Approved by the Regents
May 21, 2020

PROMOTION RECOMMENDATION
The University of Michigan-Flint
College of Arts and Sciences
Department of Biology

Karmen M. Hollis-Etter, assistant professor of biology, Department of Biology, College of Arts and Sciences, is recommended for promotion to associate professor of biology, with tenure, Department of Biology, College of Arts and Sciences.

Academic Degrees:

Ph.D.	2011	University of Illinois, Wildlife Epidemiology, Champaign-Urbana, IL
M.S.	1994	Western Illinois University, Wildlife Biology, Macomb, IL
B.S.	1988	Western Illinois University, Animal Science, Macomb, IL

Professional Record:

2012-Present	Assistant Professor of Biology, University of Michigan-Flint, Michigan
2010-2012	Instructor, Baker College, Michigan
2005-2010	Instructor, Montcalm Community College, Michigan
2003-2004	Instructor, Lansing Community College, Michigan

Summary of Evaluation:

Teaching: Since her arrival in the fall of 2012, Professor Hollis-Etter has taught four primary courses – Human Anatomy and Physiology I and II (both lecture and laboratory sections), and wildlife courses, Ecological Pests and Wildlife Diseases (at the 400/500 level). Professor Hollis-Etter is responsible for the laboratory preparation and coordination of the multiple sections of Human Anatomy and Physiology courses each semester. She describes her goal as a teacher as seeking to maximize student learning in a dynamic classroom environment utilizing multiple learning techniques. She operationalizes this philosophy by using the Socratic method, presenting information clearly in oral, written and visual forms, using medical case histories, and asking students to apply their knowledge through problem-solving. Professor Hollis-Etter's student teaching evaluations reflect the high quality of her teaching with average scores of 4.47, 4.62 and 4.62 for the questions, "Overall, this was an excellent course," "I learned a great deal in this course," and "Overall, the instructor was an excellent teacher," respectively. Professor Hollis-Etter's peer evaluations note her infectious enthusiasm for the course materials, her deep subject matter knowledge and ability to explain topics from multiple perspectives, and her continuous efforts to engage students in discussion.

In addition to her significant work advising undergraduate students, Professor Hollis-Etter has mentored 15 UROP students, four graduate students, four independent study students, and five honors students. She has participated in multiple pedagogical seminars, particularly in her early years at UM-Flint. She has engaged in curriculum development with her wildlife biology colleagues by leading efforts to align the program requirements with coursework required for students to earn Associate Wildlife Biologist Certification from the The Wildlife Society. She also participates in program assessment and in editing Implementation Reports for the department.

Research: Professor Hollis-Etter is a wildlife biologist specializing in surveillance of wildlife diseases. More specifically, she examines wildlife diseases that can be transmitted to domestic livestock and pets, as well as zoonotic diseases, which can be transmitted to humans by examining pathogen prevalence, wildlife ecology, wildlife/pathogen ecological relationships, spatial and temporal relationships of disease, and risk of pathogen. The results of Professor Hollis-Etter's scholarly activity since her arrival at the University of Michigan-Flint have included extramural funding to study feral swine in Michigan, including e-DNA

surveillance, publication of two peer reviewed journal articles in well-respected journals (one as first author, the other, in press, with a graduate student first author), nine peer reviewed conference papers, two technical reports, and one book chapter (in press). She has another paper examining disease in white-tailed deer under review in PLOS One and has plans to build on her eDNA feral swine project by investigating the use of eDNA to detect and quantify disease-causing agents. Given her area of expertise in wildlife genetics, Professor Hollis-Etter appears to have a strong trajectory for both extramural funding and research in the area of detecting the threat of disease-agents for free-ranging wildlife.

Recent and Significant Scholarly Activity:

Hauger, A. N., K. M. Hollis-Etter, D. R. Etter, G. J. Roloff, and A. R. Mahon. In Press. Use of environmental DNA (eDNA) in Michigan streams to detect feral swine (Sus scrofa). *PeerJ*

Hollis-Etter, K. M., C. L. Anchor, J. E. Chelsvig, J. P. Dubey, and R. E. Warner. 2019. Suburban white-tailed deer seropositive for *Toxoplasma gondii* from Chicago, Illinois. *Parasitology Research*

Hollis-Etter, K. M., R. A. Montgomery, D. R. Etter, C. L. Anchor, J. E. Chelsvig, R. E. Warner, P. R. Grimstad, D. D. Lovin, and M. S. Godsey. 2019. Environmental conditions for Jamestown Canyon virus correlated with population-level resource selection by white-tailed deer in a suburban landscape. *PLoS ONE* 14(10)

Service: Since her arrival in the fall of 2012, Professor Hollis-Etter has provided a wide array of service. For her program and department, Professor Hollis-Etter has served as a peer evaluator for numerous colleagues and regularly attends wildlife faculty meetings, anatomy and physiology faculty meetings, and graduate program faculty meetings. She has participated in multiple recruitment/admissions events at the undergraduate and graduate level, as well as served the faculty advisor to the Pre-Veterinary Club for three years, and reviewed graduate student scholarship applications on multiple occasions. For her college, Professor Hollis-Etter has served on one Spring and one Summer Interim Committee and she regularly attends governing faculty meetings. At the university level, she has served three years on the Administrative Services Committee and as a member of the HLC re-accreditation subcommittee for criterion 2. In our community, Professor Hollis-Etter has given presentations or served as a judge for seven events ranging from science fairs to the Boys and Girls Club of Flint. For her profession, Professor Hollis-Etter served on the board of the Wildlife Society in Michigan for a year and on the Feral Swine Working Group with the Michigan Department of Natural Resources.

External Reviewers:

Reviewer (A): "The manuscript on Jamestown Canyon virus is unique in that she used known home ranges of deer to evaluate habitat differences between exposed and unexposed deer. Oftentimes, we use approximated home ranges around kill sites in this type of research but she used actual home ranges."

Reviewer (B): "Dr. Hollis-Etter has co-authored and been co-PI with some of the leading scientists in particular areas. Her co-authorship with G. Roloff, likely the most 2 prominent wildlife researcher in Michigan, and J.P. Dubey, a world-renowned expert on Toxoplasma are testaments to the relevance of her work."

Reviewer (C): "Her papers are multi-authored, so she has a collaborative network in which she is operating, which bodes well for her future growth and productivity."

Reviewer (D): "Dr. Hollis-Etter uses a variety of cutting-edge methods in her research, which leaves her well-suited to continue to produce important insights."

Reviewer (E): "I consider Dr. Hollis-Etter's publications to be solid contributions to her discipline. If accepted, I anticipate her paper using environmental DNA to detect the presence of feral swine will be widely cited."

Reviewer (F): "Dr. Hollis-Etter is an active scientist who is contributing to the knowledge of infectious disease in wildlife. She is publishing her work, obtaining external funding, and mentoring students, all qualities of an exceptional faculty member."

Reviewer (G): "Dr. Hollis-Etter's body of publications is impressive…The study on using eDNA to detect feral pig populations is quite impactful and current. I can foresee this manuscript making quite a mark and would be very useful in undergraduate research projects."

Summary of Recommendation:
Professor Hollis-Etter's pedagogy focuses on developing critical thinking skills as she challenges students with real-life case studies, hands-on learning, and problem solving. She has worked with many students as an advisor and research mentor outside of her assigned classroom responsibilities. Professor Hollis-Etter's scholarship uses innovative methodologies to combine observational data with eDNA analyses to study wildlife disease prevalence and transmission. With regard to her service record, Professor Hollis-Etter has applied her expertise to serve her department, college, university, and local and professional communities. I recommend Karmen M. Hollis-Etter for promotion to associate professor of biology, with tenure, Department of Biology, College of Arts and Sciences.

Recommended by:

Susan Gano-Phillips

Susan Gano-Phillips, Dean
College of Arts and Sciences

Recommendation endorsed by:

Keith Moreland

Keith Moreland, Interim Provost and
Vice Chancellor for Academic Affairs

Debasish Dutta, Chancellor
University of Michigan-Flint

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