

**BIOMEDICAL & VETERINARY SCIENCES
GRADUATE PROGRAM**



ANNOUNCES

The Master of Science Seminar and Examination
of

Katelynn A. Monti

**“Feline Parasitism: Parasite Prevalence
and Evaluation of New Immunoassays
for *Giardia* and *Cryptosporidium*”**

**Monday, August 14, 2017
9:00 am
Graduate Conference Room 291**

Vita/Bio



Katelynn Monti was raised in Fairfax Station, VA. She graduated from Paul VI Catholic High School In 2009. In 2013, she completed a Bachelors in Science from the University of Mary Washington. During her time there she worked with Dr. Abbie Tomba and looked at identifying larval stages of trematodes through PCR and DNA sequencing in local snail populations. In 2013, she graduated with her degree in Biology. She then took two years off and worked at a variety of places to expand her knowledge that included various wildlife rescues, the Prince William County animal shelter, the VDACS Regional Animal Health Laboratory in Warrenton, VA and the Smithsonian Conversation Biology Institute in Front Royal, VA. In the summer of 2015, Katelynn joined Dr. Zajac's laboratory as a Biomedical & Veterinary Sciences graduate student.

The focus of her work as been *Giardia duodenalis* diagnostics in companion animals. Katelynn is interested in parasitology, infectious diseases, and pathology. She has greatly enjoyed her time in the lab and improving her skills in diagnostic parasitology. She plans on taking some time off and then applying for a doctor of philosophy in a related field.

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Lay Language Abstract

Internal parasites affect both human and animals. Some parasites do not cause any clinical signs or have a lasting effect, while others can cause damage or contribute to the death of an organism. Certain parasites are zoonotic, meaning they can be transmitted between humans and animals. Several of these zoonotic parasites are found in companion animals, such as cats. This is especially important because cats are a common household pet. How owned animals are treated, especially pets like dogs and cats, has changed over the past few decades. In many of these households they have become more of family member. Additionally, there is a large population of free roaming cats, stray and feral, that have the potential to interact with humans or their pets. Therefore, it is important to be able to effectively diagnose and determine the prevalence of parasites for both feline and human health. Some parasites are harder to diagnosis than others due to varying factors and more diagnostic tests are needed to effectively and efficiently detect them. Two of these parasites that can be challenging to detect are *Giardia duodenalis* and *Cryptosporidium* spp. This thesis was aimed at evaluating two prototype diagnostic tests that were originally designed for use in humans to detect these parasites and their potential as diagnostic tests in cats. In addition, this thesis tried to determine the prevalence of other internal parasites found in Virginian cats. The obtained results indicated the prototype diagnostic tests had potential. A variety of internal parasites were also present in Virginia cats, some of which were zoonotic, and showed how important routine veterinary care for maintains feline and human health.

Publications

Taetzsch S, Gruszynski KR, Bertke AS, Dubey JP, **Monti KA**; Zajac AM, Lindsay DS. (2017). "Prevalence of zoonotic parasites in feral cats of Central Virginia, United States." (Submitted to *Zoonoses and Public Health*)

Presentations

Monti KA, Saleh M, Chiaramonte-Taetzsch S, Herbein J, Zajac A. Fecal Survey for internal parasites of cats on eastern Virginia. 62nd Annual Meeting of the American Association of Veterinary Parasitology, Indianapolis, Indiana, July 22-25, 2017.

Awards and Academic Achievements

AAVP Student Travel Grant (2017)

Examination Graduate Committee

Major Advisor/Chair:

Anne M. Zajac, DVM, PhD, DACVM-Parasitology
Department of Biomedical Sciences & Pathobiology

Graduate Advising Committee Members:

David S. Lindsay, PhD
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Center for Molecular Medicine and Infectious
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Joel F. Herbein, PhD
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