## MAC DNA TESTING: MESSAGE FROM AMSC HEALTH COMMITTEE JUNE 1, 2016

Thank you for health testing your dog(s). We must now work together to finally rid ourselves of the genetic predisposition to avian tuberculosis also referred to as MAC, so that we can face the next challenges. The MAC DNA test will not tell if you can or cannot breed but with whom you may breed safely. Homozygous affecteds, even when not yet ill, should not be bred at all and any carrier to carrier breeding should be avoided. However, carriers CAN be safely bred to tested clear dogs and not produce any affecteds as long as the offspring are also tested before breeding them. Not removing desirable carriers from the genepool is critical to preserve the genetic diversity and good traits in the Miniature Schnauzer breed. The AMSC Health Committee recommends MAC DNA testing of both parents prior to any breeding.

The AMSC Health Committee is asking that you voluntarily share your results with the Health Committee so that a database/List can be maintained on this disease for the entire Breed. It is our intention to make this information public - in AMSCOPE, Schnauzer Shorts and on the AMSC Website member pages. In addition, we have added the MAC DNA Test to our CHIC optional requirements. Be assured that PennGen, Dr. Giger and his laboratory associates will **not release any test results** on any tested dogs to anyone except the owner/submitter online. The AMSC is more in favor that you do the testing than how or whether you share the information. However, knowing the status of breeding animals will be informative and helpful in selecting the best pairs which includes carrier-to-clear/normal breedings. The AMSC Health Committee is providing the cheek swabs free of charge for our members initially. Dr Giger will provide **aggregate data** to the AMSC as part of his research. At this early stage of testing Dr. Giger and the AMSC recommend the testing of all dogs prior to any breeding irrespective of risk as well as any dogs with suspicious signs such as fever, weight loss, lethargy, lymph node swelling, infections, etc.

In order for your dog to be tested, you must set up one PennGen account with a password and then a submission for each dog to be MAC DNA tested. Enclosed you will find Sterile Cheek Brushes and collection instructions will be emailed when you make your request. A copy of the 4 generation pedigrees of each dog being tested should be included plus a copy of the completed request submission when sent to PennGen for testing. **Results will be returned only to owner/submitter by email within 4 weeks of receiving samples at PennGen.** The test cost is \$75.00. You will receive an email when testing is complete and you will be asked to pay safely on line by secure credit card payment with Bank of America. You will then immediately receive a separate email with payment receipt and then an email with test results. If there are any further questions regarding submitted samples, please email <a href="mailto:PennGen@lists.upenn.edu">PennGen@lists.upenn.edu</a> and include MAC and specific name and submission number in subject line and other helpful info in the email for PennGen to best assist you. Again, you can track the status online and you will be getting results within 4 weeks from the time sample(s) have been received by PennGen.

If you have a clinically likely or suspected MAC-affected dog <u>or</u> get results that your dog is affected and is NOT showing any signs of disease <u>or</u> not yet diagnosed with MAC, please contact Dr. Giger <u>immediately</u> for further assistance at <u>Giger@vet.upenn.edu</u> and <u>PennGen@lists.upenn.edu</u>. Those dogs will also be important to learn about the immune dysfunction in Miniature schnauzers and possibly novel therapeutic options in the future – MAC is currently fatal and is a zoonotic disease which means it could be passed on to a very young, elderly or immune-compromised person.

## Instructions:

- Complete the PennGen online account and submission form and then print it twice & signone copy for your records and one to be included with sample. YOUR TIER DESIGNATION SHOULD BE INCLUDED IN THE COMMENT SECTION OF THE PENNGEN FORM. Also add any clinical information if you think your dog is experiencing clinical signs suggestive of MAC.
- 2. Collect the cheek swabs on the dog and then let swab dry in open sleeve for several hours; place in sleeve seal the end and seal swabs in an individual envelope with your name and your dog's name. Complete the process on one dog before going to the next dog (if more than one is tested). Again note dog's name and your last name on **each envelope**.

- 3. Send A). the collected & sealed cheek swabs plus B.) 4-5 generation pedigrees for each dog tested, C.) the complete signed online PennGen Test Request Form (keep another copy for your records).
- 4. **Once you received the results from PennGen** you may notify the Health Committee of your results. PennGen will NOT provide ANY information to anyone other than the requestor. If you want the Health Committee to have your information you will need to send it as below or forward the PennGen result email to the email address below

Email/scan/fax or mail your test results to:

AMSC HEALTH COMMITTEE Att. Patti Henderson 3870 Yellowstone Way SW Lilburn, Ga 30047 FAX: 678-623-3961

EMAIL: AMSCHealthgroup@yahoogoups.com

WE HAVE ALSO MADE THIS AN OPTIONAL TEST IN CHIC. TO USE THAT VENUE TO REPORT YOUR RESULTS. REPORTING WILL BE DONE CONSISTENT WITH THEIR PROCEDURES.