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

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

Academic Degrees:

Ph.D. 2009 Pennsylvania State University, Biology, Pennsylvania State, PA

B.S. 2003 University of Minnesota, Biology, Minneapolis, MN

Professional Record:

| 2018-present | Associate Professor of Biology, Department of Natural Sciences, University of |
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| | Michigan-Dearborn |
| 2012-2018 | Assistant Professor of Biology, Department of Natural Sciences, University of |
| | Michigan-Dearborn |
| 2010-2012 | Post-doctoral Researcher and Visiting Assistant Professor of Biology, Villanova |
| | University, Villanova, PA |

Summary of Evaluation:

<u>Teaching:</u> Since being promoted to associate professor, Professor Heinicke has taught a range of courses, from a large lower-level BIOL 130 lecture/lab course required for all biology majors and all health professions students, to upper-level undergraduate courses on General Genetics (BIOL 306) and Bioinformatics (BIOL 491). Professor Heinicke has provided directed research, independent study, or capstone teaching or research experiences for 12 students in BIOL 498/499, BIOL 492/493. He is a fantastic mentor. Within more traditional lectures, Professor Heinicke incorporates contemporary areas of interest and study (such as COVID-19, gene editing, genome sequencing) into general courses as well as upper-level classes. As evidenced by his class visit reports, students freely participate in the lecture material, and ask constructive questions. Subsequently, Professor Heinicke receives high scores on student evaluations, ranging from means 4.2-5.0. Professor Heinicke is highly respected and greatly appreciated by his students and his colleagues, a real teaching talent.

Research: Professor Heinicke is a renowned leader in the teacher/scholar model in Natural Sciences. His passion for evolutionary biology, genetics, systematics, and herpetology and the organisms he researches, provides a true model approach to succeed beyond the borders of the Dearborn campus. His collaborative team functions around specific priorities of each lab within their National Science Foundation (NSF) grants. Each collaborator takes first authorship on papers in their priority study. Professor Heinicke managed two NSF grants awarded prior to 2018 that funded research activities through April 2022. He also co-authored two successful new grant proposals, including one to UM-Dearborn and one to the NSF, securing \$70,065 to sustain his research through May 2025. Since being promoted to associate professor, he authored 13 research articles, three research notes, and one book review. Professor Heinicke was the first author and corresponding author in three of these publications and his papers often included UM-Dearborn undergraduate students and two UM-Dearborn post-doctoral researchers as co-authors. Professor Heinicke often presents his work at the Joint Meeting of Ichthyologists and Herpetologists, and World Congress of Herpetology and serves as an associate editor of the *Journal of Herpetology* as well as a section editor for *Zootaxa*. Likewise, Professor Heinicke reviewed manuscripts for sixteen different journals and proposals for

the NSF Dimensions in Biodiversity program, the Veni program of the Netherlands Organization for Scientific Research, and the Packard Fellowship for Science and Engineering program. He also moderated a session during the 2018 Joint Meeting of Ichthyologists and Herpetologists.

Recent and Significant Publications:

- Heinicke*, M.P., A.R. Lemmon, E.M. Lemmon, K. McGrath, and S.B. Hedges. 2018. Phylogenomic support for evolutionary relationships of New World Direct-developing Frogs (Anura: Terraranae). *Molecular Phylogenetics and Evolution* 118: 145–155.
- Heinicke*, M.P. and A.M. Bauer. 2018. A new provincial record and other noteworthy records of reptiles in the Western Cape, South Africa. *African Herp News* 67: 33–37.
- Butler*, B.O., L.M.P. Ceríaco‡, M.P. Marques, S. Bandeira, T. Júlio, M.P. Heinicke, and A.M. Bauer. 2019. Herpetological Survey of Huíla Province, southwest Angola, including first records from Bicuar National Park. *Herpetological Review* 50: 225–240.
- Ceríaco*, L.M.P., M.P. Heinicke, K.L. Parker‡, M. Marques, and A.M. Bauer. 2020. A review of the African snake-eyed skinks (Scincidae: Panaspis) from Angola, with the description of a new species. *Zootaxa* 4747: 77–112.
- Heinicke*, M.P., J.E. Titus-McQuillan, J.D. Daza, E.M. Kull, E.L. Stanley, and A.M. Bauer. 2020. Phylogeny and evolution of unique skull morphologies in dietary specialist African shovel-snouted snakes (Lamprophiidae: Prosymna). *Biological Journal of the Linnean Society* 131: 136–153.
- Nielsen*‡, S.V., W. Conradie, L.M.P. Ceríaco, A.M. Bauer, M.P. Heinicke, E.L. Stanley, and D.C. Blackburn. 2020. A new species of Rain Frog (Brevicipitidae, Breviceps) endemic to Angola. *ZooKevs* 979: 133–160. Heinicke Research 10.
- Heinicke*, M.P., M.H. Beidoun‡, S.V. Nielsen, and A.M. Bauer. 2021. Phylogenetic analysis of "Breviceps adspersus" documents Breviceps passmorei Minter et al., 2017 in Limpopo, South Africa. *Herpetology Notes* 14: 397–406.
- * Indicates corresponding author
- ‡ Indicates UM-Dearborn student or post-doctoral researcher

Service: Some of Professor Heinicke's service involved the Faculty Advisory Council of its Research Administration Advisory Council, Dearborn Discovery Core Committee, Assistant Director of Research Development Search Committee, and evaluation committee of the Michigan State University Medical School Early Assurance Program for Health Professions Advising. At the college level, he was a member of the Chancellor's/Dean's Medallion Committee. Other departmental duties included biology discipline chair, environmental science program (that he chaired until Fall 2021), environmental science masters program, microbiology program review, Natural Sciences Department chair faculty search, Community College Initiative and eight faculty reviews. Regarding professional outreach, Professor Heinicke reviewed curricular proposals for an environmental science program at Saginaw Valley State University and for an ecology and evolutionary biology program at Michigan Technological University. His exemplary service record extended to giving the keynote lecture at the 2019 Darwin Day at UM-Dearborn and he also served as the faculty adviser of the Lions Club.

External Reviewers:

Reviewer A: "Professor Heinicke has been and remains a busy scientist based on his output. Kudos to him for that. Quality is okay and solid enough to pass peer review and be published. His focus is solidly on empirical studies of the systematics (with some bio-geography) of reptiles and amphibians... He is passionate about the organisms he works on and he has a solid work ethic. His work with undergraduates is impressive and no doubt also inspires and motivates him to work."

Reviewer B: "Professor Henicke has quite a bit more scholarly output than other colleagues I have reviewed. Furthermore, the publications are solid, are well written, and descriptions and data is clearly presented. I would like to note that not only are these outstanding publications but also they were published in the top ranking journals."

Reviewer C: "Professor Heinicke's professional activities seem to have positioned him for promotion to Full Professor in the Department of Natural Science at the University of Michigan-Dearborn. His recent professional accomplishments outside the classroom, especially those concerning the number of peer-reviewed publications and level of extramural funding, are noteworthy scholarly achievements."

Reviewer D: "Professor Heinicke has documented in his 16 publications evidence of outstanding research quality, productivity, and scholarly impact, which is nationally and internationally recognized. He has reached the professional distinction that meets the criteria for promotion to Full Professor with tenure."

Reviewer E: "Taken together, I would summarize Professor Heinicke's overall research productivity and profile as very good. I don't consider any of the recent publications as 'outstanding,' but several will be valuable contributions to the field, and his funding record and number of publications is excellent. I should note that my assessment is in comparison to what I consider the top researchers in the field—large labs at R1 universities and major museums with a focus on PhD students—and it is a favorable comparison."

Reviewer F: "In summary, Professor Heinicke has maintained a broad scholarly focus both in terms of the types of contributions that he has made and in terms of the breadth of his interests. At another level, Professor Heinicke has maintained an intense focus on morphology, systematics, and biogeography using a range of techniques that have made what appear to be important contributions to his field."

<u>Summary of Recommendation</u>: Professor Heinicke is a superstar teacher and researcher with outstanding leadership in service. Professor Heinicke has a truly strong work ethic, a humble nature, and his equitable, relaxed, and unassuming leadership style is highly effective. It is with the support of the College of Arts, Sciences, and Letters Executive Committee that I recommend Matthew P. Heinicke for promotion to 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

Domenico Grasso, Chancellor University of Michigan-Dearborn