MSc thesis position

Dietary supplementation of methyl-group donors for prevention of feline obesity

A 2-year MSc thesis position is available in the Department of Clinical Studies investigating the effects of dietary supplementation of methyl-group donors in growing kittens post gonadectomy. The position is offered through the lab of Dr. Adronie Verbrugghe, Department of Clinical Studies (clinical nutrition), commencing September 3, 2018.

Obesity represents a major health risk for the feline population, especially as obese cats are predisposed to devastating health complications that have a large negative impact on the quality of life and reduce life span. Moreover, the prevalence, reaching 59% in North America already, continues to increase. Weight reduction is recommended in overweight cats; yet current weight-loss programs tend to have disappointing outcomes and are not without risks. Moreover, current spay/neuter practices increase the risk for fat deposition and obesity, making the principle “prevention is better than a cure” highly important. Dietary supplementation of methyl-group donors could beneficially affect feline lipid metabolism and provide a new strategy to treat and prevent obesity in domestic felines. The MSc project aims to evaluate the effect dietary supplementation of methyl group donors on growth performance, body competition, energy expenditure and blood markers of lipid metabolism in growing kittens following gonadectomy.

The ideal candidate will participate fully in all aspects of the research project while collaborating with a dynamic research team in the Department of Clinical Studies at OVC, the Department of Animal Biosciences at OAC and the Department of Human Health and Nutritional Sciences at the College of Biological Sciences. Moreover, the graduate student will directly interact with the industry partner. Selection of the successful candidate is based on a combination of academic criteria, relevant interest and experience, referees’ evaluations, and an assessment of the candidate’s career goals and motivation. An undergraduate background with courses and/or research experience in nutrition, biochemistry, and basic molecular techniques is preferred. Motivated and ambitious students with a keen interest in pet nutrition and understanding the pathophysiologic mechanisms of obesity would be ideal. Well-developed interpersonal skills are essential. Candidates must be able to work independently and as part of a collaborative team.

Review of applications will begin immediately, and continue until the position is filled. Funding for the research project is currently available, yet the candidate is expected to obtain stipend funding through scholarship applications.

Applicants are encouraged to send CV, transcripts, names and contact information of three references, and a cover letter stating interest in the abovementioned title to Dr. Adronie Verbrugghe, Assistant Professor, Department of Clinical Studies, Ontario Veterinary College, University of Guelph, at averbrug@uoguelph.ca. Research-related inquiries should be directed to Dr. Adronie Verbrugghe at averbrug@uoguelph.ca. Further inquiries related to general application procedures can be directed to Mrs. Ariah Easley, Graduate Program Assistant, Department of Clinical Studies, University of Guelph, Guelph, Ontario, N1G 2W1, Canada; phone 519-824-4120 ext. 54005; e-mail: csgrad@uoguelph.ca.

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