

UC Davis - Bannasch Lab Update

November 16, 2010

Research:

I am happy to give you an update of what my lab has been doing for Brittanys. I began looking into Brittany health issues just in the last year after Dr. Mark Neff left the Veterinary Genetics Laboratory. My laboratory was beginning to work on cleft palate in dogs and the Brittany is one of the breeds with an increased frequency of the birth defect. We were delighted to have access to the many DNA samples collected at the VGL from Brittanys and the support of Dr. Theilen in looking into this problem in the breed. Although there are likely many different areas that we could pursue we decided to stay focused on cleft palate.

We successfully mapped 2 different causes of cleft palate in the Nova Scotia Duck tolling retriever (NSDTR) in the last year. We unfortunately have not received cleft palate samples from any Brittanys however we were anxious to determine if cleft palate in Brittanys was caused by one of these loci identified in the NSDTR. I wrote up a small announcement of this project that was put in a newsletter but obviously we need to do more work to recruit samples. About 6 months ago Dr. Cork from Stanford University who had studied cleft palate in Brittanys and determined that it was a recessive condition contacted me and offered to give us her samples. We have run a portion of these samples and it appears that Brittanys have their own cleft palate gene and don't share the regions with the NSDTR. We recently (this morning!) sent out some additional Brittany samples and are hopeful that we will have enough to get a chromosomal location for Brittany cleft.

Funding:

To date the funding for this project has come from the Center for Companion Animal Health (CAAH) through a faculty grant that was ranked #1 out of all the grants received for that cycle. The Canine Health Foundation recently approved our grant to study cleft palate in dogs although they funded it at \$17,000 less than the requested budget. We have plans to apply for funds to cover the budget deficit. We have also applied for an R01 from NIH for this project.

My laboratory has not used any funds from the Marvin Nelson Jr. Memorial Fund. Currently there is ~ \$7,000 in annual interest earned by this fund which can be applied for and is only to be used for Brittany research. If we get preliminary data on cleft palate in the Brittanys and I think it is appropriate I will apply to use the funds.

Update for publication:

I will ask the graduate student, Zena Wolf, working on this project to write an update and sample request for publication. We are quite anxious to get samples from cleft puppies.

Please let me know if I have left any unanswered questions,

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