



DNA Test for Ocular Melanosis Expected This Winter 2024-2025

Foundation-Funded Research Finds Marker

A DNA marker for the major form of Ocular Melanosis has been identified by Dr. Simon Petersen-Jones and his team at Michigan State University. It is now being used to create a DNA test for a dog's likelihood of developing the disease which the team expects to make available to us over the upcoming months.

This test will be an important tool to improve the overall health of our breed by guiding breeding decisions.

Together, by funding Dr. Petersen-Jones' research, we have made a significant contribution to the Cairn Terrier breed. Thank you to all of you who have supported the Foundation over the years.

The work is not complete. The marker, while a significant step forward, is not the final answer. The marker predicts an estimated 85% of the cases of OM (that is, it has about a 15% false negative) – and appears in approximately 20% of cases that do not have OM (a 20% false positive).

Thus, the research continues. An important finding in the MSU team's research is that there appear to be two forms of Ocular Melanosis, the second of which is not predicted
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by the current marker. Finding a marker for this second form is a priority. In addition, the current marker is for changes linked to OM, rather than for the cause of OM. Identifying the causal DNA is key.

To continue this research, they urgently need additional samples:

- Eyes that have been removed from deceased dogs who were diagnosed with Ocular Melanosis by a veterinary ophthalmologist prior to their death
- Blood from living dogs who have been diagnosed with Ocular Melanosis
- Blood and eyes from deceased dogs over the age of 8 years who were found to be unaffected by Ocular Melanosis by a veterinary ophthalmologist prior to their death

If you are able to donate, please contact the research team at:

eyereseach@cvm.msu.edu. They will provide instructions and cover the costs of shipping the eyes.

Thank you for any support you can provide to further this critically important work.