PROMOTION RECOMMENDATION The University of Michigan College of Literature, Science, and the Arts

Benjamin J. Dantzer, associate professor of psychology, with tenure, and associate professor of ecology and evolutionary biology, without tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of psychology, with tenure, and professor of ecology and evolutionary biology, without tenure, College of Literature, Science, and the Arts.

Academic	Degrees:

Ph.D.	2012	Michigan State University
M.Sc.	2006	University of Louisiana
B.Sc.	2004	Northern Michigan University

Professional Record:

2020-present	Associate Professor of Psychology and Ecology and Evolutionary Biology,
	University of Michigan
2014-2020	Assistant Professor of Psychology and Ecology and Evolutionary Biology,
	University of Michigan
2013-2014	Bye-fellow, Christ's College, Cambridge
2012-2014	Post-doctoral Fellow, Dept of Zoology, University of Cambridge
2012-2014	Director of Studies in Natural Sciences, Churchill College, Cambridge
2012	Lecturer, Dept of Zoology, Michigan State University

Summary of Evaluation:

<u>Teaching</u>: Professor Dantzer has an outstanding record as a teacher. He has focused on three formal classes since promotion. Psych 235 is the gateway course for the Evolution of Behavior and Comparative Psychology stream. With Professor Dantzer, the enrollment of this course has doubled. He also teaches an advanced undergraduate seminar on Mammalian Social Behavior, which has a focus on student-led discussion and projects. For graduate teaching, Professor Dantzer teaches the first-year proseminar in Biopsychology, which helps to establish a common knowledge base for entering students. All courses receive high ratings and praise from students. Across these classes, his goals are to teach the scientific method as a transferable skill that helps students to problem solve within and outside of the classroom. In the lab and field, Professor Dantzer has mentored eighty undergraduate students, twenty-three graduate students, and six post-doctoral scholars. His trainees have an unparalleled opportunity to learn and discover how real-world environmental conditions influences biology and adaptation. Five undergraduate independent projects became publications, and Professor Dantzer's graduate students and postdocs have published numerous articles in his lab, often as first author.

<u>Research</u>: Professor Dantzer's integrative research program spans various research methodologies, animal species, and levels of analysis. Grounded in strong conceptual frameworks and hypothesis testing, his empirical work addresses fundamental questions from molecular to physiological and functional levels. As a "Tinbergian" biopsychologist, Professor Dantzer investigates how wild organisms have evolved adaptive strategies to overcome environmental challenges. His extensive publication record in top-tier research journals reflects the significant and impactful nature of his science. Notably, he is recognized for his leadership in the field, with external letter writers acknowledging his outstanding productivity and research impact, encompassing publications, grants,

awards, and overall leadership. His work not only demonstrates a high quantity of publications but also boasts a considerable impact, as evidenced by citation indices and the prestigious placement of his research in leading journals such as *Science, Current Biology*, and *Proceedings of the Royal Society – Biological Sciences*, among others. Given his established standing and trajectory, Professor Dantzer will no doubt continue to make significant contributions to the discipline, his academic unit, and the university. His interdisciplinary approach and leadership suggest a very promising future marked by continued productivity and impactful advancements in the field.

Recent and Significant Publications:

- Dantzer, B. (2023). Frank Beach Award Winner: The centrality of the hypothalamicpituitary-adrenal axis in dealing with environmental change across temporal scales. *Hormones and Behavior*, *150*, 105311.
- Petrullo, L., Boutin, S., Lane, J.E., McAdam, A.G., and Dantzer, B. (2023). Phenotype environment mismatch errors enhance lifetime fitness in wild red squirrels. *Science*, 379(6629), 269-272.
- Petrullo, L., Delaney, D.M., Boutin, S., McAdam, A.G., Lane, J.E., Palme, R., and Dantzer, B. (2022). Hormonal responses to environmental change are not specific to agents of natural selection in wild red squirrels. *Hormones and Behavior*, 146, 105262.
- Gaidica, M. and Dantzer, B. (2022). An implantable neurophysiology platform: broadening research capabilities in free-living and non-traditional animals. *Frontiers in Neural Circuits*, *16*, 940989.

Service: Professor Dantzer has exhibited exemplary service contributions at multiple levels. Nationally and internationally, he has assumed pivotal roles as a special issue editor for *Hormones and Behavior*, associate editor for the *Journal of Animal Ecology*, and assistant editor for *Integrative and Comparative Biology*. Particularly noteworthy is his directorship of an NSF Research Coordination Network in Ecology and Evolution, a prestigious position typically reserved for latecareer researchers, which reflects his elevated standing in the academic community. His active involvement with the Society for Behavioral Neuroendocrinology, including receiving the Frank Beach Award, highlights his leadership and service commitment. Professor Dantzer's contributions extend to public engagement through a hands-on museum module and community service activities with First Nations and local students. At the departmental and university levels, he has played a pivotal role in committees such as the Awards Committee and Biopsychology Admissions, going beyond typical investment by compiling data for informed decision-making. His efforts in revamping graduate programs underscore his commitment to academic development. Professor Dantzer's extensive and impactful service contributions reflect his leadership within the academic community.

External Reviewers:

Reviewer (A): "[Professor Dantzer's] Beach Award article in *Hormones and Behavior* is a masterly review of the role of the hypothalamic-pituitary-adrenal axis in coping to environmental change, a timely and important topic. There are other reviews from other researchers on the same topic, but his is superior, in my view."

Reviewer (B): "Together, [Professor Dantzer] illustrates the best of a university educator-scholarcitizen: someone who asks important questions and works hard to clearly convey the importance of his work to others. He has my strongest endorsement." Reviewer (C): "I have a tremendous amount of respect for [Professor Dantzer] and I believe he would receive unanimous support for promotion in my department based on our standards for promotion. In the rank of Professor, [Professor Dantzer] would undoubtably continue lead and be a remarkable asset to the Department of Psychology at the University of Michigan. He is a fantastic colleague and I look forward to his future contributions to the field."

Reviewer (D): "Dr. Dantzer's research stands out as integrative and cross-disciplinary. He studies hormones and behavior, conducts long-term field studies, and is making significant contributions to how natural populations are responding to climate change. As documented by his CV and personal statement, he thinks about big questions."

Reviewer (E): "Dr. Dantzer does it all, from research to education to outreach. He strives to be excellent in all areas. Dr. Dantzer is a tremendous asset to the field of behavioral ecology and endocrinology."

Reviewer (F): "He is clearly one of the world leaders in his field and is in the process of pushing his entire field in new directions. Having read many of his papers, I find him a careful and deep thinker. Among the current group of physiological ecologists worldwide, Dr. Dantzer ranks among the best."

Summary of Recommendation:

Professor Dantzer has made many important contributions in research, in teaching, and in service, as described above. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Benjamin J. Dantzer be promoted to the rank of professor of psychology, with tenure, and professor of ecology and evolutionary biology, without tenure, College of Literature, Science, and the Arts.

Anne Curzan, Dean Geneva Smitherman Collegiate Professor of English Language and Literature, Linguistics, and Education Arthur F. Thurnau Professor College of Literature, Science, and the Arts