity Event highlight the diversity we will see in the year to come.

Keep your eyes open through-

out the year for more events including the Orange County Choppers Bike Run and a photo and artifact exhibit launch at the Palisades Center Mall in New York.

More info on Finding One Another can be found at

www.FindingOneAnother.org



Penn Vet Working Dog Center...Our Mission

The mission of the Penn Vet Working Dog Center is to serve as a consortium to bring together programs that employ dogs to detect threats to local, regional and national security. The overarching goal is to collect and analyze genetic, behavioral and physical data, and integrate the latest scientific information in order to optimize the success and well-being of detection dogs. In order to prepare for future demands for these dogs as well as facilitate research, we will develop a detection dog breeding and training program that will implement, test, and disseminate the knowledge gained.

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www.PennVetWDC.org

MUTT MUGS

Submit pictures of you and your dogs at work to be displayed on our new website. Please email them to us at kkelsey@vet.upenn.edu

Please include:

- 1) Name of humans and dogs in the picture
- 2) Location and brief description
- 3) Statement of your consent to use the picture

PUPPIES BEHIND BARS

We would like to thank Puppies Behind Bars for joining our DNA Bank study!

Read more to learn about this amazing organization...

The 1990 adoption of a family companion from the Guiding Eyes for the Blind program inspired Gloria Gilbert Stoga to create a program known as Puppies Behind Bars.

Beginning with 5 puppies in 1997 at the Bedford Hills Correctional Facility, they have expanded their program to include 6 correctional facilities and over 90 dogs.

Originally, the inmates served as puppies raisers for guide dog programs.

Following the attacks of 9/11, and law enforcement's increased need for working dogs, PBB expanded into explosive detection canines.

With a mission of serving the needs of their community, they began in 2006 raising assistance dogs for disabled children and adults.

They have also initiated a new program, "Dog Tags", which donates fully trained service dogs to wounded soldiers.

The inmates take the puppies through an intensive training

program.

They attend weekly classes, live in the cell with their inmate and spend time in home environments outside of the prison to round out their experience.

At the end of their training, they are tested to see if they are suitable for various types of work.

If a dog does not pass the test, they are donated to a family with blind children.

PBB is a non-profit and fully supports all of the cost associated with the puppies in prison.

To learn more or make a donation visit

www.puppiesbehind-bars.com

