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

Adriene M. Beltz, assistant professor of psychology, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of psychology, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2014	The Pennsylvania State University
M.S.	2009	Saint Joseph's University
B.S.	2008	Saint Joseph's University

Professional Record:

2017-current	Faculty Affiliate, Michigan Institute for Data Science, University of Michigan	
2016-current	Assistant Professor, Department of Psychology, University of Michigan	
2014-2016	Post-doctoral Scholar, Department of Human Development and Family Stud	
	The Pennsylvania State University	

Summary of Evaluation:

<u>Teaching</u>: Professor Beltz is an outstanding teacher. A focus of her pedagogy is on the required graduate-level stats sequence (Psych 613/614) and she has done exceedingly well in teaching it. Her Q1 and Q2 ratings for these classes are consistently between 4.5 and 4.9. In recognition of her teaching, she received the Wilbert McKeachie Award for Excellence in Lecture-Based Teaching. Professor Beltz also leads the Methods Hour, which is a department-wide forum for faculty and grad students to discuss methodological and statistical challenges in their research. Her course ratings are outstanding (Q1s/Q2s: 4.5-5.0). Due to the department's reliance on her graduate statistics course, she was able to teach an advanced undergraduate seminar only once (Behavioral Neuroscience of Puberty; Psych 457); she has consulted with CRLT and has clear plans for how to revise the course for the future. For mentoring, she is a crucial quantitative advisor for the Developmental Psychology Training Grant, primary mentor to one graduate student and two post-doctoral scholars, and co-advisor to four graduate students and two post-doctoral scholars. She mentors four to six undergraduates in the lab each year, and she has supervised four UROP students as well as two students who wrote their honors theses with her.

<u>Research</u>: Professor Beltz examines the heterogeneous ways that sex hormones alter brain development and how these hormones influence gendered behavior in different stages of development. To this end, she develops and implements statistical approaches to model heterogeneity across individuals and then applies these statistical advances to uncover novel and important information about sex hormones and gendered behaviors. Since arriving at Michigan in 2016, she has published 51 articles with many as first author or senior author. She has received multiple prestigious awards including the American Psychological Association (APA) Division 5 (Methods) Anne Anastasi Distinguished Early Career Contributions Award, the APA Division 6 (Behavioral Neuroscience) Brenda A. Milner paper award, and the Rising Star Award from the Association of Psychological Science. She has also been successful in funding her work with support from a prestigious Jacobs Foundation Early Career Research Fellowship, as well as a grant from the James S. McDonnell Foundation and UM internal funds.

Recent and Significant Publications:

- Beltz, A. M., & Moser, J. S. (2020). Ovarian hormones: A long overlooked, but critical contributor to cognitive brain structures and function. *Annals of the New York Academy of Sciences*, 1464(1), 156-180. doi: 10.1111/nyas.14255
- Beltz, A. M., & Gates, K. M. (2017). Network mapping with GIMME. *Multivariate Behavioral Research*, *52*(6), 789-804. doi: 10.1080/00273171.2017.1373014
- Foster, K. T., & Beltz, A. M. (in press). Heterogeneity in affective complexity among men and women. *Emotion*. doi: 10.1037/emo0000956
- Beltz, A. M., Loviska, A. M., Weigard, A. (2021). Daily gender expression is associated with psychological adjustment for some people, but mainly men. *Scientific Reports*, 11, article 9114. doi: 10.1038/s41598-021-88279-4

<u>Service</u>: Professor Beltz has an outstanding level of service to the profession and the university. She serves as an associate editor of *Multivariate Behavioral Research* and the *Journal of Research in Adolescence*. She is also a statistical consulting editor of two other major journals, and on the editorial board of two more. She has reviewed grants for the NSF and the Dutch Research Council, co-organized a conference on using secondary data for the Society for Research in Child Development, and led a workshop on advanced analytical procedures. At the university level, Professor Beltz is a member of the steering committee for the Quantitative Methods in the Social Sciences (QMSS) undergraduate minor program and a Liaison Committee member for the Eisenberg Family Depression Center. Within the department, she served on the Annual Review Committee, and she is a generous resource of statistical guidance for many students and faculty.

External Reviewers:

Reviewer (A): "...Having two distinct research foci (person-specific quantitative methods and gender) could prove challenging for many early career scholars...but this does not appear to have impeded Dr. Beltz's productivity...Her early career awards...are particularly noteworthy as they signify outstanding work...in her two research areas...her role as Associate Editor for two major journals (one substantive, one quantitative) is impressive for someone at her career stage...I would place her in the top tier of scholars at her career stage...I have no doubt that she would meet the requirements for tenure and promotion at my institution."

Reviewer (B): "I have a high regard for her work...Besides the number, what stands out in Dr. Beltz's record of publications is the quality of her work...Given that Dr. Beltz's work is not exclusively on quantitative methodology, this (Anastasi) award is even more impressive...she is associate editor...[in] one of the top journals in quantitative psychology, and served on the editorial board on five other journals. This exceeds the standard expectations of scholars at her level, and Dr. Beltz has done it very well...I strongly endorse Dr. Beltz's promotion."

Reviewer (C): "I find Dr. Beltz's record of scholarship to be comparable to (even surpassing) several scholars comprising her peer group...her translational research (how state-of-the-art methods can be used to address nuanced, interesting substantive research hypotheses) stands out... Highlights... include a publication record that is sufficiently focused on innovative methods for intensive longitudinal data...Dr. Beltz is already distinguishing herself as a leader in the field... the Department...is fortunate to have such a smart, talented and emerging scholar as a member of their faculty."

Reviewer (D): "... her mentees have presented their research at scholarly conferences and have been authors on scientific journal articles that Dr. Beltz has co-authored...She appears to play an especially important role in mentoring postdocs and graduate students on the Department's training grants, as she co-advises approximately half of them related to methods, analyses, and career development... Dr. Beltz would meet the requirements for someone being considered for promotion and tenure at [my university]."

Reviewer (E): "... she is one of only a handful of developmental scientists who have considered both micro and macro level developmental time spans...The prodigious output of approximately 7 articles a year is unusual...the ability to publish across multiple disciplines, in the best journals in these fields, further attests to the high quality and innovation that marks Dr. Beltz's research... Dr. Beltz takes mentoring seriously...we would [be] excited to award her tenure and promotion and we would be thrilled with to have [sic] her representing our School."

Reviewer (F): "She is not just a rising star, she is a rising superstar...her research productivity...is well above faculty members of a similar level in our department...I was particularly struck by the breadth, depth, and cutting-edge nature of Dr. Beltz's research...This amount of service is truly impressive for someone at her level."

Summary of Recommendation:

Professor Beltz has made substantial contributions in research, in teaching, and in service, and her work reflects very well on the Department of Psychology, the College of Literature, Science, and the Arts, and the University of Michigan. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Adriene M. Beltz be promoted to the rank of associate professor of psychology, with 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

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