

! NEW EYE CERTIFICATION REGISTRY !

The OFA is pleased to announce a new Eye Certification Registry (ECR). The new ECR is a joint effort between the OFA and the American College of Veterinary Ophthalmologists (ACVO) and has the full endorsement of the ACVO and their member Diplomates. The addition of eye examination results to the OFA database will unquestionably make the OFA the most complete resource of canine health screening results in the world and enhance this important toolset for responsible breeders to make more informed breeding decisions in an effort to reduce the incidence of inherited disease.

The new OFA Eye Certification Registry will be available as of November 1, 2012. Transition to this new registry should be seamless for both owners and examining ophthalmologists:

" **EXAMS** - There will be no changes to the existing exam protocols. The standard exam process will still be conducted by ACVO Diplomates assessing dogs for the presence or absence of observable hereditary eye disease.

" **RESULTS** - There will be no changes to the interpretation or classification of the exam results. Dogs with normal eye exams will receive OFA eye clearance numbers similar to the OFA numbers issued for hips, elbows, cardiac, etc. Dogs with observable, but passing conditions (currently known as Breeder Option Codes), will be issued notated OFA eye clearance numbers. Dogs with observed eye diseases of significance will be reported as ineligible for eye clearance numbers. A complete list of Breeder Option Codes and Ineligible Categories will be available on the OFA website soon.

" **FORMS** - All active ACVO Diplomates will receive the new OFA exam forms by mid-October in advance of the transition. The forms will be similar in format to the exam forms currently in use.

" **VALID PERIOD** - OFA eye certification numbers will be considered valid for one year from the time of the exam.

" **FEES** - Fees for both initial submissions (\$12) and resubmits (\$8) of passing results for eye certifications will remain the same with one change. In order to maximize the benefits to breeders it is important to encourage owners to share all exam data, both normal and non-passing results. To that end, there is no charge to owners to submit non-passing results to the database if they authorize open disclosure.

" **ONLINE ACCESS** - All normal/passing eye exam results submitted to the OFA will be available on the OFA's website. Non-passing results will be available on the OFA website if the owner authorizes disclosure.

" **AKC - OFA** eye certification numbers will be shared with the AKC for inclusion on their registration and pedigree documents if the dog was permanently identified via microchip or tattoo AND the id was verified by the ophthalmologist at the time of the exam.

" **STATISTICAL DATA COLLECTION** - Regardless of whether the owner opts to register eye exam results with the OFA, the examining ophthalmologist will submit the results for statistical purposes to monitor disease prevalence and progression at the breed level. Working with the ACVO Genetics Committee, the OFA will make aggregate statistics available to ACVO Diplomates, breed clubs, and the public.

In addition to the new Eye Certification Registry (ECR), the OFA is working with the ACVO to establish a new Clinical Database of Ophthalmic Diagnoses (CDOD). Recognizing that the ECR represents a biased population of primarily normal dogs, the CDOD will capture additional data regarding disease prevalence for those dogs presenting to private and institutional practices for reasons other than a certification exam. Together, the OFA's new ECR and CDOD will be important tools to monitor canine inherited eye conditions and reduce their incidence.

As a not-for-profit organization, a portion of the proceeds from all OFA eye registrations will be

donated to the ACVO Vision for Animals Foundation to support research leading to the elimination of ocular diseases causing vision loss and suffering in animals. In keeping with the OFA's existing policy to support canine health research grants, these donations will be in addition to grants supported through the AKC Canine Health Foundation and the Morris Animal Foundation. Please refer back to the OFA website in the coming weeks as more details become available.

Editor's note: AKC, CHF, OFA are making every effort to encourage breeders to test and register those test results, whether the results are positive or negative. The efforts of these agencies underscore the importance placed on testing and sharing test results in order to eliminate health problems and to breed sound, healthy dogs. Most breeders with good test results happily register those results. However, registering abnormal results takes courage.

*As society has moved from country to suburbia, as groups such as PETA have influenced lawmakers and laws have been hammered out against breeders, and as economics have limited dog breeding hobbies, the number of dogs maintained by breeders has been limited. It is the small breeder with a limited number of breeding stock that takes a big step back when testing finds a genetic problem. To register those results takes a breeder who understands what the final product **has** to be and has the courage to do it. Looking at this from the other direction, shouldn't other breeders, who understand the disappointment, reach out to assist? Breeders with good test results can offer to breed to unaffected relatives. To remedy problems such as hip dysplasia and patellar luxation stock is bred to lines with little of those problems. Are breeders with normal tests willing to help another breeder to eliminate a problem or to offer better stock? Is an established breeder willing to breed to stock of the novice breeder? Good test results call for rejoicing; abnormal test results call for BFCA members to help each other for the betterment of the breed.*

Just so you know:

The Board has bestowed Honorary Life Membership status to Anne Jones. Anne has served BFCA in many capacities. Perhaps her most significant contribution is her dedication to the health and welfare of the Bichon Frise. Her commitment to educating pet owners and breeders on the health issues of our breed will be a lasting legacy.

Congratulations, Anne

This quarter, the BFCA Health Committee was solicited by Purina for a list of most frequent health problems of the Bichon Frise. This list taken from the last BFCA health survey will be used by Purina on its web site giving information about different breeds of dogs.

DOG FANCY breed profile writer, Windy Wilson, contacted BFCA Health Committee to verify facts about the breed. In addition, she wanted anecdotes about Bichons that illustrated life with the Bichon. The Bichon Frise will be featured in the next issue.

BFCA member Pam Goldman has always been generous in supporting Bichon health. Leading by example, Pam is featured in the fall CHF "Discoveries". You, too, may want to follow her example. (The picture in "Discoveries" was lovely. I had difficulties in reproducing it. Sorry.)



"I think it's extremely important for everybody who owns a dog - any dog - to think about doing something to give back to the Canine Health Foundation, to keep the research going. And one way to do that is a charitable annuity"

Foundation Announces New Charitable Gift Annuity Program

Having recently established a charitable gift annuity, Pam Goldman is one of the newest members of the AKC Canine Health Foundation Heritage Society. A loyal supporter of the Foundation, an AKC judge and a longtime Bichon Frise fancier, Mrs. Goldman knows her gift will help future generations of dogs live longer, healthier lives.

If you would like to make a gift to prevent, treat and cure canine disease that guarantees you an income for life and tax benefits, consider a charitable gift annuity. A charitable gift annuity is a simple contract that enables a donor to make a charitable contribution that generates an immediate charitable income tax deduction and provides an annuitized income stream for life.

The AKC Canine Health Foundation is partnering with Comerica Legacy Foundation to enable a charitable gift annuity program with ease and more flexibility. This partnership provides a financially secure way to make a real impact on the future - helping all dogs and their owners live longer, healthier lives.

Contact us at www.akcchf.org/heritatesociety or call 1-888-682-9696 to have custom illustrations prepared for you. We will use your individual situation to demonstrate how your donation will make an impact on the mission of the AKC Canine Health Foundation and provide you with immediate benefits.

Where your money goes. Update on Research.

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I'm happy to give an update! To date, we have 46 Bichons in the study. That's about 2/3 – 3/4 of the way towards our goal, which is excellent. We are still finding that Bichons with a history of calcium oxalate stones have much higher fasting urinary calcium levels than stone-free dogs. However, there have been a few stone-forming dogs that have normal urinary calcium. Those dogs may not have a genetic risk factor for stones, but may have instead formed them due to something in their diet or medication they were given (e.g. steroids may increase the risk for stones).

Our data analysis from Miniature Schnauzers has identified a chromosomal region that is associated with stones. We've found that about 1/3 of the Bichons with stones have the same DNA pattern (called a haplotype) in this region as the stone-forming Miniature Schnauzers. We're currently sequencing genes in this region to find a mutation. We will be including Bichons in the additional DNA analyses. Let me know if you would like more details or have any questions. Many thanks to your breed group for supporting this research!

Kind regards,
Eva

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GRANT PROGRESS REPORT REVIEW

Grant: 01415: *Development of Anti-IgE Peptide for Treatment of Canine Allergy*

Principal Investigator: Dr. Bruce Hammerberg, DVM PhD

Research Institution: North Carolina State University

Grant Amount: \$84,861.00

Start Date: 1/1/2011 **End Date:** 12/31/2012

Progress Report: 18 month

Report Due: 6/30/2012 **Report Received:** 6/28/2012

Recommended for Approval:

(Content of this report is not confidential.)

Original Project Description:

Treatment of chronic allergic diseases in dogs, often seen as recurring dermatitis, frequently results in less than optimal outcomes. When the disease can be linked to exposure to specific allergens, such as house dust mites, desensitization injections can be effective in some individuals when carried out over an extended time; however, most cases are not resolved by desensitization and require a combination of allergen avoidance and anti-inflammatory drugs. The prolonged use of these drugs, such as corticosteroids, can result in severe side effects. These same challenges exist for human allergy sufferers, but recently there has been a major breakthrough in the development of a new, safe and effective therapy using a monoclonal antibody that specifically binds and neutralizes human IgE that is responsible for activating inflammation-producing cells. This new product is called Xolair® and it has been used safely by millions of allergy patients for more than 5 years. Our laboratory has developed a monoclonal antibody that specifically binds

canine IgE in the same manner as the monoclonal antibody used to develop Xolair®. There are two obstacles remaining in providing the canine equivalent to Xolair® for treatment of allergies in dogs and they are the Objectives of this proposal: 1. Modifying the monoclonal antibody to reduce the dog's natural response to clear this protein; and, 2. Developing cost effective production of the modified antibody. Our Approach is to: 1. Generate a single chain recombinant peptide from the IgE-binding region of our canine IgE-specific monoclonal antibody that is small in size and of limited antigenic potential; and 2. Develop a transgenic plant (eg. tobacco) containing the gene for this recombinant peptide using well established techniques that will allow production of the therapeutic peptide in kilogram quantities. The expected outcome will be to provide a new, safe and highly effective treatment option for canine allergic diseases that is affordable to use for maintenance therapy.

Grant Objectives:

Objective 1: To create a recombinant, nonanaphylactic, single-chain antibody fragment (scFv) with high affinity for canine IgE from the variable region gene sequences of mAb 5.91 clones.

Objective 2: To generate a plant-derived recombinant, nonanaphylactic, single-chain antibody fragment with high affinity for IgE that can be scaled up for production at kilogram amounts.

Report to Grant Sponsor from Investigator:

The sequence for the light chain variable region of mAb 5.91 was completed in April, 2011. The sequence for the heavy chain variable region was completed in October, 2011. Linkage of the two sequences and expression of a recombinant scFv of mAb 5.91 with confirmation of high affinity binding to canine IgE was completed in November, 2011.

A Fab fragment was produced from the whole molecule mAb 5.91 and used in flow cytometry assays as a model for the recombinant scFv version of the antibody by May, 2011. Whole blood from allergic dogs was processed and assayed. Results showed that the whole mAb 5.91 molecule reduced the amount of binding of canine IgE to the monocyte cell population from 15% to 7.7%. Moreover, the intact mAb 5.91 was able to bind the free IgE to prevent it from binding cell surface receptors. However, whole molecule mAb 5.91 complexed with canine IgE bound to 13.7% of the lymphocyte cell population possibly reacting with IgG Fc receptors. The Fab fragment of mAb 5.91, pre-incubated with canine IgE, reduced the binding of canine IgE to the monocyte cell population from 15% to 5.6%. This demonstrated that the Fab fragment of mAb 5.91 was even more effective in reducing the binding of IgE to the monocyte cell population than the intact mAb 5.91. There was no evidence of Fab fragment complexed with canine IgE binding to lymphocytes as previously seen with intact mAb 5.91.

These preliminary results indicate that the recombinant scFv form of the mAb 5.91 will be more effective at blocking IgE binding to cell surface receptors as well as decreasing the potential of cross reactivity of the lymphocyte cell population with the IgG Fc receptors than the original mAb 5.91.

Gene constructs of the newly made 5.91-scFv were designed to target the chloroplast and ER regions of the tobacco leaf cells. Both gene constructs were inserted into a PVX pGR106 amplicon vector and amplified in E.coli. The purified 5.91scFv-pGR106 constructs are being used to transform *Agrobacterium tumefaciens* strain GV3101. However, problems have been encountered during transformation attempts of *Agrobacterium tumefaciens* with the purified 5.91scFv-pGR106 constructs. A second round of transformation is being performed at this time. TEV-B is a transgenic tobacco plant that expresses a mutated P1/HC-Pro suppressor of Post Transcriptional Gene Silencing. It has been shown that this line of tobacco plants produces higher protein yields than wild type varieties of tobacco including *Nicotiana benthamiana*. TEVB seeds were planted on May 23rd and TEV-B plants should be ready for infection in July.

July 30, 2012

CHIC 5 STAR AWARDS

The BFCA Health Committee has issued the first of the CHIC 5 Star Awards to the following:

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| Merrymaker's Living Doll | Cindy Morey | 11/15/09 |
| Merryell Absolutely Spellbound | Mayno Blanding | 11/29/09 |
| Jasme Raggedy Ann | Mayno Blanding | 11/29/09 |
| Victoire's Cheers to Austin | Vickie Halstead | 11/30/09 |
| Victoire L'Amour Champagne Lace | Vickie Halstead | 11/30/09 |
| Victoire Juniper's Hot Tamale | Vickie Halstead | 11/30/09 |
| Victorie's Norwegian Red | Vickie Halstead | 11/30/09 |
| Victoire Melodie's Bleu Reign | Melodie Michel | 11/30/09 |
| Victoire Diamond Rio Citrine | David & Darlene Scheiris | 12/02/09 |
| Mybliss Galway's Irish Imp | Nancy Noonan | 06/06/10 |
| White Shadow Galaway Hide N'Seek | Nancy Noonan | 06/06/10 |
| Allure's U Chenoa Joe | Lisa Des Camps | 10/01/10 |
| Victorie Gerie No Lemon Gemstone | Vickie Halstead, Mary Wangsness | 11/30/10 |
| Paray Parasol of Knollwood | Susan & Dean Anneser | 12/1/10 |
| Paray's Secret Encounter | Susan & Dean Anneser | 12/1/10 |
| Merrymaker's Southern Charm of Bibelot | Cindy Morey | 1/13/11 |
| MyBliss Petite Coquette | Loretta McDonald | 3/16/11 |
| Jabree's Jack of Hearts | Nita & Mark Gryan | 3/23/11 |
| Bibelot's Sugar Plum Dancer | Paula Hendricks | 6/6/11 |
| Bibelot's Purple Heart O'Mine | Matt & Paula Abbott | 9/12/11 |
| Jabree's Bellefleur La Jolie | Nita & Mark Gryan | 12/19/11 |