







# Jonathan R. Brennan

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Associate Professor of Linguistics  
Faculty Associate for Psychology  
University of Michigan  
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**Research Interests** Cognitive neuroscience of language  
Naturalistic experimental methods  
Incremental syntactic and semantic representations and computations



## Employment

- 2019–* Associate Professor of Linguistics  
Faculty Associate for Psychology  
University of Michigan
- 2012–2019* Assistant Professor of Linguistics  
Adjunct Assistant Professor of Psychology University of Michigan
- 2011–2012* Post-doctoral fellow  
Radiology Department, The Children’s Hospital of Philadelphia  
Supervisors: Timothy Roberts & David Embick
- 2010–2011* Post-doctoral fellow  
Neuroscience of Language Lab, New York University  
Supervisor: Alec Marantz

## Education

- 2005–2010* Ph.D., Linguistics *New York University*  
*1999–2003* B.A., Cognitive Science & Classical Studies *Vassar College*  
*2002* Visiting Student, Department of Linguistics *University of Edinburgh*

## Awards

- 2019*  Early Career Award, Society for the Neurobiology of Language  
*2019*  U–M Class of 1923 Memorial Teaching Award  
*2006* Honorable Mention, NSF GRFP

## Grants

### As project lead

- 2023–2024 NSF: *Conference: Socially Situated Language Processing: Special Sessions at the Human Sentence Processing 2024 Conference*. #BCS-2314725  
**Brennan (PI)**, Boland (Co-PI), Lewis (Co-PI), Namboodiripad (Co-PI), Levinson (Co-PI)  
\$62,433
- 2022–2024 NSF SPRF: *Building a neurolinguistic corpus of naturalistic conversation to investigate second language grammar*. #SBE-2203723  
Abugaber (PI), **Brennan (Co-PI)** \$138,000
- 2022 University of Michigan LSA Summer Research Award: *An open electrophysiological dataset for multilingual narrative comprehension* \$5,800
- 2016–2022 NSF CRCNS: *Neuro-computational models of natural language* #IIS-1607251  
**Brennan (Co-PI)** \$292,168  
Companion project with Hale (Co-PI) and Luh (Co-PI) Total: \$863,069
- 2012–2014 University of Michigan M-Cubed: *Neural Coherence at Rest and During Language Processing in Autism Spectrum Disorder*.  
**Brennan (Co-PI)**, Lajiness-O’Neill (Co-PI) and Kovelman (Co-PI) \$60,000

### As project collaborator

- 2023–2028 NIH NICHD R01: *Bilingual Children with DLD: A Neurodevelopmental Perspective*. #R01-DC020717  
Kovelman (PI), Hu (Co-I), Satterfield (Co-I), **Brennan (Co-I)**, Caruso (Co-I) \$2,899,562
- 2023–2028 NIH NIDCD R01: *Characterizing the recovery of spectral, temporal, and phonemic speech information from visual cues*. #R01-DC020717  
Brang (PI), **Brennan (Co-I)**, Jahn (Collab), Stacey (Co-I) \$2,663,327

## Media

*Brain Inspired* Podcast, Ep. 53, Nov. 17, 2019  
<https://braininspired.co/podcast/53/>

## Book

**Brennan, J.R.** (2022). *Language and the brain: A slim guide to neurolinguistics*. Oxford University Press. ISBN 9780198814764  
Reviewed in: *System*, *CHOICE*, *The American Journal of Psychology*

**Articles &  
Book chapters**

☆ indicates a primary contribution as first or senior (co-)author  
† indicates graduate advisees; ‡ indicates undergraduate advisees

*Under review* ☆ Cho, J.<sup>†</sup> & **Brennan, J.R.** (Under review). Decoding of lexical items and grammatical features in EEG: A cross-linguistic study

Tatar, C.<sup>†</sup>, Keshet, E., **Brennan, J.R.**, & Krivokapić, J. (Under review) Does prosody mark sarcasm early in an utterance? A production and perception study, including listeners who self-identified as being on the autism spectrum

Baggio, G., **Brennan, J.R.**, Martin, A. (Under review). Explanation in the neuroscience of language. in *Oxford Handbook of the Philosophy of Linguistics*, ed. R. Nefdt, K. Stanton, & G. Dupre.

2025 ☆ Zhao, J.<sup>†</sup>, Gao, R.<sup>‡</sup>, & **Brennan, J.R.** (2025). Decoding the Neural Dynamics of Headed Syntactic Structure Building. *Journal of Neuroscience*.  
doi: 10.1523/JNEUROSCI.2126-24.2025  
preprint: 10.1101/2024.11.07.622560

Yu, C.-L., Eggleston, R. L., Zhang, K., Nickerson, N., Sun, X., Marks, R. A., Hu, X., **Brennan, J.R.**, Wellman, H., & Kovelman, I. (2025). Neural Processing of Children's Theory of Mind in a Naturalistic Story-Listening Paradigm. *Social Cognitive and Affective Neuroscience*.  
doi: 10.1093/scan/nsaf022  
preprint: 10.31234/osf.io/8ns5v

☆ Cho, J.<sup>†</sup> & **Brennan, J.R.** (2025). Prefix priming within and across languages in early and late bilinguals. *Bilingualism: Language and Cognition*.  
doi: 10.1017/S136672892400107X

2024 Wolfman, M., Dunagan, D., **Brennan, J.R.**, & Hale, J.T. (2024). Hierarchical syntactic structure in human-like language models. *Proceedings of CMCL2024*.  
pdf: <https://aclanthology.org/2024.cmcl-1.6>

Momenian, M., Ma, Z., Wu, S., Wang, C., **Brennan, J.R.**, Hale, J., Meyer, L., & Li, J. (2024). Le Petit Prince Hong Kong (LPPHK): Naturalistic fMRI and EEG data from older Cantonese speakers. *Scientific Data*.  
dataset: 10.18112/openneuro.ds004718.v1.1.0

☆ Cho, J.-H.<sup>†</sup>, Pires, A. & **Brennan, J.R.** (2024). How large are root and affix priming effects in visual word recognition? Estimation from original data and a Bayesian meta-analysis. *Language, Cognition & Neuroscience*.  
doi: 10.1080/23273798.2024.2384051

Tatar, C.<sup>†</sup>, **Brennan, J.R.**, Krivokapic, J. & Keshet, E. (2024). Examining melodiousness in sarcasm: Wiggleness, spaciousness, and contour clustering. *Proceedings of Speech Prosody 2024*

doi: 10.21437/SpeechProsody.2024-137

☆ Cho, J.-H.<sup>†</sup>, & **Brennan, J.R.** (2024). Neural decoding of words and morphosyntactic features within and across languages. *Proceedings of COGSCI 2024*.

pdf: <https://escholarship.org/uc/item/7kb0m2zf>

☆ He, L.<sup>†</sup>, Chen, P., Nie, E., Li, Y., & **Brennan, J.R.** (2024). Decoding Probing: Revealing Internal Linguistic Structures in Neural Language Models using Minimal Pairs. *Proceedings of LREC-COLING 2024*.

preprint: arxiv:2403.17299

Sugimoto, Y., Yoshida, R., Jeong, H., Koizumi, M., **Brennan, J.R.**, & Oseki, Y. (2024). Localizing Syntactic Composition with Left-Corner Recurrent Neural Network Grammars. *Neurobiology of Language*

doi: 10.1162/nol.a.00118

2023 ☆ Tung, T.-Y.<sup>†</sup>, & **Brennan, J.R.** (2023). Expectations modulate retrieval interference during ellipsis resolution. (2023). *Neuropsychologia* 190 (5)

doi: 10.1016/j.neuropsychologia.2023.108680

☆ Stanojević, M., **Brennan, J.R.**, Dunagan, D., Steedman, M. & Hale, J. T. (2023). Modeling structure-building in the brain with CCG parsing and large language models. *Cognitive Science* 47 (7)

doi: 10.1111/cogs.13312

preprint: arxiv:2210.16147

as co-first author

Dunagan, D., Stanojević, M., Coavou, M., Zhang, S., Bhattasali, B., Li, J. **Brennan, J.R.**, & Hale, J. (2023). Neural correlates of object-extracted relative clause processing across English and Chinese. *Neurobiology of Language*

doi: 10.1162/nol.a.00110

☆ **Brennan, J.R.** (2023). Syntax. in Johnsrude, I. (ed) *The Oxford Research Encyclopedia of Psychology*

doi: 10.1093/acrefore/9780190236557.013.759

preprint: <https://www.dropbox.com/s/n726zuy8mdkcdp7>

- ☆ **Brennan, J.R.** (2023) Hemodynamic methods. in Sprouse, J. (ed) *The Oxford Handbook of Experimental Syntax*.  
doi: 10.1093/oxfordhb/9780198797722.013.17  
preprint: <https://www.dropbox.com/s/eik3ivx99uocvo5>
- 2022 Li, J., Bhattasali, S., Zhang, S., Franzluebbers, B., Luh, W., Spreng, R. N., **Brennan, J.R.**, Yang, Y., Pallier, C., & Hale, J. (2022). Le Petit Prince: A multilingual fMRI corpus using ecological stimuli. *Scientific Data* 9, 530.  
doi: 10.1038/s41597-022-01625-7
- ☆ Lo, C.-W.<sup>†</sup>, Tung, T.-Y.<sup>†</sup>, Ke, A.<sup>†</sup>, & **Brennan, J.R.** (2022). Hierarchy, not lexical regularity, modulates low-frequency neural synchrony during language comprehension. *Neurobiology of Language*  
doi: 10.1162/nol.a.00077
- ☆ Cho, J.-H.<sup>†</sup>, & **Brennan, J.R.** (2022). Word-final orthographic priming as a function of word-frequency, prime duration, and morphological status. *Proceedings of the 44th Annual Conference of the Cognitive Science Society (COGSCI2022)*  
pdf: <https://escholarship.org/uc/item/6dz392c4>
- ☆ Hale, J. T., Campanelli, L., Li, J., Bhattasali, S., Pallier, C., & **Brennan, J.R.** (2022). Neuro-computational models of language processing. *Annual Review of Linguistics* 8: 427–446.  
doi: 10.1146/annurev-linguistics-051421-020803
- 2021 ☆ Stanojević, M., Bhattasali, S., Dunagan, D., Campanelli, L., Steedman, M., **Brennan, J.R.**, & Hale, J. T. (2021). Modeling incremental language comprehension in the brain with Combinatory Categorical Grammar. *Proceedings of the Workshop of Cognitive Modeling and Computational Linguistics (CMCL2021)*  
doi: 10.18653/v1/2021.cmcl-1.3
- ☆ Lo, C.-W.<sup>†</sup>, & **Brennan, J.R.** (2021). EEG Correlates of Long-Distance Dependency Formation in Mandarin Wh-Questions *Frontiers in Human Neuroscience*  
doi: 10.3389/fnhum.2021.591613
- 2020 ☆ Wagley, N.<sup>†</sup>, Kovelman, I., Lajiness-O’Neill, R., Hay, J. S. F., Ugolini, M.<sup>‡</sup>, Bowyer, S. M., & **Brennan, J.R.** (2020). Predictive processing during a naturalistic statistical learning task in ASD. *eNeuro* 7(6).  
doi: 10.1523/ENEURO.0069-19.2020
- ☆ **Brennan, J.R.**, Kuncoro, A., Dyer, C., & Hale, J. T. (2020) Localizing syntactic predictions using recurrent neural network grammars. *Neuropsychologia* 146: 1074–1079  
doi: 10.1016/j.neuropsychologia.2020.107479

Stehwien, S., Henke, L., Hale, J. T., **Brennan, J.R.**, & Meyer, L. (2020). The Little Prince in 26 Languages: Towards a Multilingual Neuro-Cognitive Corpus. *Proceedings of the Workshop on Linguistic and Neurocognitive Resources (LiNCr2020)* pp. 43–49  
pdf: <https://www.aclweb.org/anthology/2020.lincr-1.6>

☆ Pykkänen, L. & **Brennan, J.R.** (2020). The Neurobiology of syntactic and semantic structure building. In Poeppel, Mangun & Gazzaniga (eds.) *The Cognitive Neurosciences*, 6<sup>th</sup> ed.  
preprint: 10.31234/osf.io/fa2xb

☆ Bhattasali, S., **Brennan, J.R.**, Luh, W.-M., Franzluebbbers†, B., & Hale, J. T., (2020). The Alice Datasets: fMRI & EEG Observations of Natural Language Comprehension. *Proceedings of Linguistic Resources and Evaluation (LREC)*  
pdf: <https://www.aclweb.org/anthology/2020.lrec-1.15>

☆ Weissler, R. E.† & **Brennan, J.R.** (2020). How do listeners form grammatical expectations to African American Language? *University of Pennsylvania Working Papers in Linguistics* 25(2)  
pdf: <https://repository.upenn.edu/pwpl/vol25/iss2/16>

☆ **Brennan, J.R.** & Martin, A. E. (2020). Phase synchronization varies systematically with linguistic structure composition. *Philosophical Transactions of the Royal Society B* 375(1791)  
doi: 10.1098/rstb.2019.0305

2019 ☆ Hale, J. T., Kuncoro, A., Hall, K. B., Dyer, C., & **Brennan, J.R.** (2019). Text Genre and Training Data Size in Human-Like Parsing. *Proceedings of Empirical Methods in Natural Language Processing*  
doi: 10.18653/v1/D19-1594

☆ **Brennan, J.R.**, & Hale, J. T. (2019). Hierarchical structure guides rapid linguistic predictions during naturalistic listening. *PLoS ONE* 14(1): e0207741.  
doi: 10.1371/journal.pone.0207741

☆ **Brennan, J.R.**, Lajiness-O’Neill, R., Bowyer, S., Kovelman, I., & Hale, J. T. (2019). Predictive sentence comprehension during story-listening in Autism Spectrum Disorder. *Language, Cognition & Neuroscience* 34(4): 428–439  
doi: 10.1080/23273798.2018.1560483

Bhattasali, S., Fabre, M., Luh, W.-M., Al Saied, H., Constant, M., Pallier, C., **Brennan, J.R.**, & Hale, J. T. (2019). Localising memory retrieval and syntactic composition: an fMRI study of naturalistic language comprehension. *Language, Cognition and Neuroscience* 34(4): 491–510  
doi: 10.1080/23273798.2018.1518533

- 2018 ☆ **Brennan, J.R.** (2018). Mapping meanings. *Trends in Neurosciences*, 41(11): 770–772  
doi: 10.1016/j.tins.2018.08.003
- Wei, H., Boland, J.E., **Brennan, J.R.**, Yuan, F., Wang, M., & Zhang, C. (2018). Lexicalized structural priming in second language online sentence comprehension. *Second Language Research*, 34(3): 395–416  
doi: 10.1177/0267658317723684
- ☆ Hale, J., Dyer, C., Kuncoro, A., & **Brennan, J.R.** (2018). Finding syntax in human encephalography with beam search. *Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics*, pages 2727–2736.  
doi: 10.18653/v1/P18-1254  
🏆 *Best paper award*
- Lajiness-O’Neill, R., **Brennan, J.R.**, et al. (2018). Patterns of Altered Neural Synchrony in the Default Mode Network in Autism Spectrum Disorder Revealed with Magnetoencephalography (MEG): Relationship to Clinical Symptomatology. *Autism Research*, 11: 434–449  
doi: 10.1002/aur.1908
- Bhattasali, S., Hale, J. T., Pallier, C., **Brennan, J.R.**, Luh, W.-M., & Spreng, R. N. (2018). Differentiating Phrase Structure Parsing and Memory Retrieval in the Brain. *Proceedings of the Society for Computation in Linguistics*.  
doi: 10.7275/R5FF3QJ2
- 2017 ☆ **Brennan, J.R.** & Pykkänen, L. (2017). MEG evidence for incremental sentence composition in the anterior temporal lobe. *Cognitive Science*, 41(S6): 1515–1531  
doi: 10.1111/cogs.12445
- 2016 Li, J., Hale, J. T., Mahar, A., & **Brennan, J.R.** (2016). Temporal Lobes as Combinatory Engines for both Form and Meaning. *Proceedings of the Workshop on Computational Linguistics for Linguistic Complexity (CL4LC), COLING2016*.  
pdf: <https://www.aclweb.org/anthology/W16-4121>
- ☆ **Brennan, J.R.**, Wagley, N.<sup>†</sup>, Kovelman, I., Bowyer, S. M., Richard, A. E., and Lajiness-O’Neill, R., (2016). MEG reveals atypical sensitivity to linguistic sound sequences in Autism Spectrum Disorder. *NeuroReport*, 27(13): 982–986  
doi: 10.1097/WNR.0000000000000643
- ☆ **Brennan, J.R.** (2016). Naturalistic sentence comprehension in the brain. *Language and Linguistics Compass*, 10(7): 299–313  
doi: 10.1111/lnc3.12198

- ☆ **Brennan, J.R.**, Stabler, E. P. Jr., Van Wagenen, S. E., Luh, W.-M., & Hale, J. (2016). Abstract linguistic structure correlates with temporal activity during naturalistic comprehension. *Brain and Language*, 157–158: 81–94  
doi: 10.1016/j.bandl.2016.04.008
- ☆ Levinson, L. & **Brennan, J.R.** (2016). The costs of zero-derived causativity in English: Evidence from reading times and MEG. *Morphological Metatheory* ed. D. Siddiqi and H. Harley, pp. 163–198. John Benjamins.  
doi: 10.1075/la.229.06lev
- 2015 ☆ Hale, J. T., Lutz, D., Luh, W.-M., & **Brennan, J.R.** (2015). Modeling fMRI time courses with linguistic structure at various grain sizes. *Proceedings of the 6th Workshop on Cognitive Modeling and Computational Linguistics*, pp. 89–97  
doi: 10.3115/v1/W15-1110
- Kovelman, I, Wagley, N., Hay, J. S. F., Ugolini, M., Bowyer, S., Lajiness-O’Neill, R., & **Brennan, J.R.** (2015) Multi-modal imaging of temporal processing in typical and atypical language development. *Annals of the New York Academy of Sciences*, 1337: 7–15  
doi: 10.1111/nyas.12688
- ☆ **Brennan, J.R.** (2015) Neurolinguistic processing of psychological verbs. in Wright, J. D. (Ed.) *International Encyclopedia of Social and Behavioral Sciences, Second Edition*  
doi: 10.1016/B978-0-08-097086-8.54044-6
- 2014 ☆ Van Wagenen, S., **Brennan, J.R.**, and Stabler, E. P. (2014) Quantifying parsing complexity as a function of grammar complexity. In Stockall, L., and Shutze, C. (Eds.) *UCLA Working Papers in Linguistics, no. 18, Connectedness: A Festschrift for Sarah VanWagenen*  
pdf: <http://www.linguistics.ucla.edu/faciliti/wpl/issues/wpl18/wpl18.html>
- ☆ **Brennan, J.R.**, Lignos, C., Embick, D. & Roberts, T. P. L. (2014). Spectro-temporal correlates of lexical access during auditory lexical decision. *Brain and Language*, 133: 39–46  
doi: 10.1016/j.bandl.2014.03.006
- 2013 Pylkkänen, L., **Brennan, J.R.**, & Bemis, D. (2013). Grounding the cognitive neuroscience of semantics in linguistic theory. in Grohmann, K & Boeckx, C (eds.) *The Cambridge Handbook of Bilingualism*. Oxford: Oxford University Press.
- 2012 ☆ **Brennan, J.R.** & Pylkkänen, L. (2012) The time-course and spatial distribution of brain activity associated with sentence processing. *NeuroImage*, 60: 1139–1148  
doi: 10.1016/j.neuroimage.2012.01.030



- ☆ **Brennan, J.R.**, Nir, Y., Hasson, U., Malach, R., Heeger, D. J. & Pykkänen, L. (2012). Syntactic structure building in the anterior temporal lobe during natural story listening. *Brain and Language*, 120(2):163–173  
doi: 10.1016/j.bandl.2010.04.002
- ☆ **Brennan, J.R.** (2012). Indefinites, choice functions, and discourse anaphora. in *Proceedings of NELS 39*, eds. S. Lima, K. Mullin, and B. Smith, 151–163. Amherst, MA: GLSA
- 2011 Pylkkänen, L., **Brennan, J.R.**, & Bemis, D. (2011). Grounding the cognitive neuroscience of semantics in linguistic theory. *Language and Cognitive Processes*, 26(9):1317–1337.  
doi: 10.1080/01690965.2010.527490
- 2010 ☆ **Brennan, J.R.** & Pykkänen, L. (2010). Processing psych verbs: Behavioral and MEG measures of two different types of semantic complexity. *Language and Cognitive Processes*, 25(6):777–807.  
doi: 10.1080/01690961003616840
- 2009 ☆ **Brennan, J.R.** (2009). Pronouns, inflection, and Irish prepositions. in *NYU Working Papers in Linguistics*, vol. 2, eds. Patricia Irwin and Violeta Vázquez-Rojas  
pdf: <http://linguistics.as.nyu.edu/object/linguistics.grad.nyuwpl>
- 2008 ☆ **Brennan, J.R.** & Pykkänen, L. (2008). Processing events: Behavioral and neuromagnetic correlates of aspectual coercion. *Brain and Language*, 106(2):132–143.  
doi: 10.1016/j.bandl.2008.04.003
- 2008 ☆ **Brennan, J.R.** (2008). Prepositions in modern Irish: Agreement and impoverishment. in *Proceedings of WCCFL 26*, eds. C. Chang & H. Haynie, 105–113. Somerville, MA: Cascadilla Press.  
pdf: <http://www.lingref.com/cpp/wccfl/26/>
- ☆ **Brennan, J.R.** (2008). *Only finally*. in *Proceedings of NELS 37*, eds. E. Elfner & M. Wakow, Amherst, MA: GLSA.

## Datasets

- Momenian, M., Ma, Z., Wu, S., Wang, C., **Brennan, J.R.**, Hale, J., Meyer, L., & Li, J. (2024). Le Petit Prince Hong Kong (LPPHK): Naturalistic fMRI and EEG data from older Cantonese speakers. [Data set]. OpenNeuro ds004718  
doi: 10.18112/openneuro.ds004718.v1.1.0

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Li, J., Bhattasali, S., Zhang, S., Franzluebbbers, B., Luh, W., Spreng, R. N., **Brennan, J.R.**, Yang, Y., Pallier, C., & Hale, J. (2022). Le Petit Prince: A multilingual fMRI corpus using ecological stimuli [Data set]. OpenNeuro ds003643.  
doi: 10.18112/openneuro.ds004718.v1.1.0

Bhattasali, S., **Brennan, J.R.**, Luh, W.-M., Franzluebbbers†, B., & Hale, J. T. (2020) The Alice Dataset: fMRI Dataset to Study Natural Language Comprehension in the Brain [Data set]. OpenNeuro ds002322.  
doi: 10.18112/openneuro.ds002322.v1.0.3

**Brennan, J.R.** (2018). EEG Datasets for Naturalistic Listening to “Alice in Wonderland” [Data set]. University of Michigan Deep Blue Data Repository.  
doi: 10.7302/746w-g237

**Brennan, J.R.** (2016). fMRI timecourses for Story-Listening [Data set].  
<https://bit.ly/2Eg823B>

**Dissertation**    *Incrementally dissociating syntax and semantics*  
Chair: Liina Pylkkänen  
Committee: Chris Barker, Robert Frank, Stephanie Harves, Alec Marantz

### Invited Presentations

*Keynote /*    **2022** NLP@Michigan **2019** Computational Cognitive Neuroscience (Panel); Society for the  
*Featured*    Neurobiology of Language (Early Career Award Talk); Weinberg Institute Cognitive Science

*Workshops*    **2024** Workshop on *Temporal Response Functions (TRFs) in Real-World Speech Processing*,  
& *Symposia*    Hanse-Wissenschaftskolleg Institute for Advanced Study **2021** Workshop on *Neurobiology of Language: Key Issues and Ways Forward*, Max Planck Institute for Psycholinguistics **2020** Symposium on *Emergence in Learning and Communication*, Michigan Center for the Study of Complex Systems **2018** Workshop on *Towards Mechanistic Models of Meaning Composition*, Trondheim; University of Michigan Weinberg Cognitive Science Symposium Panelist **2014** University of Michigan M-Cubed Symposium **2012** Michigan Workshop in Philosophy and Linguistics (discussant) **2009** Workshop on *New directions in the use of MEG for language research*, NeuroSpin **2008** Workshop on *Neurolinguistics and Imaging: Progress and Prospects*, NYU Abu-Dhabi

*Colloquia* **2024** McMaster University Linguistics; Northwestern University Linguistics **2023** UC Irvine Language Science; MPI Language Cycles; University of Michigan Linguistics **2020** University of Chicago Linguistics **2018** Stony Brook University Linguistics; University of Florida Linguistics; Michigan State University Linguistics **2017** Harvard University Laboratory for Developmental Studies; University of Maryland Linguistics; New York University Linguistics **2016** Cornell University Cognitive Science; Wayne State University Linguistics and Psychology Colloquium **2015** Michigan State University CSD **2014** University of Michigan Linguistics **2013** University of Michigan Psychology CCN Forum **2012** University of Michigan Linguistics; University of Texas Austin Linguistics; Michigan State University Linguistics **2011** University of Pennsylvania Common Ground; INSERM-CEA, NeuroSpin; Rutgers University Linguistics; CUNY Psycholinguistics Group; Pomona College Cognitive Science **2010** Bucknell University Linguistics; UCLA Psycholinguistics Group; Brown University Cognitive Science; Johns Hopkins University Cognitive Science; University of Maryland Linguistics **2009** CUNY Syntax Group; Princeton University Psycholinguistics Group; Yale Syntax Group **2007** CUNY Psycholinguistics Group

### Conference Presentations

† indicates graduate advisees; ‡ indicates undergraduate advisees

2024 Figueiredo, M.‡, & **Brennan, J.R.** (2024) Comparing LLM layerwise activation with EEG dynamics during language comprehension with RSA. Poster presented at SNL2024, October 2024

Tung, T.-Y.†, & **Brennan, J.R.** (2024) Earlier evoked response for lexical surprisal in L1 compared to L2 during naturalistic listening. Poster presented at SNL2024, October 2024

Tatár, Cs.†, **Brennan, J.R.**, Krivokapić, J., Keshet, E. (2024) Examining melodiousness in sarcasm: Wiggleness, spaciousness, and contour clustering. Talk presented at Speech Prosody, July 2024.

Cho, J.-H.† & **Brennan, J.R.** (2024). Neural decoding of words and morphosyntactic features within and across languages. Talk presented at the Annual Meeting of the Cognitive Science Society, July 2024

Tatár, Cs.†, **Brennan, J.R.**, Krivokapić, J., Keshet, E. (2024). Examining the time-varying measures of F0 in sarcasm: Wiggleness, spaciousness, and contour clustering. Poster presented at the 186th Meeting of the Acoustical Society of America, May 2024.

Cho, J.-H.†, Momma, S. & **Brennan, J.R.** (2024). How far ahead does prediction span? The timing of verb pre-activation during sentence comprehension. Talk presented at the Annual Meeting of Society for Human Sentence Processing, May 2024

2023 Tatár, Cs.<sup>†</sup>, **Brennan, J.R.**, Krivokapić, J., Keshet, E. (2023, December 4-8). Early prosodic marking of sarcasm and its perception in autistic and neurotypical adults. Poster presented at the joint meeting of the Australian Acoustical Society, the Acoustical Society of America, WESPAC, and PRUAC, December 2023

Tung, T.-Y.<sup>†</sup>, & **Brennan, J.R.** (2023) Modeling memory retrieval during naturalistic comprehension. Poster presented at the Annual Meeting of the Society for the Neurobiology of Language (SNL2023), October 2023

Zhao, J.<sup>†</sup>, & **Brennan, J.R.** (2023) Tracking the representational dynamics of linguistic composition during sentence comprehension: A proposed neural decoding study. Poster presented at the Annual Meeting of the Society for the Neurobiology of Language (SNL2023), October 2023

Tatár, Cs.<sup>†</sup>, **Brennan, J.R.**, Krivokapić, J., Keshet, E. (2023) Early prosodic marking of sarcasm and its perception in autistic and neurotypical adults. Talk presented at the 43rd TABU Dag, June 2023

Cho, J.-H.<sup>†</sup>, & **Brennan, J.R.** (2023) Cross-language masked prefix priming. Poster presented at the Conference on Human Sentence Processing (HSP2023), March 2023

Tung, T.-Y.<sup>†</sup>, & **Brennan, J.R.** (2023) Modeling retrieval interference during naturalistic comprehension. Poster presented at the Conference on Human Sentence Processing (HSP2023), March 2023

2022 Abugaber, D., & **Brennan, J.R.** (2022). Building a neurolinguistic corpus of naturalistic conversation to investigate second language grammar. Poster presented at the Society for the Neurobiology of Language (SNL2022), October 2022

Tung, T.-Y.<sup>†</sup> & **Brennan, J.R.** (2022). Transformer language models partly predict retrieval interference effects. Poster presented at the Society for the Neurobiology of Language (SNL2022), October 2022

Cho, J.-H.<sup>†</sup> & **Brennan, J. R.** (2022). Neural decoding of grammatical number within and across languages. Poster presented at the Society for the Neurobiology of Language (SNL2022), October 2022.

Cho, J.-W.<sup>†</sup>, & **Brennan, J.R.** (2022). *Word-final orthographic priming as a function of word frequency, prime duration, and morphological status*. Poster presented at the Annual Meeting of the Cognitive Science Society (CogSci2022), July 2022

Tung, T.-Y.<sup>†</sup>, & **Brennan, J.R.** (2022). *Expectations modulate retrieval interference*. Poster presented at the Conference on Human Sentence Processing (HSP2022), March 2022

Hildebrandt, T.<sup>†</sup>, & **Brennan, J.R.** (2022). *Adaptation effects limited to online measures in the needs past participle construction*. Poster presented at the Conference on Human Sentence Processing (HSP2022), March 2022

Cho, J.-H.<sup>†</sup> & **Brennan, J.R.** (2022). *Word-final orthographic overlap is facilitatory in masked priming but inhibitory in unmasked priming*. Poster presented at the Conference on Human Sentence Processing (HSP2022), March 2022

Yu, C.-L., Eggleston, E., Kovelman, I., & **Brennan, J.R.** (2022). *Using functional near-infrared spectroscopy to study developmental aspects of naturalistic narrative comprehension*. Talk presented at the Cognitive Development Society, April 2022

2021 Hildebrandt, T.<sup>†</sup> & **Brennan, J.R.** (2020). *The Stability of Individual ERP Response Dominance Within and Across Conditions*. Flash talk presented at the CUNY Conference on Human Sentence Processing, Virtual, March 2021

Cho, J.-H.<sup>†</sup> & **Brennan, J.R.** (2020). *Meaning, but not grammatical features, is cross-linguistically mask-primed in sentential contexts*. Flash talk presented at the CUNY Conference on Human Sentence Processing, Virtual, March 2021

2020 Lo, C.-W.<sup>†</sup> & **Brennan, J.R.** (2020). *Testing semantic compositionality in low-frequency neural oscillations*. Poster presented at the Society for the Neurobiology of Language (SNL2020), Virtual, October 2020

Sabo, E.<sup>†</sup> & **Brennan, J.R.** (2020). *Speaker Accent influences Bilingual Lexical Activation: An EEG Study on Sentence Processing of False Cognates*. Poster presented at the Society for the Neurobiology of Language (SNL2020), Virtual, October 2020

Tung, T.-Y.<sup>†</sup> & **Brennan, J.R.** (2020). *Symmetric retrieval in processing Mandarin relative clauses*. Poster presented at the Society for the Neurobiology of Language (SNL2020), Virtual, October 2020

Lo, C.-W.<sup>†</sup> & **Brennan, J.R.** (2020). *Lexical representation doesn't fully capture low-frequency neural oscillations during sentence comprehension*. Poster presented at Architectures and Mechanisms in Language Processing (AMLAP2020), Virtual, September 2020

Bhattachali, S., **Brennan, J.R.**, Luh, W.-M., Franzluebbers<sup>†</sup>, B., & Hale, J. T., (2020). *The Alice Datasets: fMRI & EEG Observations of Natural Language Comprehension*. Talk to be presented at the 12th Conference on Language Resources and Evaluation (LREC2020), Marseille, May 2020

Weissler, R.<sup>†</sup> & **Brennan, J.R.** (2020). *Racial identity matters: EEG correlates reflect syntactic expectation based on both speaker identity and language variety in American Englishes*. Talk to be presented at the CUNY Conference on Human Sentence Processing, Amherst, March 2020

Tung, T.-Y.<sup>†</sup>, & **Brennan, J.R.** (2020). *Asymmetric processing of Mandarin relative clauses*. Poster to be presented at the CUNY Conference on Human Sentence Processing, Amherst, March 2020

Lo, C.-W.<sup>†</sup>, & **Brennan, J.R.** (2020). *Testing temporal boundaries of composition in low-frequency neural oscillations*. Poster to be presented at the CUNY Conference on Human Sentence Processing, Amherst, March 2020

Hildebrandt, T.<sup>†</sup> & **Brennan, J.R.** (2020). *Examining behavioral and electrophysiological coherence in a construction demonstrating gradient acceptability*. Poster to be presented at the CUNY Conference on Human Sentence Processing, Amherst, March 2020

2019 Hale, J. T., Kuncoro, A., Hall, K. B., Dyer, C., & **Brennan, J. R.** , (2019). *Text Genre and Training Data Size in Human-Like Parsing*. Poster presented at Empirical Methods in Natural Language Processing (EMNLP).

Weissler, R.<sup>†</sup> & **Brennan, J.R.** (2019). *Grammatical Expectations of American English Dialects*. Poster presented at the Society for the Neurobiology of Language, Helsinki, August 2019.

**Brennan, J.R.**, Martin, A. E., Dunagen, D., Meyer, L., & Hale, J. T. (2019). *Resolving dependencies during naturalistic listening*. Poster presented at the Society for the Neurobiology of Language, Helsinki, August 2019.

Lo, C.-W.<sup>†</sup>, Tung, T.-Y.<sup>†</sup>, Ke, A.<sup>†</sup>, & **Brennan, J.R.** (2019). *Cortical tracking of Mandarin structures*. Poster presented at the Society for the Neurobiology of Language, Helsinki, August 2019.

2018 Weissler, R.<sup>†</sup> & **Brennan, J.R.** (2018). *Do listeners form grammatical expectations to African American Language?* Talk presented at New Ways of Analyzing Variation, New York, October 2018.

Lo, C.-W.<sup>†</sup> & **Brennan, J.R.** (2018). *A simulation-based approach to statistical power with ERPs*. Poster presented at the Society for the Neurobiology of Language, Québec City, August 2018.

Hale, J., Dyer, C., Kuncoro, A., & **Brennan, J.R.** (2018). *Finding syntax in human encephalography with beam search*. Talk presented at the 2018 meeting of the Association for Computational Linguistics, Melbourne, July 2018.

**Brennan, J.R.**, Dyer, C., Kuncoro, A., Pallier, C. & Hale, J. T. (2018) *Neural network models of the electrophysiological dynamics of language comprehension*. Talk presented at the 2018 Collaborative Research in Computational Neuroscience meeting, Berkeley, June 2018.

**Brennan, J.R.** & Hale, J. T. (2018) *Teasing apart structure-building and structure-completion during naturalistic story listening using EEG*. Poster presented at the CUNY Conference on Human Sentence Processing, Davis, Mar 2018.

Lo, C.-W.<sup>†</sup> & **Brennan, J.R.** (2018) *EEG correlates of covert dependency formation in Mandarin wh-questions*. Poster presented at the CUNY Conference on Human Sentence Processing, Davis, Mar 2018.

Herbert, M.<sup>†</sup>, **Brennan, J.R.** & Pires, A. (2018) *A principle component analysis of variable signing in deaf ASL–English bilinguals*. Poster presented at the Linguistic Society of America, Salt Lake City, Jan 2018.

2017 Hale, J. T., Bhattasali, S., **Brennan, J.R.**, Li, J., Luh, W.-M., & Pallier, C. (2017) *Localizing Structure-building and Memory Retrieval in Naturalistic Language Comprehension*. Poster presented at the Society for the Neurobiology of Language, Baltimore, Nov 2017.

**Brennan, J.R.**, Saraff, E.<sup>‡</sup>, Cantor, M.<sup>‡</sup>, & Embick, D. (2017) *N400 modulated by word onset duration but not information content during spoken word recognition*. Poster presented at the Society for the Neurobiology of Language, Baltimore, Nov 2017.

Lo, C.-W.<sup>†</sup> & **Brennan, J.R.** (2017) *EEG correlates of covert dependency formation in Mandarin wh-questions*. Poster presented at the Society for the Neurobiology of Language, Baltimore, Nov 2017.

**Brennan, J.R.**, Lajiness-O’Neill, R. Bowyer, S., Kovelman, I., & Hale, J. T. (2017) *Predictive sentence comprehension during story-listening in Autism Spectrum Disorder*. Poster presented at the Boston University Conference on Language Development, Boston, Nov 2017.

2016 Hale, J. T., **Brennan, J.R.**, Murphy, B. (2016) *Grammatical Relations in the Listening Brain*. Poster presented at Pattern Recognition for NeuroImaging 2016, Trento, June 2016.

**Brennan, J.R.**, Cantor, M.<sup>‡</sup>, Eby, R.<sup>‡</sup>, & Hale, J. T. (2016) *EEG correlates of syntactic expectation reflect both word-to-word and hierarchical dependencies*. Talk presented at the 2016 CUNY Conference on Human Sentence Processing, Gainesville, March 2016.

Flores, A., Swick, C., Andersen, T., Goodcase, R., McFarlane, K., Bowyer, S. M., **Brennan, J.R.**, Kovelman, I., & Lajiness-O’Neill, R. (2016). *Relationship between neural coherence in gamma frequency band and social problem solving ability in autism spectrum disorder*. Poster presented at the 2016 meeting of the International Neuropsychology Society.

Lajiness-O'Neill, R., McFarlane, K., Rusiniak, K., **Brennan, J.R.**, Kovelman, I., & Bowyer, S. M. (2016). *Altered P3 neuromagnetic evoked response related to language functioning in children with autism spectrum disorder*. Poster presented at the 2016 meeting of the International Neuropsychology Society, Boston.

2015 **Brennan, J.R.**, Cantor, M.<sup>‡</sup>, Eby, R.<sup>‡</sup>, & Hale, J. T. (2015) *Early EEG indices of syntactic expectation reflect both linear and hierarchical dependencies*. Poster presented at the 2015 Annual Meeting of the Society for the Neurobiology of Language, Chicago, October 2015.

**Brennan, J.R.**, Stabler, E. P., VanWagenen, S. E., Luh, W.-M., & Hale, J. T. (2015) *Abstract Linguistic Structure Correlates with Anterior Temporal Activity during Naturalistic Comprehension*. Poster presented at the 2015 Annual Meeting of the Society for the Neurobiology of Language, Chicago, October 2015.

Hale, J. T., **Brennan, J.R.**, Luh, W.-M., & Pallier, C. (2015) *Neural correlates of syntactic subjecthood*. Poster presented at the 2015 Annual Meeting of the Society for the Neurobiology of Language, Chicago, October 2015.

Wagley, N.<sup>†</sup>, Hay, J. S. F., Bowyer, S. M., Lajiness-O'Neill, R., **Brennan, J.R.**, & Kovelman, I. (2015) *Brain and behavioral differences in speech segmentation between typically developing children and children with ASD*. Poster presented at the 2015 Annual Meeting of the Society for the Neurobiology of Language, Chicago, October 2015.

Anderson, T., Flores, A.-M., Swick, C., Bowyer, S., **Brennan, J.R.**, Kovelman, I., & Lajiness-O'Neill, R. (2015) *Relationship Between Neural Coherence and Social/Language Functioning in Autism Spectrum Disorder*. Poster presented at the 2015 Annual Meeting of the American Psychological Association.

🏆 *Special recognition by APA Division 40-Society for Clinical Neuropsychology*

Hale, J. T., Lutz, D. E., Luh, W.-M., & **Brennan, J.R.** (2015) *Modeling fMRI time courses with linguistic structure at various grain sizes*. Paper presented 2015 Workshop on Cognitive Modeling and Computational Linguistics (CMCL), Denver, CO, June 2015.

Seifeldin, M.<sup>‡</sup>, Cantor, M.<sup>‡</sup>, Boland, J., & **Brennan, J.R.** (2015) *They dropping copulas: salient cues in the integration of speaker identity and syntax*. Poster presented at the 28th annual CUNY Conference on Human Sentence Processing, Los Angeles, CA, March 2015.

Lajiness-O'Neill, R., Richard, A., Wagley, N., Ugolini, M., Younce, S., **Brennan, J.R.**, Kovelman, I., & Bowyer, S. M. (2015) *Aberrant Neural Synchrony in Autism Spectrum Disorders Revealed with Magnetoencephalography (MEG) During Resting State: Relationship with Core Behaviors*. Paper presented at the 43rd Annual Meeting of the International Neuropsychological Society, Denver, CO, February 2015.



2014 **Brennan, J.R.**, Wagley, N.<sup>†</sup>, Ugolini, M.<sup>‡</sup>, Richard, A., Kovelman, I., Bowyer, S., & Lajiness-O'Neill, R. *Neural coherence during natural story listening as a biomarker for Autism*. Poster presented at the 2014 Annual Meeting of the Society for the Neurobiology of Language, Amsterdam, August 2014.

**Brennan, J.R.**, Cantor, M.<sup>‡</sup>, Lignos, C., Embick, D., & Roberts, T. P. L. *Oscillatory dynamics to time-stretched speech during lexical decision*. Poster presented at the 2014 Annual Meeting of the Society for the Neurobiology of Language, Amsterdam, August 2014.

Lajiness-O'Neill, R., Richard, A., **Brennan, J.R.**, Kovelman, I., & Bowyer, S. M. (2014) *Examining Neural Synchrony in Autism Spectrum Disorders with Magnetoencephalography (MEG) During Resting State*. Poster presented at the 19th International Conference on Biomagnetism, Halifax, CA, August 2014.

Hale, J.T., Callaway, F., Feldman, E., Jeffrey-Wilensky, J., Lutz, D., Mahar, A. & **Brennan, J.R.** (2014) *Modeling Neural Correlates of Syntactic Structure Building*. Poster presented at Architectures and Mechanisms in Language Processing, Edinburgh, UK, August 2014.

2013 **Brennan, J.R.**, Ugolini, M.<sup>‡</sup>, Richard, A., Younce, S.<sup>‡</sup>, Noto, F. D., Bowyer, S., Kovelman, I., & Lajiness-O'Neill, R. (2013). *Neural coherence at rest and during language processing in Autism Spectrum Disorder*. Poster presented at the 2013 University of Michigan M-Cubed Symposium, Ann Arbor, November 15, 2013.

2012 **Brennan, J.R.**, Embick, D., & Roberts, T.P.L. (2012) *Spectro-temporal correlates of rapid lexical access during auditory lexical decision*. Poster presented at the 2012 Neurobiology of Language Conference, San Sebastian, Spain, October 25–27, 2012.

**Brennan, J.R.**, Gaetz, W., & Roberts, T.P.L. (2012) *Beamforming (in)sensitivity to correlated sources as a connectivity diagnostic*. Poster presented at the 18th International Conference on Biomagnetism, Paris, August 26–30, 2012.

**Brennan, J.R.**, VanWagenen, S., & Stabler, E. (2012) *Quantifying parsing complexity as a function of grammar complexity*. Talk presented at the 25th Annual CUNY Conference on Human Sentence Processing, CUNY Graduate Center, March 14–16, 2012.

2011 **Brennan, J.R.** & Pylkkänen, L. (2011) *The neural correlates of incremental structure-building & interpretation*. Poster presented at the 2011 Neurobiology of Language Conference, Annapolis, Nov. 11–13, 2011.

**Brennan, J.R.** *Mapping language function during natural story listening*. Talk presented at the 2011 IRTG Schizophrenia & Autism Winter School, University of Pennsylvania, Oct. 13–15, 2011.

- Levinson, L., **Brennan, J.R.**, (2011) *The costs of zero-derived causativity in English: Evidence from reading times and MEG*. Talk presented at the Structuring the Argument Workshop, CNRS, Paris, Sept. 5–7, 2011.
- VanWagenen, S., **Brennan, J.R.**, & Stabler, E. (2011) *Evaluating parsing strategies in sentence processing*. Poster presented at the 24th Annual CUNY Conference on Human Sentence Processing, Stanford University, March 24–26, 2011.
- Brennan, J.R.** & Pylkkänen, L. (2011) *Teasing apart the relationship between syntactic structure-building and semantic composition using MEG*. Talk presented at the 2011 meeting of the Linguistic Society of America, Pittsburgh, Jan. 6–9, 2011.
- 2010 **Brennan, J.R.** & Pylkkänen, L. (2010) *Brain regions associated with rapid word-by-word sentence processing: An MEG study*. Talk presented at the 2010 Neurobiology of Language Conference, San Diego, Nov. 11–12, 2010.
- Brennan, J.R.** & Pylkkänen, L. (2010) *Investigating the relationship between syntactic structure-building and semantic composition using MEG*. Talk presented at the 41st meeting of the North East Linguistics Society, University of Pennsylvania, Oct. 22–24, 2010.
- Brennan, J.R.** & Levinson, L. (2010) *The costs of silent causativity: Evidence from reading times and MEG*. Poster presented at the 23rd Annual CUNY Conference on Human Sentence Processing, New York, Mar. 18–20, 2010.
- Brennan, J.R.** & Pylkkänen, L. (2010) *Teasing apart structure-building and semantic composition during story-reading with MEG*. Poster presented at the 23rd Annual CUNY Conference on Human Sentence Processing, New York, Mar. 18–20, 2010.
- Levinson, L. & **Brennan, J.R.** *The behavioral and neural correlates of silent causativity in verbs*. Talk presented at the 2010 meeting of the Linguistic Society of America, Baltimore, Jan. 7–10, 2010.
- 2008 **Brennan, J.R.** (2008) *Indefinites, choice functions, and discourse anaphora*. Talk presented at the 39th meeting of the North East Linguistics Society, Cornell University. Nov. 7–9, 2008.
- Brennan, J.R.** & Pylkkänen, L. (2008) *Semantic composition and inchoative coercion: An MEG study*. Poster presented at the 2008 meeting of the CUNY Conference on Human Sentence Processing, University of North Carolina, Chapel Hill. Mar. 13–15, 2008.
- 2007 **Brennan, J.R.**, Nir, Y., Hasson, U., Malach, R., Heeger, D. J., & Pylkkänen, L. (2007) *Language in wonderland: Linguistic processing during natural story listening*. Poster presented at the 2007 annual meeting of the Cognitive Neuroscience Society, New York, May 5–6, 2007.

**Brennan, J.R.** (2007) *Prepositions in modern Irish: Agreement and impoverishment*. Paper presented at the 26th meeting of the West Coast Conference on Formal Linguistics, University of California, Berkeley, April 27–29, 2007.

**Brennan, J.R.** & Pykkänen, L. (2007) *Processing events: Aspectual coercion in self-paced reading and magnetoencephalography*. Poster presented at the 2007 meeting of the CUNY Conference on Human Sentence Processing, University of California, San Diego. Mar. 29–31, 2007.

**Brennan, J.R.** (2007) *Only finally*. Poster presented at the 2007 annual meeting of the Linguistic Society of America, Anaheim CA. Jan. 4–7, 2007.

2006 **Brennan, J.R.** (2006) *A weight problem: Vowel length in Classical Latin*. Talk presented at the 8th annual SUNY/CUNY/NYU Miniconference, State University of New York at Stony Brook, Nov. 18, 2006.

**Brennan, J.R.** (2006) *Only, finally*. Poster presented at the 37th meeting of the North East Linguistics Society, University of Illinois at Urbana-Champaign. Oct. 12–15, 2006.

2001 J. Andrews, K. Livingston, K. Paroo, B. Philip, G. Pielli & **Brennan, J.R.** (2001) *Concept formation in humans and neural nets*. Talk presented at the 2001 Undergraduate Research Summer Institute, Vassar College, Poughkeepsie, NY. July 2001.

## Undergraduate Research Presentations

2023 Maria Figueiredo<sup>‡</sup> & **Jonathan Brennan** (2023). *EEG brain activity similarity to neural network models of language processing*. Poster presented at the Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2023.  
🏆 *Blue Ribbon Award*.

Kennedy Lloyd<sup>‡</sup> & **Jonathan Brennan** (2023). *Quantifying methodological racialized inequities in neurolinguistics*. Poster presented at the Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2023.  
🏆 *Blue Ribbon Award*.

Navya Gullapuram<sup>‡</sup>, **Jonathan Brennan** & David Abugaber (2023). *Does brain-to-brain synchrony predict alignment between speakers in naturalistic conversation?* Poster presented at the Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2023.

- Sohum Pavaskar<sup>‡</sup>, **Jonathan Brennan** & David Abugaber (2023). *Comparing the accuracy of different AI-based automatic speech transcription services for fieldwork in neurolinguistics*. Poster presented at the Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2023.
- 2021 Matthew Button<sup>‡</sup> & **Jonathan Brennan** (2021). *Neurophysiological correlates of language processing*. Virtual Presentation at the Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2021.  
🏆 *Blue Ribbon Award*.
- Reegan Katzenberger<sup>‡</sup> & **Jonathan Brennan** (2021). *Semantic Priming of Monosyllabic Nouns*. Virtual Presentation at the Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2021.
- 2019 Ibrahim Lubis<sup>‡</sup>, Dylan Rodriguez<sup>‡</sup> & **Jonathan Brennan** (2019). *The Effects of Filtering on Semantic Priming Event Related Potentials*. Poster Presented at Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2019.
- 2018 Nicholas Hollman<sup>‡</sup>, David Kamper<sup>‡</sup> & **Jonathan Brennan** (2018). *Investigating the Latency Component of the N400*. Poster Presented at Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2018.
- Tyree Cowell<sup>‡</sup> & **Jonathan Brennan** (2018). *Can Natural Language Processors Help Unlock the Black Box of Sentence Comprehension?* Talk Presented at the Midwest Undergraduate Cognitive Science Conference, Bloomington, April 2018.  
🏆 *Honorable Mention for Outstanding Oral Presentation*
- 2017 Maya Roberts<sup>‡</sup>, Christopher Posada<sup>‡</sup> & **Jonathan Brennan** (2017). *Increasing electrophysiological SNR during natural story listening*. Poster Presented at Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2017.
- 2016 Samia Elahi<sup>‡</sup> & **Jonathan Brennan** (2016). *The EEG signature of words spoken by different speakers*. Poster Presented at Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2016.
- 2015 Claudia Kassouf<sup>‡</sup>, Salim Huerta<sup>‡</sup> & **Jonathan Brennan** (2015). *Neurophysiological Correlates of Semantic Priming*. Poster Presented at Undergraduate Research Opportunities Program Spring Research Symposium, Ann Arbor, April, 2015.
- 2014 Rachael Eby<sup>‡</sup>, Patricia Masello<sup>‡</sup> & **Jonathan Brennan** (2014). *Neurophysiological Correlates of Language Processing*. Poster Presented at Michigan Research Community Spring Research Symposium, Ann Arbor, April, 2014.

Jonathan R. Brennan

Ryan R. Goodcase, Kaitlyn McFarlane, TyRonda Smith, Annette Richard, Susan Bowyer, **Jonathan Brennan**, Ioulia Kovelman & Renee Lajiness-O’Neill (2014). *Brain Coherence in Alpha, Beta, and Gamma Frequency Bands in Autism Spectrum Disorder*. Poster Presented at the Eastern Michigan University Annual Undergraduate Research Symposium, Ypsilanti, March, 2014.

🏆 *McKeachie Best Undergraduate Poster in Psychology.*

**Teaching**

- U–M LING 432, Introduction to Neurolinguistics
- LING 209, Language & Human Mind
- LING 210, Introduction to Linguistic Analysis
- LING 347/PSYC 349, Talking Minds
- LING 497, Capstone Seminar in Linguistics: Neuroscience of Language
- LING 780, Second-Year Seminar: Language Processing and Social Cognition
- LING 492/792, Topics in Linguistics: Reverse Engineering the Human Language Faculty
- LING 492/792, Topics in Linguistics: Quantitative Methods in Linguistics
- LING 492/792, Topics in Linguistics: Neurolinguistics
- LING 492/792, Topics in Linguistics: Experimental Semantics
- Guest lectures:* Introduction to Linguistics (topic: Neurolinguistics)

- Workshops & Schools* *Introduction to Neurolinguistics*, Linguistic Society of Korea Winter School, Seoul National University, Feb 2018 (1 week)
- Introduction to Neurolinguistics*, at the Linguistic Society of America Summer Institute, University of Kentucky, Jul 2017 (4 weeks)
- Introduction to Neurolinguistics*, at the Linguistic Society of America Summer Institute, University of Michigan, Jul 2013 (6 weeks)
- Data Analysis and Visualization in R*, NYU Linguistics, 2010–2011 (6 meetings)

**Advising**

*Post-doctoral*

Lauren Salig	NIH T32	2024–	
David Abugaber-Bowman	NSF SBRF	2022–2023	→ Deloitte

*Graduate*

principle advisees in **bold face**

<b>Xueyang Huang</b>	U–M Ling	Advisor	2024–
Rachel Eggleston	U–M Psych	Diss. cmte	2024 –
Cody Cao	U–M Psych	Diss. cmte	2024–

## Jonathan R. Brennan

Soo Ryu	U–M Psych	Diss. cmte	2024–	
<b>James Baybaş</b>	U–M Ling	Advisor	2023–	
James Vizthum	U–M Mideast	Diss. cmte	2023–24	→ faculty, Wake Forest
Nia Nickerson	U–M Psych	Diss. cmte	2023–24	→ post-doc, Irvine
Natasha Vernooij	U–M Psych	Diss. cmte	2023–24	
<b>Junyuan Zhao</b>	U–M Ling	Advisor	2022–	
EunSeon Ahn	U–M Psych	Diss. cmte	2022–23	→ Exponent
<b>Jeonghwa Cho</b>	U–M Ling	Diss. chair	2019–24	→ Faculty, Hongkik
<b>Lauretta Cheng</b>	U–M Ling	Diss. co-chair	2019–24	
<b>Tamarae Hildebrandt</b>	U–M Ling	Diss. chair	2019–22	
<b>Marjorie Herbert</b>	U–M Ling	Advisor	2018–22	
Peter Lindes	U–M Psych	Diss. cmte	2018–2022	→ CIC-IQMRI
<b>Justin Craft</b>	U–M Ling	Diss. co-chair	2018–23	
<b>Tzu-yun Tung</b>	U–M Ling	Diss. chair	2017–23	→ post-doc, U Chicago
Alan Ke	U–M Ling	Diss. cmte	2017–19	→ faculty, MSU
<b>Rachel Weissler</b>	U–M Ling	Diss. co-chair	2017–21	→ faculty, U Oregon
Myrna Cintron-Valentin	U–M Psych	Diss. cmte	2017–19	
Guadalupe de los Santos	U–M Psych	Diss. cmte	2016–17	
David Ogden	U–M Ling	Diss. cmte	2016–19	→ NSF
<b>Emily Sabo</b>	U–M Ling	Diss. co-chair	2016–21	→ Mango Languages
<b>Chia-wen Lo</b>	U–M Ling	Diss. chair	2015–21	→ post-doc, MPI Leipzig
Neelima Wagley	U–M Psych	Diss. cmte	2014–19	→ faculty, Arizona State
Michael Schwartsman	U–M Psych	Diss. cmte	2012–14	→ Facebook
Sarah VanWagenen	UCLA Ling	Diss. cmte	2011–14	

*Undergraduate Honors Thesis* Quan Zou (Cognitive Science, 2025), Maria Figueiredo (Cognitive Science, 2025), Eli Friestrom (Neuroscience, 2025) Jacky He (Linguistics, 2023), Shuchen Wen (Cognitive Science, 2023) 🏆 *Sam Epstein Award*, Akshaya Ravikumar (Cognitive Science, 2023), David Kamper (BCN, 2020), Tyree Cowell (Cognitive Science, 2018), Emma Saraff (BCN, 2015), Maryam Seifeldin (Linguistics, 2014), Patrick Kelley (Linguistics, 2013)

*Undergraduate Research* Yuchen Huang (2024–), Julia Klepko (UROP, 2024–), Greta Loewenthal (2023–), Eli Friestrom (2023–), Quan Zou (UROP 2023–), Gabriel Mora (UROP 2023–), Anna Machak (2022–23), Advait Iyer (2022–23), Navya Gullapuram (UROP, 2022–23), Sohum Pavaskar (MRADS, 2022–23), Kennedy Lloyd (UROP, 2022–23), Maria Figueredo (UROP, 2022–), Jalen Greene (2022), Chinmay Savanur (2022–23), Akshaya Ravikumar (2021–23), Reagan Katzenberger (MRADS 2020–21), Matthew Button (UROP 2020–21), Haoyu Du (UROP, 2019–), Areti Majumdar (UROP, 2019–22), Dylan Rodriguez (UROP, 2018–19), Ibrahim Lubis (UROP, 2018–19) Rubina Veerakone (2018), Nicholas Hollman (UROP, 2017–18), Maya Roberts (UROP, 2016–20), Christopher Posada (UROP, 2016–17), Samia Elahi (UROP, 2016–19), David Kamper (2016–20), Salim Huerta (UROP, 2015–20), Claudia Kassouf (UROP, 2015–16), Rachael Eby (MRC, 2014–17), Patricia Masello (MRC, 2014–15), Evan Buysse (2013–14), Omar Mahmood (2013–14), Max Cantor (2013–15), Jacob Freund (2013–14), Stefanie Younce (2013–14), Margaret Ugolini (2013–14), Sara Swierczynski (2013), Kyle Montgomery (UROP, 2013–15) Jessica Combs (2009–10), Sophia Le Frege (2010–11)

## Academic Service

☆ indicates chair/leadership role

*Departmental* **2025** U–M Linguistics: Executive Committee, Graduate Admissions; U–M Weinberg Institute: Executive Committee, Undergraduate Committee, Faculty Search Committee **2024** U–M Linguistics: Graduate Admissions Committee (☆ *chair*), Committee on Inclusive Practices, Faculty Review Committee, Faculty Search Committee U–M Weinberg Institute: Executive Committee, Undergraduate Committee **2023** U–M Linguistics: Graduate Admissions (☆ *chair*), Faculty Search Committee **2022** U–M Linguistics: Graduate Admissions Committee (☆ *chair*), Colloquium Advisor, Faculty Review Committee MICHHERS Faculty Mentor **2021** U–M Linguistics: Executive Committee, Colloquium Advisor, Faculty Review Committee **2020** U–M Linguistics: Graduate Committee, Colloquium Advisor, MICHHERS Faculty Mentor **2019** U–M Linguistics: Graduate Committee, MICHHERS Faculty Mentor **2018** U–M Linguistics: Graduate Admissions **2017** U–M Linguistics: Executive Committee, MICHHERS Faculty Mentor **2016** U–M Linguistics: Graduate Committee, MICHHERS Faculty Mentor **2015** U–M Linguistics: Graduate Committee **2014** U–M Linguistics: Graduate Committee **2013** U–M Linguistics: Executive Committee **2012** U–M Linguistics: Graduate Committee **2007** NYU Linguistics: Graduate Linguistics Association President **2006** NYU Linguistics: Graduate Linguistics Association Treasurer

*Colleague & University* **2025** U–M Faculty Senate Assembly, Faculty Senate Student Relations Advisor Committee, Faculty Senate Rules and Regulations Committee **2024** U–M Faculty Senate Assembly, Faculty Senate Student Relations Advisor Committee, Faculty Senate Rules and Regulations Committee, MaCSS Program Faculty Mentor **2023** U–M Faculty Senate Assembly, Faculty Senate Student Relations Advisor Committee, Faculty Senate Rules and Regulations Committee MaCSS Program Faculty Mentor **2022** U–M Faculty Senate Assembly **2017** LSA Teaching Academy Panelist **2016** LSA Teaching Academy Panelist, **2015** CRLT Preparing Future Faculty Panelist **2014** LSA Teaching Academy Panelist CRLT Preparing Future Faculty Panelist

*External (non-review)* **2025** Society for Human Sentence Processing Executive Committee, Glossa Psycholinguistics Action Editor **2024** Annual Conference for Human Sentence Processing (☆ *co-chair*), Society for Human Sentence Processing Executive Committee, Glossa Psycholinguistics Action Editor, Greenhills School Advanced Research Program Research Mentor **2023** Society for Human Sentence Processing Executive Committee, Glossa Psycholinguistics Action Editor, Greenhills School Advanced Research Program Research Mentor **2021** Greenhills School Advanced Research Program Research Mentor **2016** Greenhills School Advanced Research Program Research Mentor

*Editorial* Glossa Psycholinguistics Action Editor (2023–)  
Glossa Psycholinguistics Editorial Board (2021–2022)  
PLoS Computational Biology Guest Editor (2017–2019)

Jonathan R. Brennan

**Grant** Study sections: NIH NINDS (2020, 2021, 2022); NSF (2021, 2025).  
**Reviewing** Ad-hoc reviewer: National Institutes of Health, National Science Foundation, European Research Council, US-Israel Binational Science Foundation, Riksbankens Jubileumsfond (Sweden), Swiss National Science Foundation

**Journal** *Annals of the New York Academy of Sciences, Autism Research, Bilingualism, Brain Communications, Brain & Language, Brain Sciences, Cerebral Cortex, Cognition, Cortex, eLife, eNeuro, European Journal of Neuroscience, Frontiers in Human Neuroscience, Frontiers in Psychology, Glossa, Glossa Psycholinguistics, Human Brain Mapping, Imaging Neuroscience, Journal of Cognitive Neuroscience, Journal of Comparative Germanic Linguistics, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Learning, Memory & Cognition, Journal of Neurolinguistics, Journal of Neuroscience, Language Cognition & Neuroscience, Nature Communications, Nature Computer Science, Nature Human Behavior, Nature Machine Learning, Nature Neuroscience, Nature Reviews Neuroscience, Neurobiology of Language, NeuroImage, NeuroImage: Reports, Neuropsychologia, PeerJ, PLoS One, PLoS Biology, Proceedings of the National Academy of Sciences, Proceedings of the Royal Society B: Biological Sciences, Psychonomic Bulletin & Review, Psychological Review, Science, Science Reports, Syntax, Trends in Cognitive Sciences,*

**Conference** Architectures and Mechanisms of Language Processing (AMLaP), Association for Computational Linguistics (ACL), Cognitive Science Society (COGSCI), Conference on Computational Linguistics (COLING), Conference on Human Sentence Processing (HSP, formerly CUNY), Empirical Methods in Natural Language Processing (EMNLP), Experiments in Linguistic Meaning (ELM), Generative Linguistics in the Old World (GLOW), Linguistic Society of America Annual Meeting (LSA), North American Association for Computational Linguistics (NAACL) Society for Computation in Linguistics (SCiL), Society for the Neuroscience of Language (SNL), West Coast Conference on Formal Linguistics (WCCFL)

**Book** *Taylor & Francis, SAGE, Sinauer*  
**Reviewing**

**Memberships** Society for Human Sentence Processing.  
Society for the Neurobiology of Language.