# HEALTH COMMITTEE REPORT FEBRUARY 2012

#### **BORZOI HEALTH SURVEY:**

The total number of respondents in our OFA Borzoi health survey is now 915 participants with the number pretty close to equal between dogs and bitches. Cancer is still the most prevalent issue in the breed with Gastrointestinal second, dental and orthopedic disorders tied for third, and cardiological and neurological/muscular tied for fourth. There are now 555 dogs in the OFA DNA test database for Degenerative Myelopathy. Of these, 14 or 3% are listed "at risk", 142 or 26% are listed as "carriers" and 399 or 72% are listed as "normal".

### CANINE HEALTH FOUNDATION & MORRIS ANIMAL FOUNDATION GRANT RESEARCH:

I received the initial list of CHF Oak Grants in September of 2011 and an updated list on February 3rd for this year's grant cycle. At this time, there are no current grants focused on heart disease research. There are several very interesting studies on cancer – Osteosarcoma and Lymphoma as well as Mast Cell tumors. However, Acorn grants do not follow the annual cycle and can be submitted at any time throughout the year, so there may be more forthcoming throughout the year, that would be of more benefit directly to the borzoi breed. I also received the Canine grant proposals and request for support from The Morris Animal Foundation. There are two that I would like the board to review and consider supporting either one or both. This first one is closely related to the study we contributed to CHF previously for Osteosarcoma in Large Breed dogs, but this research grant continues further along this pathway to determine identification at breed specific levels

## **Identifying Genetic Factors of Bone Cancer**

Dr. Joelle M. Fenger, Ohio State University, Fellowship Training Grant, D09CA-402

Total Fellowship Training Grant Cost: \$101,715

Bone cancer, or osteosarcoma, is a relatively common disease in large and giant breed dogs and a leading cause of death in some breeds, such as Greyhounds and Rottweilers. MicroRNAs (miRNAs) are small non–protein-coding RNAs involved in the initiation and progression of cancer in humans. Researchers will use a new genetic tool developed to determine which miRNAs are expressed in canine osteosarcoma cell lines and tumors. They will also try to identify the miRNAs associated with specific breeds, those associated with an individual dog's prognosis and survival and those identified as targets for developing new treatments for this painful disease.

The second research grant that looked promising is in the area of stem cell development as a future disease treatment protocol.

## Reprogramming Canine Stem Cells to Develop New Therapies

Dr. Deborah Guest, Animal Health Trust, United Kingdom, Pilot Study, D12CA-803 Total Study Cost: \$11,286

Dogs suffer from many orthopedic, neurological and cardiovascular injuries and diseases that could be treated with cell replacement therapies. One potential therapy is the use of induced pluripotent stem cells (iPSCs), which are artificially produced by reprogramming adult cells back to an embryonic state, thereby giving them the ability to grow indefinitely in culture and the potential to turn into any cell type. These iPSCs have enormous therapeutic potential because they can be used to grow genetically identical cells for use in transplantations without risk of being rejected by the dog's immune system. To date, iPSCs have been successfully derived from adult human, mouse, monkey, pig, horse and sheep cells, but little has been done in dogs. The researcher will determine the factors and culture conditions required to generate canine iPSCs. This study will form the basis of future work to further characterize iPSCs and determine their potential to be used therapeutically in dogs and as a novel tool for studying canine inherited diseases.

For co-sponsorship of Morris Animal Foundation grants, they request \$3000, however, I'm certain that they would be very appreciative of any amount we would be able to contribute. If the board approved only one of the above research grants, then I would request that we support with a co-sponsorship of \$3000. If the board would like to approve both grants, I might recommend that we offer \$2000 to each.

Lastly along the research front, I've been in contact with Dr. Kate Meurs regarding her interest in pursuing cardiac research specifically for borzoi. She is very excited and interested in working with our breed. When we talked, she would like to approach borzoi in a two grant step process. The first grant would be to do comparative research within the borzoi breed to determine the most prevalent cardiac disease in the borzoi breed. The second grant would then be to focus on the borzoi specific genetic characteristics of the disease with the hope of finding the exact DNA marker to aid in DNA marker test development for this specific disease. Dr. Meurs will put together a proposal summary for the boards review prior to submitting a request to the CHF. I want to be certain that I would have the board's backing for this research study and to use our CHF Donor Advised Fund for it, before she spends extensive time and effort to prepare the necessary documents to submit to the CHF for consideration.

## **CANINE HEALTH FOUNDATION DONOR ADVISED FUND:**

I received the account information for the period of 1/1/1011 thru 12/31/2011 from the CHF.

The Beginning balance was \$29, 123.46. We had income in the amount of \$755 from the Purina Partnership program and \$395.61 in interest and dividends. However, because of the downturn in the economy and the poor return on investments, we had unrealized losses of (\$1002.21). The ending balance is \$29, 746.95. I highly recommend we pursue utilizing these resources to support cardiac research as soon as possible.

### **2012 NATIONALS HEALTH EVENTS:**

I have confirmed that Dr. Sunshine Lahmers, from the Washington State University, will be able to provide our OFA cardiac clinic. Her rate is \$35 per dog with a 40 dog minimum.

I have also confirmed that seminar speaker Dr. Charles Coleman, DVM CAC can provide us with a seminar on alternative holistic medicine approach to treating our dogs. He has the following credentials in holistic medicine from the American Veterinary Holistic Medicine Association: AC AK BF CR CR (AVCA) CN CM GT NAET NU MA WH PROLOTHERAY. Have no idea what all this alphabet soup means? Come to the seminar and find out!! His speaking fee will be \$625 for the evening. His office is located in Pasco, about 5 miles away from our host hotel sight.

#### **HEALTH FUND RAISING:**

I was contacted by a club member, Renee McCartin, with great enthusiasm to pursue a 2 year calendar project with proceeds to benefit borzoi health. Far be it from me to turn down a helping hand and Renee has been working diligently on this project with much success and much support from the borzoi community. I'm hopeful that we can find a way to continue this as either an annual or biannual project – something the community can rely on.

Our next idea will be to develop a periodic on line auction of borzoi items.

In addition, I'm looking into and need help with establishing a "health blog" to be included from our BCOA Health website. I'd like to be able to post at least monthly or bi-monthly new news, ideas etc. to keep the flow of communication going.

Respectfully submitted,

Ginger Jones – BCOA Health Committee Chairman