

CURRICULUM VITAE

NAME Melissa M. Guard, MS, DVM		POSITION TITLE Guardian Veterinary Hospital - Owner	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Texas A&M University	DVM	May 2017	Veterinary Medicine
Texas A&M University	MS	Aug 2013	Biomedical Science Microbiome Research
Texas A&M University	BS	May 2010	Animal Science
Austin College	BS	May 2007	Spanish

Positions and Employment

01/2019 – 06/2021	Cypress Fairhaven Animal Hospital Cypress, TX	Small Animal Medicine and Surgery
05/2017 – 05/2018	Chasing Tails Mobile Veterinary Clinic, College Station, TX	Small Animal Ambulatory Medicine And Surgery
05/2010 – 08/2013	Department of Small Animal Clinical Sciences Texas A&M University, College Station, TX	Graduate Assistant Research
08/2007 – 05/2010	Gastrointestinal Laboratory Texas A&M University, College Station, TX	Undergraduate researcher - PCR assay validation

Co-Author Peer Reviewed Articles

AlShawaqfeh, M. K., B. Wajid, Y. Minamoto, M. Markel, J. A. Lidbury, J. M. Steiner, E. Serpedin, and J. S. Suchodolski. "A dysbiosis index to assess microbial changes in fecal samples of dogs with chronic inflammatory enteropathy." FEMS microbiology ecology 93, no. 11 (2017): fix136.

Kim, Hyemee, Nivedita Banerjee, Maritza A. Sirven, Yasushi Minamoto, Melissa E. Markel, Jan S. Suchodolski, Stephen T. Talcott, and Susanne U. Mertens-Talcott. "Pomegranate polyphenolics reduce inflammation and ulceration in intestinal colitis—involvement of the miR-145/p70S6K1/HIF1 α axis in vivo and in vitro." The Journal of Nutritional Biochemistry 43 (2017): 107-115.

Heilmann, R. M., Guard, M. M., Steiner, J. M., Suchodolski, J. S., & Unterer, S. (2017). Fecal markers of inflammation, protein loss, and microbial changes in dogs with the acute hemorrhagic diarrhea syndrome (AHDS). *Journal of Veterinary Emergency and Critical Care*, 27(5), 586-589.

Minamoto Y, Dhanani N, Markel ME, Steiner JM, Suchodolski JS. "Prevalence of Clostridium perfringens, Clostridium perfringens enterotoxin and dysbiosis in fecal samples of dogs with diarrhea." *Vet Microbiol* 2014. Dec 5: 174(3-4):463-73.

Noratto GD, Garcia-Mazcorro JF, Markel ME, Martino HS, Minamoto Y, Steiner JM, Suchodolski JS, Mertens-Talcott SU. "Carbohydrate-Free Peach (Prunus persica) and Plum (Prunus salicina) Juice Affects Fecal Microbial Ecology in an Obese Animal Model" *Plos One* 2014. Jul 9:9(7):e101723.

Bordin AI, Suchodolski JS, Markel ME, Weaver KB, Steiner JM, Dowd SE, Pillai S, Cohen ND. "Effects of administration of live or inactivated virulent Rhodococcus equi and age on the fecal microbiome of neonatal foals" *PLoS One* 2013. June 13:8(6):e66640.

Guard BC, Markel ME, Stephenson CE, Barr JW, Steiner JM, Suchodolski JS. Evaluation of the abundance of Blautia Spp., Fusobacterium Spp., Faecalibacterium Spp. in feces from dogs with acute hemorrhagic diarrhea. *J Vet Intern Med*, 27(3): 700, 2013

Suchodolski JS, Markel ME, Garcia-Mazcorro JF, Unterer S, Heilmann RM, Dowd SE, Kachrao P Ivanov I, Minamoto Y, Dillman EM, Steiner JM, Cook AK, Toresson L. "The fecal microbiome in dogs with acute diarrhea and idiopathic inflammatory bowel disease." *PLoS One* 2012. 7(12):e51907.

Garcia-Mazcorro JF, Suchodolski JS, Jones KR, Clark-Price SC, Dowd SE, Minamoto Y, Markel ME, Steiner JM, Dossin O. "Effect of the proton pump inhibitor omeprazole on the gastrointestinal bacterial microbiota of healthy dogs." *FEMS Microbiol Ecol*. 2012. June:80(3):624-36.

Peer Reviewed Research Abstracts

AlShawaqfeh M, Wajid B, Guard M, Minamoto M, Lidbury JA, Steiner JM, Serpedin E, Suchodolski JS. A Dysbiosis Index to Assess Microbial Changes in Fecal Samples of Dogs with Chronic Enteropathy. *J Vet Intern Med* 30:4, p1536, 2016

Y. Minamoto, C.C. Otoni, ME Markel, R.M. Heilmann, J.M. Steiner, A.E. Jergens, J.S. Suchodolski. Evaluation of the Fecal Microbiota in Dogs with Idiopathic Inflammatory Bowel Disease Before and After Treatment. *J Vet Intern Med*. ACVIM Forum Proceedings 2013.

Guard BC, Markel ME, Stephenson CE, Barr JW, Steiner JM, Suchodolski JS. Evaluation of the abundance of Blautia Spp., Fusobacterium Spp., Faecalibacterium Spp. in feces from dogs with acute hemorrhagic diarrhea. *J Vet Intern Med*, 27(3): 700, 2013.

Markel, ME. "Characterization of fecal dysbiosis in dogs with chronic enteropathies and acute hemorrhagic diarrhea." *JVIM* 2012.

Y. Minamoto, K.A. Barry, J.F. Garcia-Mazcorro, M.E. Markel, N.M. Gossett; G.C. Fahey Jr, J.M. Steiner, K.S. Swanson, J.S. Suchodolski. Effect of Low Level Fructan Supplementation on the Abundance of Specific Bacterial Groups in Fecal Samples of Dogs. *J Vet Intern Med*. ACVIM Forum Proceedings 2012.

Markel, ME. "Evaluation of bacterial groups in dogs with gastrointestinal disease using quantitative PCR assays." *JVIM* 2011.