

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

Jonathan R. Brennan, assistant professor of linguistics, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of linguistics, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2010	New York University
B.A.	2003	Vassar College

Professional Record:

2013 – present	Adjunct Assistant Professor, Department of Psychology, University of Michigan
2012 – present	Assistant Professor, Department of Linguistics, University of Michigan
2011 – 2012	Post-doctoral Fellow, Department of Radiology, The Children’s Hospital of Philadelphia
2010 – 2011	Post-doctoral Fellow, Neuroscience of Language Laboratory, New York University

Summary of Evaluation:

Teaching – Professor Brennan is an innovative, enthusiastic, and generous teacher, who fosters deep and engaged learning in the students with whom he works. His teaching contributions are essential to the undergraduate and graduate curricula in neurolinguistics and psycholinguistics, and his contributions are central to the department’s mission to highlight multiple approaches to the scientific study of language. In addition to his specialized courses in neurolinguistics and quantitative modeling at the graduate levels, Professor Brennan has successfully expanded courses in psycholinguistics and introductory linguistics at the undergraduate level. His courses address the needs of a wide range of LSA undergraduate students, preparing them to engage in a complex society in which experimentation and scientific argumentation form fundamental skills. Professor Brennan is a valued mentor and laboratory supervisor for undergraduate and graduate students. In turn, students praise his flexible yet rigorous approach and comment repeatedly on how much they have learned from him. They also consistently note his skill at tailoring his mentoring to address exactly what the student needs in order to succeed.

Research – Professor Brennan has made foundational contributions to the study of how the brain processes language using an innovative method that combines neuroscience, computational linguistics, and theoretical syntactic and semantic modeling. He is widely cited for his comparison of multiple theoretical models of language processing that proceeds by specifying precise processing algorithms and by linking functions that connect those algorithms to the theoretical models. He is known for his use of naturalistic, rather than experimentally derived, data on which to test neural processing of language. He has applied his unique method to the study of children who are developing both typically and non-typically, focusing especially on language production and processing in children with Autism Spectrum Disorder. His findings

have been published in many of the most prestigious journals in the fields of neurolinguistics and psycholinguistics and have been recognized with prestigious disciplinary awards.

Recent and Significant Publications:

“Finding syntax in human encephalography with beam search,” with J. Hale, et al., *Proceedings of the 2018 meeting of the Association for Computational Linguistics*, 2018, arXiv:1806.04127.

“MEG reveals atypical sensitivity to linguistic sound sequences in Autism Spectrum Disorder,” with N. Wagley, et al., *NeuroReport*, 27(13), 2016, pp. 982–986, doi: 10.1097/WNR.0000000000000643.

“Naturalistic sentence comprehension in the brain,” *Language and Linguistics Compass*, 10(7), 2016, pp. 299–313, doi: 10.1111/lnc3.12198.

“Syntactic structure building in the anterior temporal lobe during natural story listening,” with Y. Nir, et al., *Brain and Language*, 120(2), 2012, pp. 163–173, doi:10.1016/j.bandl.2010.04.002.

Service – Professor Brennan provides impressive service to the Department of Linguistics, where he has served on its Executive and Graduate committees. He brings highly respected and much-appreciated thoughtfulness, pragmatism, and intellectual rigor to these roles, and has contributed to departmental interests aimed at fostering stronger interdisciplinary connections across the college and the university. Professor Brennan is also a highly valued faculty member associated with the Weinberg Institute for Cognitive Science. In service to the profession, he is regularly invited to serve as a journal, book, grant, and conference reviewer.

External Reviews:

Reviewer (A)

“The major innovation of his approach lies in the combination of naturalistic stimuli and computational approaches, a highly promising new perspective that has the potential to lead to major advances in the cognitive neuroscience of language in the near to medium term. It is also an exemplary case of how interdisciplinary and collaborative work can lead to new insights and push the envelope of what is possible in a particular field.”

Reviewer (B)

“...one of the most important aspects of Dr. Brennan’s work is the way in which it builds explicit connections between experimental work using neuroimaging on the one hand with computational/representational theories from different subfields in Linguistics on the other. This orientation of his work is important– there are many laboratories producing neuroimaging work on language whose results have little or no relevance to linguistic theory... Dr. Brennan’s research program is one of the important exceptions...and it makes him extremely valuable as Linguistics finds itself changing in ways that bring it into contact with the ‘language sciences’ more generally.”

Reviewer (C)

“...I believe Jonathan is one of the top ten scientists currently working on neurocomputational approaches to language. ... the work that he has done is first-rate, and he’s just getting started.”

Reviewer (D)

“Brennan is distinguished from virtually all of his peers in using computationally instantiated linguistic theories to investigate the biological basis of human language processing. He is further distinguished from many researchers in both cognitive neuroscience and linguistics in his focus on the processing of naturalistic, continuous speech (as opposed to highly controlled laboratory tasks).”

Reviewer (E)

“There is no doubt that the research goal—revealing the cognitive and neural mechanisms that derive meaning from words and sentences—is eminently worthy. The area is challenging to work in, requiring combined knowledge from linguistic theory, psychology, computer science, and statistical inference.”

Reviewer (F)


“Dr[.] Brennan’s unique talent is the ability to know enough in each of the disciplines that he brings together so that he can either provide the expertise himself, or he can work closely with expert collaborators and understand what they are doing.”

Reviewer (G)

“Given the excellent quality of Dr. Brennan as a scientist, his impressive track record of publications in highly ranked journals, the great impact his work has already made in the literature, his prestigious NSF grant...and his meritorious teaching and training of student researchers... I am therefore confident that Dr. Brennan is highly competitive with others in his cohort for promotion and tenure.”

Summary of Recommendation:

Professor Brennan’s wide-reaching, innovative, and methodologically rigorous research has earned him a reputation of being among the best in his field, and he is certain to continue making insightful contributions in the years to come. He is a strong asset to the university as a researcher, teacher, and academic citizen of the highest caliber. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Jonathan R. Brennan be promoted to the rank of associate professor of linguistics, with tenure, College of Literature, Science, and the Arts.



Elizabeth R. Cole, Interim Dean
Professor of Women’s Studies, Psychology,
and Afroamerican and African Studies
College of Literature, Science, and the Arts

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