



Karen Munana



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DVM, University of California at
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<https://cvm.ncsu.edu/research/labs/clinical-sciences/companion-animal-epilepsy/>

Companion animal models of Epilepsy and Neurologic Disease

Research emphasis:

Dr. Munana's research focus is epilepsy, with an emphasis on disease that is refractory to conventional treatments. Interests include the influence of the immune system on the development and progression of epilepsy and the role of infectious, inflammatory and vector-borne pathogens in neurologic disease. Advanced imaging for diagnostics and treatment of disease is also of strong interest.

Application:

- Epilepsy
- Encephalitis
- Role of Inflammation in Neurologic disease

Collaboration potential:

- Seizures and epilepsy
- Inflammatory brain disease
- Multi drug resistance
- Pharmacokinetics

Selected publications:

Muñana KR, Zhang D, Patterson EE. Placebo effect in canine epilepsy trials. *Journal of Veterinary Internal Medicine* 2010;24:166-170.

Muñana KR, Thomas WB, Inzana KD, Nettifee-Osborne JA, McLucas KJ, Olby NJ, Mariani CM, Early PJ. Evaluation of levetiracetam as adjunctive treatment for refractory canine epilepsy: A randomized, placebo-controlled, cross-over trial. *Journal of Veterinary Internal Medicine* 2012; 26:341-348.

Muñana KR, Nettifee-Osborne JA, Bergman RL, Jr, Mealey KL. Association between ABCB1 genotype and seizure outcome in Collies with epilepsy. *Journal of Veterinary Internal Medicine* 2012; 26:1358-1364.

Muñana KR, Nettifee-Osborne J, Papich MG. Effect of chronic administration of phenobarbital or bromide on pharmacokinetics of levetiracetam in dogs with epilepsy. *Journal of Veterinary Internal Medicine* 2015; 2:614-619.