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

Alexandra G.E. Rosati, assistant professor of psychology, and assistant professor of anthropology, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of psychology, with tenure, and associate professor of anthropology, without tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D. 2012 Duke University A.B. 2005 Harvard University

Professional Record:

2017-current	Assistant Professor, Department of Psychology, University of Michigan
2017-current	Assistant Professor, Department of Anthropology, University of Michigan
2017-current	Affiliated Faculty, Weinberg Institute for Cognitive Science, University of
	Michigan
2015-2017	Assistant Professor, Department of Human Evolutionary Biology, Harvard
	University
2013-2015	Post-doctoral Researcher, Department of Psychology, Yale University

Summary of Evaluation:

Teaching: Professor Rosati is a dedicated instructor who has demonstrated excellence in both teaching and mentoring. Since coming to UM in Fall 2017, she has developed two new undergraduate courses: "Human Cognitive Evolution" (Psych 330/363) and "Evolution and Human Nature" (Psych 432/465). In addition, Professor Rosati was instrumental in generating a new evolution and behavior curriculum pathway within the Biopsychology, Cognition, and Neuroscience major that involved the generation of a new course ("Evolution & Behavior") for first- and second-year undergraduates. To-date, she has piloted the course as a small class (Psych 335, 330, 235). From these classes, Professor Rosati receives exceptional ratings and comments from students, with Q1s and Q2s that are typically above 4.5. Her formal mentoring at Michigan includes three Ph.D. students, two post-doctoral fellows (one accepted a faculty position at the University of Newcastle), and four undergraduate honors students, along with many other undergraduates.

Research: Professor Rosati is a comparative psychologist who examines cognitive function across primate species. By working with a wide array of primates across the globe, she has been able to gain unparalleled insight into evolutionary differences among these species. Among her many notable findings, she discovered that humans show similar levels of cognitive control relative to other apes, but much greater control than monkeys. This work demonstrates that there is a marked evolutionary advantage for apes in this domain. Moreover, in a 2020 *Science* article she found that as male chimpanzees age they engage in more equitable friendships with other males, groom more and fight less, and socialize more with important social partners. This parallels human aging whereby we prioritize close, positive relationships as we get older. Before Professor Rosati's work came out, it was believed that these altered priorities were due to

changes in personal future time horizons. These findings establish that these age-related changes can emerge without complex future-oriented cognitive capacities that are thought to only exist in humans. She has an outstanding record of publishing in top-tier journals and has been funded by both foundations and federal agencies. Impressively, among other honors, she received the American Psychological Association Division 6 (Society for Behavioral Neuroscience and Comparative Psychology) Early Career Investigator Award for 2021.

Recent and Significant Publications:

- Bettle, R. & Rosati, A.G. (2021). "The primate origins of human social cognition." *Language Learning and Development*, 17(2), 96-127.
- De Petrillo, F. & Rosati, A.G. (2021). "Variation in primate decision-making under uncertainty and the roots of human economic behaviour." *Philosophical Transactions of the Royal Society B*, 376(1819), https://doi.org/10.1098/rstb.2019.0671.
- Rosati, A.G., Hagberg, L., Enigk, D.K., Otali, E., Emery Thompson, M., Muller, M.N., Wrangham, R.W., & Machanda, Z.P. (2020). "Social selectivity in aging wild chimpanzees. *Science*," *370*(6515), 473-476.
- Rosati, A.G. (2017). "Foraging cognition: Reviving the ecological intelligence hypothesis." *Trends in Cognitive Sciences*, 21(9), 691-702.

Service: Professor Rosati has demonstrated a high level of leadership and service locally and internationally that surpasses expectations at the assistant professor level. Notably, she served on the Departmental Diversity Committee and the Diversity Task Force within the Biopsychology Area. Outside the University of Michigan, Professor Rosati serves as a scientific advisor to the Duke Lemur Center and the Pan-African Sanctuary Alliance. Furthermore, she is a consulting editor at the *Journal of Comparative Psychology*, an associate editor at *Proceedings of the Royal Society B*, and she has served as a guest editor for *Philosophical Transactions of the Royal Society B* (2019-2020) as well as *Current Opinion in Behavioral Sciences*. Finally, she has reviewed grants for the NSF and NIH, as well as for international funding agencies and foundations.

External Reviewers:

Reviewer (A): "This level of funding is impressive, especially for a junior researcher in the challenging funding environment we have faced over the last few years. This level of success is undoubtedly due to her innovative and varied research program that draws from several disciplines and is addressing important questions in all of these fields...Dr. Rosati's record is one of the best I have seen in a researcher at her level, and I find her highly deserving of promotion and tenure."

Reviewer (B): "She is a rising star, matching or even surpassing many of her peers, but still with a long and exciting trajectory ahead of her."

Reviewer (C): "Dr. Alexandra Rosati is perhaps the only scholar seriously investigating the origins of the human mind. Many people claim to be doing this, but Dr. Rosati is unique in that she concurrently studies multiple primate species from disparate taxonomic branches to figure and compare their capacity for complex cognition. And really that's the only way to do it properly...You are lucky to have her on your faculty."

Reviewer (D): "I find several elements of Dr. Rosati's work especially impressive: she makes use of variation across primates (rather than focusing only on apes), and chooses subjects wisely based on the question at hand; she investigates key questions that reflect frontiers in the fields in which she works; and she is producing an impressive number of high impact papers that truly push those scientific frontiers forward. In addition, Dr. Rosati has a rich set of collaborations that will continue to grow her research program. Collectively, her lab is well positioned for future growth and cutting-edge research."

Reviewer (E): "Rosati is a highly productive researcher, and a quality I particularly appreciate is her ability to synthesize old and new bodies of literature to suggest new overarching hypotheses. It is also commendable that Rosati typically works on free-ranging populations of primates, rather than on captive individuals. This is typically more time-consuming—which renders her research output all the more impressive."

Reviewer (F): "Rosati's research attacks all—or nearly all—of the big questions in the evolution of cognition. She deftly employs the comparative method, starting with a focus on a particular cognitive domain...then tests hypotheses across multiple primate species. She has been extraordinarily productive, performs experiments that are sharply focused and well-controlled, and writes exceptionally clear review articles that address important issues and guide the reader through her thinking. Her research is of a very high quality. It is having a significant scholarly impact both nationally and internationally."

Summary of Recommendation:

Professor Rosati has made a substantial number of important contributions in research, in teaching, and in service and her work reflects very well on the Department of Psychology, the College of LSA, and the University of Michigan. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Alexandra G. E. Rosati be promoted to the rank of associate professor of psychology, with tenure, and associate professor of anthropology, 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