



RESEARCH PROGRESS REPORT SUMMARY

Grant 01731: A Novel Approach to Understanding How Meningoencephalomyelitis Develops In Dogs

Principal Investigator: Dr. Nick D Jeffery, BVSc, PhD

Research Institution: Iowa State University

Grant Amount: \$31,104.00

Start Date: 1/1/2013

End Date: 6/30/2015

Progress Report: Mid-Year 2

Report Due: 6/30/2014

Report Received: 6/23/2014

Recommended for Approval: Approved

(Content of this report is not confidential. A grant sponsor's CHF Health Liaison may request the confidential scientific report submitted by the investigator by contacting the CHF office. The below Report to Grant Sponsors from Investigator can be used in communications with your club members.)

Original Project Description:

This project is aimed at finding a cause of 'meningoencephalomyelitis of unknown etiology', otherwise known as 'MUE', which is a summary term for diseases such as 'GME'. This group of conditions causes serious neurologic disease in dogs, especially small breeds, including blindness, loss of balance, seizures and paralysis - but the cause is currently unknown. A recent experimental breakthrough has incriminated bacteria in the digestive system as triggers for a similar disease in laboratory mice and rats. The main purpose of this project is to find out whether imbalances in the number or type of digestive system bacteria might also be a cause for MUE in dogs. If it was to be true it would open a whole new avenue of approach to treatment of affected dogs and might also produce information useful for treating neurologic disease in humans.

To carry out this investigation we will analyze fecal samples collected from affected dogs for their content of bacteria. We will then compare the numbers and type of bacteria with those we find in fecal samples from unaffected dogs. Because we will be examining many dogs with MUE we will also be able to ask owners other questions about their dogs' recent medications and medical history to determine whether there are other risk factors that might be associated with MUE.



Grant Objectives:

The general aim of this project is to elucidate risk factors for the development of meningoencephalomyelitis of unknown etiology (MUE) in dogs.

Publications:

None at this time.

Report to Grant Sponsor from Investigator:

This project is progressing as we were hoping that it would. We have collected questionnaires and fecal samples from 22 affected dogs so far, out of an aimed-for total of 30, plus 12 of the aimed-for total of 30 control dogs. We cannot analyze the data until it is all collected; the current phase is simply collecting the material for analysis at a later date.