PROMOTION RECOMMENDATION

The University of Michigan-Dearborn College of Arts, Sciences, and Letters

Matthew P. Heinicke, assistant professor of biology, Department of Natural Sciences, College of Arts, Sciences, and Letters, is recommended for promotion to associate professor of biology, with tenure, Department of Natural Sciences, College of Arts, Sciences, and Letters.

Academic Degrees:

Ph.D.	2009	The Pennsylvania State University, Biology, Pennsylvania, PA
B.S.		University of Minnesota, Biology, Minneapolis, MN

Professional Record:

2012 – present Assistant Professor, Biology, Department of Natural Sciences, University

of Michigan-Dearborn

2010 – 2012 Post-doctoral Researchers and Visiting Assistant Professor, Department of

Biology, Villanova University

Summary of Evaluation:

Teaching: Professor Heinicke is rated excellent in teaching. He taught a range of courses, from a large lower-level BIOL 130 lecture/lab course required for all biology majors undergraduates, to upper-level undergraduate courses on General Genetics (BIOL 306), Bioinformatics (BIOL 491), Biology seminar, (BIOL 497), and hosted a variety of students in independent study or capstone research/teaching (BIOL 498/499, BIOL 492/493). Bioinformatics (BIOL 491) was designed, developed, and taught by Professor Heinicke on several occasions. In the classroom, he routinely receives high scores on student evaluations, averaging 4.40 of 5.0. He puts significant effort into class preparation, writing many of his own questions, and carefully constructing his PowerPoint lectures. Looking at the overview of these large lecture classes, Professor Heinicke also brings the (BIOL 306 or the BIOL 130) information to the students in a constructive manner, attuned to where they are intellectually, a real talent. Professor Heinicke is highly respected and appreciated by his students.

Using capstone research or independent student research, Professor Heinicke has tapped into a group of talented students seeking laboratory research experiences. He is a fantastic mentor. Many of his students significantly contributed to his research projects. Professor Heinicke currently maintains an active research group of approximately five undergraduate students.

Research: Professor Heinicke is rated excellent in his research. Passionate about evolutionary biology, genetics, systematics, and herpetology, Professor Heinicke is a renowned leader in the teacher/scholar model in natural sciences. He wisely cultivated professional contacts that became collaborations prior to coming to our campus. Their truly collaborative and collective effort has resulted in an amazing number of peer-reviewed papers. Each collaborator, including Professor Heinicke, takes first authorship on their priority study, as clearly noted in his document describing his contributions to each paper. Furthermore, quality underlies Professor Heinicke's

research efforts, as demonstrated with his "Outstanding Paper" published in 2014 in Systematics and Biodiversity ("Phylogeny, taxonomy, and biogeography of a circum-Indian Ocean clade of leaf-toed geckos [Reptilia: Gekkota], with a description of two new genera.")

Professor Heinicke is an extraordinarily prolific researcher, especially given his teaching assignments; three classes per term. Currently, he has authored or co-authored over 12 peer-reviewed manuscripts since 2010. In addition, he was awarded over \$650,000 in external research support, counting only his share of collaborative projects. He often presents his work at the Joint Meeting of Ichthyologists and Herpetologists, and World Congress of Herpetology. Professor Matthew Heinicke is a star teacher and researcher. University of Michigan-Dearborn its students and faculty are truly fortunate to profit from his strong work ethic, humble nature, and his unassuming leadership.

Recent and Significant Publications:

- Heinicke MP, Greenbaum E, Jackman TR, and Bauer AM. 2011. Phylogeny of a trans-Wallacean radiation (Squamata, Gekkonidae, Gehyra) supports a single early colonization of Australia. *Zoologica Scripta*, 40: 584–602.
- Rösler H, Bauer AM, Heinicke MP, Greenbaum E, Jackman TR, Nguyen TQ, and Ziegler T. 2011. Phylogeny, taxonomy, and zoogeography of the genus Gekko Laurenti, 1768 with the revalidation of G. reevesii Gray, 1831 (Sauria: Gekkonidae). *Zootaxa*, 2989: 1–50.
- Heinicke MP, Daza JD, Greenbaum E, Jackman TR, and Bauer AM. 2014. Phylogeny, taxonomy, and biogeography of a circum-Indian Ocean clade of leaf-toed geckos (Reptilia: Gekkota), with a description of two new genera. *Systematics and Biodiversity*, 12: 23–42.
- Wood Jr. PL, Heinicke MP, Jackman TR, and Bauer AM. 2012. Phylogeny of bent-toed geckos (Cyrtodactylus) reveals a west to east pattern of diversification. *Molecular Phylogenetics and Evolution* 65: 992–1003.
- Heinicke MP, Jackman TR, and Bauer, AM. 2017. The Measure of Success: geographic isolation promotes diversification in Pachydactylus geckos. *BMC Evolutionary Biology*, 17: 9 (17 pages).
- Heinicke MP, Lemmon AR, Lemmon EM, McGrath K, and Hedges SB. Phylogenomic support for evolutionary relationships of New World Direct-developing Frogs (Anura: Terraranae). *Molecular Phylogenetics and Evolution*, 118: 145-155.

<u>Service</u>: Professor Heinicke is rated excellent in his service. Professor Heinicke is a member of the Society for the Study of Evolution, Society for the Study of Amphibians and Reptiles, and the Herpetological Association of Africa (HAA). He performs extensive professional service as an associate editor for the *Journal of Herpetology* (section: Systematics); *Zootaxa* (section: New World Geckos). Besides reviewing manuscripts for numerous peer-reviewed journals, Professor Heinicke was a session moderator at the recent Genomics/Biogeography (2015 Society for the Study of Amphibians and Reptiles meeting). Professor Heinicke served on two biology

discipline searches, resulting in the hiring two productive assistant professors (developmental biology faculty and the cell biology/toxicology). He was the department executive committee member at large for one year, and participated on the Environmental Science Program Committee, Masters of Science in Environmental Science Program Committee, and the academic advising for the biology and environmental science programs. He is currently serving as the chair of the Environmental Sciences Program. For student organizations, Professor Heinicke has served as the faculty advisor, UM-Dearborn Pre- Dental Association and the UM-Dearborn Lions Club.

External Reviewers:

Reviewer A: "It is particularly notable and frankly amazing that Professor Heinicke is currently the lead PI of two National Science Foundation grants, each in excess of \$300,000, especially since the current success rate in the Systematics and Biodiversity panel is only ~7%! I don't know of anyone who has been successful at securing two simultaneous grants, especially at a smaller school. The competition for these funds is fierce."

Reviewer B: "As a researcher and service provider to the professional community, Professor Heinicke has documented evidence of outstanding quality, productivity, and scholarly impact which is nationally and internationally recognized. Professor Heinicke has clearly reached a level of professional distinction that meets the criteria for promotion to Associate Professor with tenure."

Reviewer C: "I think Professor Heinicke is already emerging as a leader in his field and will have a great impact over his career. Few others that I can think of at his stage have such a bright future."

Reviewer D: "I am truly impressed by the quantity of papers published by Professor Heinicke including ten peer-reviewed papers published after starting his assistant professorship. His productivity is particularly notable given his intense teaching obligations and the heavy fieldwork required for this kind of data collection."

Reviewer E: "I have reviewed the material provided for review and find that the case for tenure and promotion is strong. Matt has a solid publication record (reviewed below), contributes importantly to the curriculum by teaching core courses, has an impressive record of undergraduate research mentorship, and is broadly engaged in his professional community as an associate editor and activity in national and international meetings. Most impressively, Matt has managed to land two large NSF grants, which, in these especially - lean time, is a remarkable accomplishment."

Summary of Recommendation:

Professor Heinicke is both an excellent teacher and scholar. His research is thoughtful, collaborative, and seeks to understand the complex integration of the worlds of systematics, evolution, and genetics. He simply enlightens everyone with his work ethic and collegial nature, meanwhile addressing the central mission of the Department of Natural Sciences, to engage all in collaborative research/scholarly projects. Reflecting on teaching, natural sciences colleagues greatly value his many contributions in the classroom to our science community. Professor

Heinicke made substantial service contributions, quite valuable to his department, college, university and his profession. Further, professional service is outstanding and reflects well on our institution and our reputation. We are pleased to recommend, with strong support of the College of Arts, Sciences, and Letters Executive committee, Matthew P. Heinicke for promotion to associate professor of biology, with tenure, Department of Natural Sciences, College of Arts, Sciences, and Letters.

Martin J. Hershock, Dean College of Arts Sciences, and Letters

Daniel Little, Chancellor

University of Michigan-Dearborn

May 2018