

CURRICULUM VITAE

Aneta Kielar, Ph.D.

Department of Speech, Language and Hearing Sciences
University of Arizona
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EDUCATION

- Ph.D. University of Western Ontario** 2008
Academic Area: Cognition & Perception
Advisor: Marc F. Joanisse, Ph.D.
Dissertation: *Representation of language in the brain: Behavioural and imaging investigations of English past tense morphology*
- M.A. University of Western Ontario** 2003
Academic Area: Cognitive Psychology
Advisor: Marc F. Joanisse, Ph.D.
Thesis: *Working memory and sentence comprehension in adult listeners under stress as a function of memory span and syntactic complexity*
- B.Sc. Honors, High Distinction, University of Toronto** 2000
Academic Areas: Psychology and Biological Sciences
Advisor: Konstantine Zakzanis, Ph.D.
Thesis: *Neuropsychological differentiation of late onset schizophrenia and fronto-temporal dementia*

ACADEMIC APPOINTMENTS

- Associate Professor, University of Arizona* 2023-present
Department of Speech, Language and Hearing Sciences,
Cognitive Science Graduate Interdisciplinary Program, BIO5 Institute,
Department of Linguistics, Member of Graduate Faculty
- Assistant Professor, University of Arizona* 2016-2023
Department of Speech, Language and Hearing Sciences,
Cognitive Science Graduate Interdisciplinary Program, BIO5 Institute,
Department of Linguistics
- Postdoctoral Fellow, Rotman Research Institute, Baycrest Center for Geriatric Care* 2011-2016
PI: Jed A. Meltzer, Ph.D.

Research Associate, Northwestern University 2010-2011
 Aphasia and Neurolinguistics Research Laboratory, School of
 Communication Sciences and Disorders
 PI: Cynthia K. Thompson, Ph.D., CCC-SLP

Postdoctoral Fellow, Northwestern University 2008-2010
 Aphasia and Neurolinguistics Research Laboratory, School of
 Communication Sciences and Disorders.
 PI: Cynthia K. Thompson, Ph.D., CCC-SLP

RESEARCH POSITIONS

Research Assistant, Psychoacoustics and Hearing Laboratory Samuel 2000-2001
 Lunenfeld Research Institute, Mount Sinai Hospital, Toronto
 PI: Sharon M. Abel, Ph.D.

Research Assistant, Baycrest Centre for Geriatric Care 2000-2001

PUBLICATIONS

KEY: °student mentee - *italics*: undergraduate student mentee, underlined: graduate student mentee, +equal author contributions/senior authorship; *work done as a graduate student

Peer-Reviewed Research Articles

1. °Nickels, K.V., Beeson, & °Kielar A. (2025). Addressing Phonological Deficit in Primary Progressive Aphasia with Behavioral Intervention and Transcranial Direct Current Stimulation. *Journal of Speech, Language, and Hearing Research*, 68(5), 2348-2385, doi: 10.1044/2024_JSLHR-24-00250. Epub 2025 Apr 14, PMID: 40227131
2. °Jebahi, F., V. T. Lay., & °Kielar, A. (2024). Psycholinguistic Predictors of Naming Accuracy and Decline in Bilingual Logopenic Primary Progressive Aphasia: A Cross-Linguistic Case Study. *Neurocase*, 10.1080/13554794.2024.2436165, PMID: 39632498
3. °Jebahi, F., Nickels, K.V., & °Kielar, A. (2024). Patterns of Performance on the Animal Fluency Task in Logopenic Variant of Primary Progressive Aphasia: A Reflection of Phonological and Semantic Skills. *Journal of Communication Disorders*, 108, 106405, <https://doi.org/10.1016/j.jcomdis.2024.106405>, PMID: 38324949
4. °Jebahi, F. & °Kielar, A. (2024). The relationship between semantics, phonology, and naming performance in aphasia: A structural equation modeling approach. *Cognitive Neuropsychology*, 41(3-4), 113-128, doi: 10.1080/02643294.2024.2373842, PMID: 38970815

5. ⁺Jebahi, F., ^oNickels, K.V., & ⁺**Kielar, A.** (2024). Predicting confrontation naming in the logopenic variant of primary progressive aphasia. *Aphasiology*, 38(4), 635-666, <https://doi.org/10.1080/02687038.2023.2221998>
6. ⁺Shah-Basak, P., Boukrina, O., ^oJebahi, F., & Li, C. ⁺**Kielar, A.** (2023). Targeted neurorehabilitation strategies in post-stroke aphasia. *Restorative Neurology and Neuroscience*, 41(3-4), 129-191. doi: 10.3233/RNN-231344, PMID: 37980575
7. **Kielar, A.**, Shah-Basak, P., Meyer, L., Fujioka, T., eds. (2023). Oscillatory brain activity as a marker of brain function and dysfunction in aging and in neurodegenerative disorders. Lausanne: *Frontiers Media SA*. doi: 10.3389/978-2-83251-790-1
8. **Kielar A.**, Shah-Basak, P., Meyer, L., Fujioka, T. (2023). Editorial: Oscillatory Brain Activity as a Marker of Brain Function and Dysfunction in Ageing and in Neurodegenerative Disorders. *Front. Aging Neurosci. Sec. Alzheimer's Disease and Related Dementias*, 15, doi: 10.3389/fnagi.2023.1153150, PMID: 36875698
9. ⁺Nickels, K.V., Beeson, P.M., Rising, K.L., ^oJebahi, F., & ⁺**Kielar A.** (2023). Positive changes to written language following phonological treatment in logopenic variant primary progressive aphasia: Case report. *Frontiers in Human Neuroscience, Speech and Language*, 16, 1006350, doi: 10.3389/fnhum.2022.1006350, PMID: 36760227
10. **Kielar, A.**, Patterson, D. K., & Chou, Y-H. (2022). Efficacy of repetitive transcranial magnetic stimulation in treating stroke aphasia: Systematic review and meta-analysis, *Clinical Neurophysiology*, <https://doi.org/10.1016/j.clinph.2022.04.017>, PMID: 35606322
11. **Kielar, A.**, Shah-Basak, P. P., Patterson, D. K., Jokel, R., & Meltzer, J. A. (2022). Electrophysiological abnormalities as indicators of early-stage pathology in Primary Progressive Aphasia (PPA): A case study in semantic variant PPA. *Neurocase*, 1–13. Advance online publication. <https://doi.org/10.1080/13554794.2022.2039207>
12. Shah-Basak, P., Sivaratnam, G., Teti, S., Deschamps, T., **Kielar, A.**, Jokel, R., & Meltzer, J. A. (2022). Electrophysiological connectivity markers of preserved language functions in post-stroke aphasia. *NeuroImage. Clinical*, 34, 103036. Advance online publication. <https://doi.org/10.1016/j.nicl.2022.103036>, PMID: 35561556
13. **Kielar, A.**, Shah-Basak P., Deschamps, T., Jokel, R., & Meltzer, J. A. (2019). Slowing is slowing: Delayed neural responses to words are linked to abnormally slow resting state activity in Primary Progressive Aphasia. *Neuropsychologia*, 129:331-347. <https://doi.org/10.1016/j.neuropsychologia.2019.04.007>, PMID: 31029594
14. Shah-Basak P., **Kielar A.**, Deschamps T., Verhoeff, P., Jokel, R. J., & Meltzer J.A. (2018). Spontaneous oscillatory markers of cognitive status in two forms of dementia. *Human Brain Mapping*, 40:1594-1607. DOI: 10.1002/hbm.24470, PMID: 30421472

15. **Kielar, A.**, Deschamps, T., Jokel R., & Meltzer, J. A. (2018). Abnormal language-related oscillatory abnormalities in primary progressive aphasia. *NeuroImage: Clinical*, 18:560-574. <https://doi.org/10.1016/j.nicl.2018.02.028>, PMID: 29845004
16. Meltzer J.A., **Kielar A.**, Panamsky L., Links K.A., Deschamps T., Leigh R.C. (2017). Electrophysiological signatures of phonological and semantic maintenance in sentence repetition. *Neuroimage*, 156:302-314. doi: 10.1016/j.neuroimage.2017.05.030, PMID: 28526621
17. Jokel, R., **Kielar, A.**, Anderson, N.D., Black, S.E., Rochon, E., Friedman, M., Tang-Wai, D., & Graham, S. (2016). Behavioral and neuroimaging changes after naming therapy for semantic variant PPA. *Neuropsychologia*, 89:191-216. doi: 10.1016/j.neuropsychologia.2016.06.009, PMID: 27297727
18. **Kielar, A.**, Deschamps, T., Jokel, R., and Meltzer, J. A. (2016). Functional reorganization of language networks for semantics and syntax in chronic stroke: Evidence from MEG. *Human Brain Mapping*, 37(8):2869-2893. doi: 10.1002/hbm.23212, PMID:27091757
19. **Kielar, A.**, Jokel, R., Chu, R. K.O., Deschamps, T., Panamsky, L., Chen, J. J., Khatamian, Y. B., Meltzer, J. A. (2016). Identifying Dysfunctional Cortex: Dissociable Effects of Stroke and Aging on Resting State Dynamics in MEG and fMRI. *Frontiers in Aging Neuroscience*, 8:1-22. doi: 10.3389/fnagi.2016.00040, PMID: 26973515
20. **Kielar, A.**, Panamsky, L., & Meltzer, J. A. (2015). Localization of electrophysiological responses to semantic and syntactic anomalies in language comprehension with MEG. *NeuroImage*, 105:507-524. DOI: 10.1016/j.neuroimage.2014.11.016, PMID: 25463470
21. **Kielar, A.**, Meltzer, J. A., Moreno, Alain, C., & Bialystok, E. (2014). Oscillatory responses to semantic and syntactic violations. *Journal of Cognitive Neuroscience*, 26:2840-2862. doi: 10.1162/jocn_a_00670. Epub 2014 Jun 4., PMID: 24893735
22. **Kielar, A.**, Meltzer-Assher, A., & Thompson, C. K. (2012). Electrophysiological responses to argument structure violations in healthy adults and individuals with agrammatic aphasia. *Neuropsychologia*, 50(14):3320-3337. DOI: 10.1016/j.neuropsychologia.2012.09.013, PMID: 23022079
23. **Kielar, A.**, & Joanisse, M. F. (2011). The role of semantic and phonological factors in word recognition: An ERP cross-modal priming study of derivational morphology. *Neuropsychologia*, 49(2):161-177. DOI: 10.1016/j.neuropsychologia.2010.11.027, PMID: 21129390
24. **Kielar, A.**, Fix, S. C., Bonakdarpour, B., & Thompson, C.K. (2010). Neural correlates of covert and overt production of tense and agreement morphology: Evidence from fMRI. *Journal of Neurolinguistics*, 24(2):183-201. DOI: 10.1016/j.jneuroling.2010.02.008, PMID: PMC3263466

25. **Kielar, A.**, & Joanisse, M. F. (2010). Graded effects of regularity in language revealed by N400 indices of morphological priming. *Journal of Cognitive Neuroscience*, 22(7):1373-1398. DOI: 10.1162/jocn.2009.21353, PMID: 19803689
26. **Kielar, A.**, Joanisse, M. F., & Hare, M. L. (2008). Priming English past tense verbs: Rules or statistics? *Journal of Memory and Language*, 58(2):327-346.
27. Abel, S. M., Sass-Kortsak, A., & **Kielar, A.** (2002). The effects on earmuff attenuation and other safety gear worn in combination. *Noise and Health*, 5(17):1-13.
28. Abel, S. M., Sass-Kortsak, A., & **Kielar, A.** (2001). The effects of safety gear worn in combination and hearing loss on earmuff attenuation and speech understanding. *Canadian Acoustics*, 29(3):50-51.
29. Zakzanis K. K., **Kielar A.**, Young D. A., & Boulos, M. (2001). Neuropsychological differentiation of late onset schizophrenia and fronto-temporal dementia. *Cognitive Neuropsychiatry*, 6(1):63-77.

Manuscripts Under Review and in Preparation

1. **Kielar, A.**, & Beeson, P. M. (*submitted*). Phonological and Semantic Skills Predict Past-Tense Verb Inflection Ability in Perisylvian Aphasia.
2. Baiocco, L., **Kielar, A.**, Lai, V.T (*submitted*). ERP Correlates and Metaphor Comprehension in Neurotypical Adults: A Scoping Review of Empirical Studies
3. Jebahi, F. & ⁺**Kielar, A.** (*revision submitted*). Leveraging Thematic Relationships Between Verbs and Nouns for Noun Retrieval Treatment in Logopenic Primary Progressive Aphasia: A Case Series
4. Nickels, K., & ⁺**Kielar, A.** (*under review*). Predictors of Reading and Spelling Performance in Primary Progressive Aphasia.
5. **Kielar, A.**, Nickels, K.V., Lopez, I. A. (*in preparation*). Relationship between impaired semantic control language performance and cortical volume in the logopenic PPA.
6. Nickels, k. v., and Kiealr, A. (*in preparation*). Associations and Dissociations in Spoken and Written Naratives in the Logopenic Variant Primary progressive aphasia.
7. **Kielar, A.**, & Patterson, D. K. (*in preparation*). Relationship between language performance and age-related changes in structural and functional connectivity.

Published Conference Proceedings

1. **Kielar A.** (2021). Contribution of Phonology and Semantics to Verb Inflection Deficit in Post-Stroke Aphasia. EasyChair Preprint, № 6345, *60th Annual Meeting of Academy of Aphasia*.
2. **Kielar, A.,** Jokel, R., & Meltzer, J. A. (2018). Modulation of Task-Related and Resting-State Oscillatory Responses in Primary Progressive Aphasia. *Front. Hum. Neurosci.* Conference Abstract: *56th Annual Meeting of Academy of Aphasia*. doi: 10.3389/conf.fnhum.2018.228.00043
3. **Kielar, A.,** Jokel, R., Chu, R. K.O., Deschamps, T., Panamsky, L., Chen, J. J., Khatamian, Y. B., Meltzer, J. A. (2015). Distinguishing the effects of stroke and healthy aging with resting state MEG and fMRI. *International Journal of Stroke*, 10, 50.
4. **Kielar, A.,** Deschamps, T., Chu, R.K.O, Panamsky, L., Khatamian, Y.B., Chen, J.J., and Meltzer, J. A. (2014). Stroke induced reorganization of the neural networks for sentence comprehension, and relationship to perilesional dysfunction revealed by MEG and ASL. *Frontiers*, *52nd Annual Meeting of Academy of Aphasia*.
5. Meltzer-Asscher, A., **Kielar, A.,** Mack, J., Weintraub, S., Mesulam, M. M., & Thompson, C. K. (2012). Electrophysiological Responses to Semantic and Argument Structure Violations in Agrammatic Primary Progressive Aphasia. *Procedia - Social and Behavioral Science*, 61, 266-268.
6. **Kielar, A.,** Meltzer-Asscher, A., & Thompson, C. K. (2012). Electrophysiological responses to argument structure violations in healthy adults and individuals with nonfluent aphasia. *The Aphasiology Archive University Library System*, University of Pittsburgh.
7. **Kielar, A.,** Meltzer-Asscher, A., & Thompson, C. K. (2011). ERP responses to argument structure and semantic violations in sentence context in healthy and agrammatic aphasic adults. *Procedia - Social and Behavioral Sciences*, 23, 045-46.
8. **Kielar, A.,** & Orange, J. B. Processing of nouns and verbs in Dementia of Alzheimer's Type (DAT) (2007). *Proceedings of the Festival of International Conferences on Caregiving, Disability, Aging and Technology: Advances in NeuroRehabilitation (FICCDAT)*.

Book Chapters

1. **Kielar, A.,** Shah-Basak, P., Meyer, L., Fujioka, T., eds. (2023). Oscillatory brain activity as a marker of brain function and dysfunction in aging and in neurodegenerative disorders. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-83251-790-1

2. Thompson, C. K., **Kielar, A.**, & Fix, S. F. (2012). Morphological aspects of agrammatic aphasia. In R. Bastiaanse & C. K. Thompson (Eds.), *Perspectives on Agrammatism*, pp 75-105. Sussex, UK: Psychology Press.
3. Thompson, C. K., & **Kielar, A.** (2014). Neural Bases of Sentence Processing: Evidence from Neurolinguistic and Neuroimaging Studies, In V. Ferreira, M. Goldrick, & M. Miozzo (Eds.), *The Oxford Handbook of Language Production*. Oxford University Press: New York, NY, USA.

Other Publications

1. **Kielar, A.**, Chou, Y-H., Kline, E., & Mohr, S. (2020). Systematic review and meta-analysis of repetitive transcranial magnetic stimulation (rTMS) effects on treating language symptoms in post-stroke aphasia. PROSPERO 2020 CRD42020180104 Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42020180104
2. **Kielar A.** (2008). Representation of language in the brain: Behavioral and imaging investigations of English past tense morphology. Dissertation Abstracts International: Section B: The Sciences and Engineering, Vol 69(5-B), 2008. pp. 3289. [Doctoral Dissertation, The University of Western Ontario]
3. **Kielar A.** (2003). Working memory and sentence comprehension in adult listeners under stress as a function of memory span and syntactic complexity. [M.A. Thesis, University of Western Ontario]
4. Abel, S. M., Sass-Kortsak, A. and **Kielar A.** (2001). "Hearing Protectors, safety glasses and respiratory protective equipment in combination: Effect on sound attenuation." Final Report (Operating Grant #980003), *Workplace Safety & Insurance Board*.
5. **Kielar A.** (2012). Schizophrenia and Fronto-temporal Dementia: Differential Test Sensitivity: Honours Thesis, University of Toronto, Laboratory of Dr. Konstantine K. Zakzanis.

CONFERENCES/SCHOLARLY PRESENTATIONS

Colloquia

1. **Kielar, A.** (Fall, 2023). Research Colloquium, *Speech, Language, and Hearing Sciences Data Blitz*, University of Arizona.
2. **Kielar, A.** (Fall, 2023). What is Primary Progressive Aphasia and what can we do to help those affected by this syndrome. *Cognitive Science Colloquium Series*, University of Arizona.

3. **Kielar, A.** (Fall, 2022). Language and Neuroimaging Research. *Speech, Language, and Hearing Sciences, Colloquium*. University of Arizona
4. **Kielar, A.** (Spring, 2019). Slowing of Language-Related and Resting-State Oscillatory Responses in Primary Progressive Aphasia (PPA). *Speech, Language, and Hearing Sciences Colloquium*, University of Arizona.
5. **Kielar A.** (April, 2018). Individualized neuromodulation protocol for the treatment of language deficits in aphasia, *2018 Transcranial Magnetic Stimulation Workshop*, BIO5, University of Arizona.
6. **Kielar, A.** (March, 2018). Talking the Talk: Priming past tense in aphasia. *Speech, Language, and Hearing Sciences Spring Data Blitz*, University of Arizona.
7. **Kielar, A.** (September, 2018). Language Responses in Primary Progressive Aphasia. *Speech, Language, and Hearing Sciences Fall Data Blitz*, University of Arizona.
8. **Kielar, A.** (March 1, 2017) Neuroimaging of Language. *UBRP recruitment event*, University of Arizona.
9. **Kielar, A.** (February, 2017). Investigation of Language with Neuroimaging. *Department of Linguistics Recruitment Event*, University of Arizona.
10. **Kielar, A.** (April, 2017). Language related and spontaneous oscillatory responses in acquired Language Disorders. *Cognitive Science Colloquium*, University of Arizona.
11. **Kielar, A.** (March 7, 2016). Neural pathways for semantic and syntactic processing and stroke related plasticity. *Colloquium Series Talk, Department of Speech and Hearing Science*, University of Arizona.
12. **Kielar, A.** (February 4, 2016). Neural correlates of semantic and syntactic processing and stroke related plasticity., *School of Speech, Language, and Hearing Sciences*, San Diego State University.
13. **Kielar, A.** (March 30, 2015). Neural pathways for semantic and syntactic processing and stroke related plasticity. *Colloquium Series Talk, Department of Speech and Hearing Science*, Arizona State University.
14. **Kielar, A.** (November 6, 2014). Pathways for semantic and syntactic processing: Evidence from MEG and Aphasia. *Colloquium Series Talk, Department of Psychology*, University of California at Riverside, Riverside, CA.

Invited Symposia and Seminars

1. **Kielar A.** (September, 2023). Treatment of language in Alzheimer's Disease: Combining behavioral therapy with noninvasive neuromodulation). *Arizona Alzheimer's Consortium*

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- 24th Annual Scientific Conference, Mayo Clinic and Arizona State University, Tempe, Arizona. (**Invited Symposium Presentation**)
2. **Kielar A.** (May, 2023). Innovations in Healthy Aging Summit. Building Resiliency with Healthy Aging Research. *Center for Outreach & Collaboration* University of Arizona Washington, D.C. (**Invited Symposium Presentation**)
 3. **Kielar, A.** (April, 2022). Neural dynamics in stroke-related and progressive aphasia: Moving towards individualized treatment with noninvasive neuromodulation. TRIPODS Seminar. *Statistics & Data Science Graduate Interdisciplinary Program, Data Science Academy, University of Arizona.* (**Invited Seminar Presentation**)
 4. **Kielar A.,** (March, 2022). Targeted neurorehabilitation strategies in post-stroke aphasia. *American Society of Neurorehabilitation*, St. Louis, MO. (**Invited Symposium**)
 5. **Kielar, A.,** (Spring, 2020). Effect of rTMS on spontaneous brain connectivity. *Research Innovating Showcase, BIO5 Institute, University of Arizona.*
 6. **Kielar A.** (October, 2018). Modulation of task related and resting state oscillatory responses in Primary Progressive Aphasia. *56th Annual Meeting of Academy of Aphasia*, Montreal, Quebec. (**Invited Symposium Presentation**)
 7. **Kielar, A.** (May, 2018). Language related and resting-state oscillatory responses in primary progressive aphasia. *48th Clinical Aphasiology Conference*, Austin, Texas.
 8. **Kielar A.** (2018, October 13). Neural dynamics of language-related and spontaneous activity in aphasia. *Barrow Stroke Symposium*, Phoenix, Arizona. (**Invited Symposium Presentation**)
 9. **Kielar A.** (2018, April 30). Individualized neuromodulation protocol for the treatment of language deficits in aphasia, *2018 Transcranial Magnetic Stimulation Workshop, BIO5, University of Arizona* (**Invited Seminar Presentation**)
 10. Jokel, R., Meltzer, J. A., & **Kielar, A.** (2016, May 2). Innovative services for clients with PPA. *GTA Rehabilitation Best Practices Day*, Toronto, Ontario.
 11. **Kielar, A.** (2014, January 9). Supporting stroke recovery: Localization of neural networks for sentence processing in healthy adults and stroke participants. *Seniors Health Knowledge Network Making Connections Webinar Series, Toronto, Ontario, Canada.* (**Invited Seminar Presentation**)
 12. Oppermann, F., **Kielar, A.,** Panamsky, L., & Meltzer, J. (2013, November 14-17). Alpha and beta power decrease as neural correlates of semantic and phonological processing in a language task. *Psychonomics Society Annual Meeting, Toronto, Ontario, Canada.*
 13. **Kielar, A.,** Panamsky, L., & Meltzer, J. (February 13-14, 2013). Localization of neural networks for sentence processing using Magnetoencephalography. *Ontario Research*

Coalition (ORC) and the Ontario Long Term Care Association (OLTCA) Applied Research Education Day, Toronto, Ontario, Canada.

14. **Kielar, A.** Neural correlates of language recovery in aphasia: An fMRI study of treatment related effects. (November 23, 2011). *The Ontario Long Term Care Association (OLTCA) Applied Research Education Day, Toronto, Ontario, Canada.*
15. **Kielar, A.,** Fix, S. C., Bonakdarpour, B., Parrish, T. B., & Thompson, C. K. (June, 2010). Neural correlates of treatment-induced functional category recovery: An fMRI study of tense and agreement production. *14th International Aphasia Rehabilitation Conference, Montreal, Quebec (Invited Symposium Presentation).*
16. **Kielar, A.,** Joanisse, M. F., Hare, M. L., & Seidenberg, M. S. (November, 2004). Past tense priming: Rules and exceptions or phonology and semantics? *The 45th Psychonomic Society Annual Meeting, Minneapolis, MIN.*
17. Joanisse, M. F., **Kielar, A.,** Hare, M. L., & Seidenberg, M. S. (May, 2004). The brain bases of regular, irregular and pseudo-regular morphology: Evidence from priming and functional MRI experiments of past tense in English. *AMLAP Conference, Aix en Provence, France.*
18. **Kielar, A.** Neuropsychological differentiation of late life schizophrenia and fronto-temporal dementia. (April 28, 2000). *Paper presented at 30th Psychology Undergraduate Thesis Conference, University of Guelph.*

Peer Reviewed Conference Posters and Presentations

KEY: °student mentee - *italics: undergraduate student mentee*, underlined: graduate student mentee, +equal author contributions/senior authorship; *work done as a graduate student

1. °Jebahi, F., and +**Kielar, A.** (May, 2025). Treating Noun Retrieval Impairment in the Logopenic Variant of Primary Progressive Aphasia: A Multi-Modal Intervention Integrating Verb-Noun Relationships and Structured Cueing. *Clinical Aphasiology Conference, Albuquerque, New Mexico, USA.*
2. °Jebahi, F., Lai, V. T., & +**Kielar, A.** (October, 2024). Longitudinal Investigation of Naming Accuracy in a Case of Bilingual Logopenic Primary Progressive Aphasia: Contribution of Psycholinguistic Properties. *Poster presented at the 62nd annual Meeting of the Academy of Aphasia, Nara, Japan.*
3. °Nickels, K., & +**Kielar, A.** (October, 2024). Predicting Written Language Performance in Primary Progressive Aphasia: The Role of Central Language Processes and Psychometric Word Properties. *Virtual poster presentation at the 62nd annual Academy of Aphasia Annual Meeting, Nara, Japan*
4. °Nickels, K., °Abraham, E., & +**Kielar, A.** (September, 2024). Examining Health Sciences Student Attitudes and Knowledge of the Primary Progressive Aphasia (PPA) Syndrome: A

Pilot Survey Study. *Poster presentation at the annual Arizona Alzheimer's Consortium Scientific Conference*, Tempe, AZ.

5. Nickels, K., Beeson, P., Rising, K., Jebahi, F., & **Kielar, A.** (October, 2023). Treatment Outcomes Following Phonological Intervention in Logopenic and Nonfluent/Agrammatic Variant Primary Progressive Aphasia: Results from a Double-Blind, Sham-Controlled, Crossover Trial. *Platform presentation at the 61st annual Academy of Aphasia Meeting*, Reading, England.
6. Jebahi, F., & **Kielar, A.** (October, 2023). The Contribution of Semantics and Phonology to Naming Error Types in Aphasia. *61st annual Academy of Aphasia Meeting*, Reading, England.
7. **Kielar, A.**, Nickels, K.V., Beeson, P.M., Jebahi, F., Frazier, N.J. (September, 2023). Rehabilitating language in primary progressive aphasia with targeted phonological treatment and transcranial direct current stimulation (TDCS). Treatment Outcomes in Primary Progressive Aphasia after Phonological Treatment with tDCS. Poster presentation at the annual *Arizona Alzheimer's Consortium Scientific Conference*, Tempe, AZ
8. Nickels, K., Beeson, P., Jebahi, F., Frazier, N. J., & **Kielar, A.** (September, 2023). Treatment Outcomes in Primary Progressive Aphasia after Phonological Treatment with tDCS. Poster presentation at the annual Arizona. *Alzheimer's Consortium Scientific Conference*, Tempe, AZ.
9. Jebahi, F., Nickels, K.V., Frazier, N. J., Egleson, L., **Kielar, A.** (2023, September). The Contribution of Semantic and Phonological Abilities to Category Fluency Performance Patterns in Logopenic Variant of Primary Progressive Aphasia. *Alzheimer's Consortium Scientific Conference*, Tempe, AZ.
10. Nickels, K., Beeson, P.M., Rising, K., Jebahi, F., Sachs, A., & **Kielar, A.** (2022, November). The impact of phonological intervention on written language skills in logopenic variant primary progressive aphasia. Technical research paper presented at the *2022 Annual Convention of American Speech-Language-Hearing Association*, New Orleans, LA.
11. Jebahi, F., Nickels, K.V., & **Kielar, A.** (2022, November). Generative naming in the logopenic variant of primary progressive aphasia: the role of psycholinguistic properties. Poster presentation at the *2022 Annual Convention of the American Speech-Language-Hearing Association*, New Orleans, LA.
12. Jebahi, F., Nickels, K.V., Frazier N.J., & **Kielar, A.** (2022, October). Clustering and switching on verbal fluency in logopenic variant of primary progressive aphasia. Poster presentation at the *Annual Meeting of the Society for the Neurobiology of Language*, Philadelphia, PA.

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13. °Nickels, K., Beeson, P. M., Rising, K., °Jebahi, F.,⁺**Kielar, A.** (2022, October). Phonological Treatment Outcomes in Nonfluent/Agrammatic Variant Primary Progressive Aphasia: A Case Study. *60th Academy of Aphasia Annual Meeting*. Philadelphia, PA.
 14. °Jebahi, F., °Nickels, K., °Frazier, N., ⁺**Kielar, A.** (October, 2022). Understanding semantic category generation in Primary Progressive Aphasia (PPA). Poster Presented at the 14th *Annual Meeting of the Society for the Neurobiology of Language*. Philadelphia, PA.
 15. **Kielar, A.**, Dianne K. Patterson, D. K., & Chou, Y-H. (October, 2022). Examination of individual characteristics and rTMS parameters that moderate treatment outcomes in post-stroke aphasia. *60th Academy of Aphasia Annual Meeting*. Philadelphia, Pennsylvania.
 16. Nickels, K.V., Beeson, P.M., Rising, K.L., °Jebahi, F., °Frazier, N.J., & ⁺**Kielar, A.** (2022, September). Treatment for phonological text agraphia in logopenic variant of primary progressive aphasia: A heterogenous case series. Poster presentation at *the Arizona Alzheimer's Consortium*, Tempe, AZ.
 17. °Jebahi, F., °Nickels, K.V., & ⁺**Kielar, A.** (2022, May) Psycholinguistic determinants of naming in logopenic variant of primary progressive aphasia. Poster presentation at the 2022 *Clinical Aphasiology Conference*, Wrightsville Beach, NC.
 18. **Kielar, A.**, Patterson, D., °Guzik, A., Chou, Y-H. (2021, October, 5-8th). Effectiveness of rTMS in treating post-stroke aphasia: Role of stimulation parameters and individual characteristics. Platform Presentation at the *13th Meeting of the Society for Neurobiology of Language*
 19. **Kielar, A.** (2021, October, 24th). Contribution of Phonology and Semantics to Verb Inflection Deficit in Post-Stroke Aphasia. *Academy of Aphasia Meeting*.
 20. **Kielar, A.**, Patterson, D. K., Chou, Y-H., °Mohr, S., °Johnson, H.N. (2020, October, 21st). Effect of excitatory and inhibitory theta burst stimulation (TBS) on resting state connectivity. *12th Meeting of the Society for Neurobiology of Language*.
 21. **Kielar, A.**, Patterson, D. K., Jokel, R., Meltzer, J. A. (October, 21st 2020). Altered oscillatory responses to language in the semantic variant of PPA: Converging evidence from MEG, Voxel-Based Morphometry, and Diffusion Weighted imaging. *12th Meeting of the Society for Neurobiology of Language*.
 22. Shah-Basak, P., Sivaratnam, G., Teti, S., **Kielar, A.**, Jokel, R., & Meltzer, J. (October, 21st 2020). Electrophysiological connectivity and network changes after high-definition transcranial direct current stimulation in post-stroke aphasia. *12th Meeting of the Society for Neurobiology of Language*.
 23. Shah-Basak, P., Sivaratnam, G., Teti, S., Francois-Nienaber, A., **Kielar, A.**, & Meltzer, J. (2019, August 20-22). Functional connectivity underlying language reorganization in chronic post-stroke aphasia using resting-state magnetoencephalography. *The Society for Neurobiology of Language (SNL)*, Helsinki, Finland.

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24. **Kielar, A.,** °Rice, L. C., °Mohr, S., °Lughes, P., McConville, K. (2019, March 23-29). Relationship between phonology, semantics and past tense inflection in post-stroke aphasia. *Cognitive Neuroscience Society Conference (CNS)*, San Francisco, CA, USA.
 25. **Kielar, A.,** °Rice, L. C., °Mohr, S. (2018, November 15-17). Priming Past-Tense in Aphasia: Contribution of Sound and Meaning. *American Speech-Language Hearing Association Conference (ASHA)*, Boston, Massachusetts.
 26. **Kielar, A.,** °Deschamps, T., Jokel, R., Meltzer, J.A. (2017, November 8-10). Oscillatory Abnormalities in Primary Progressive Aphasia. *Society for the Neurobiology of Language*, Baltimore, MD.
 27. °Deschamps T., **Kielar A.,** Jokel R., Meltzer J.A. (2017, March 21-22). Resting state MEG biomarkers of cognitive status across healthy aging and two forms of dementia. *27th Annual Rotman Research Institute Conference*, Toronto, Ontario, Canada.
 28. **Kielar, A.,** °Deschamps, T., °Chu, R., Jokel, R., and Meltzer, J.A. (2016, December 10). Oscillatory responses associated with recovery of semantics and syntax in stroke aphasia. *7th ASU Cognitive Science Conclave*. Tempe, Arizona.
 29. Meltzer, J. A., **Kielar, A.,** °Chu, R., °Deschamps, T. (2016, March 21-22). Spontaneous MEG as a biomarker for cortical health in aging, stroke, dementia, and ordinary cognitive decline. *26th Rotman Research Institute Conference*, Toronto, Ontario.
 30. **Kielar, A.,** °Deschamps, T., °Chu, R., Jokel, R., and Meltzer, J. A. (2015, October 15-17). Alterations of language related oscillatory activity and spontaneous neural dynamics after stroke. *7th Annual Meeting of the Society for the Neurobiology of Language*, Chicago, IL.
 31. **Kielar, A.,** Jokel, R., Chu, R.K.C., Deschamps, T., Panamsky, L., Chen, J. J., Khatamian, Y.B., and Meltzer, J. A. (2015, September 17 -19). Distinguishing the effects of stroke and healthy aging with resting state MEG and fMRI. *6th Canadian Stroke Congress*, Toronto, Ontario.
 32. **Kielar, A.,** Jokel, R., Chu, R.K.C., Deschamps, T., Panamsky, L., Chen, J. J., Khatamian, Y.B., and Meltzer, J. A. (2015, March 9-11). Altered neural dynamics in stroke and aging: sensitivity of resting state MEG vs. fMRI. *25 years of Brain and Aging: 25th Rotman Research Institute Conference*, Toronto, Ontario.
 33. Meltzer, J.A., **Kielar, A.** D'Angelo, M.C. Ryan, J.D., Barense, M.D. (2015, March 9-11). Electrophysiological abnormalities in older adults at risk for dementia: language lateralization and resting state changes. *25 years of Brain and Aging: 25th Rotman Research Institute Conference*, Toronto, Ontario.
 34. **Kielar, A.,** °Deschamps, T., °Chu, R., °Panamsky, L., Khatamian, Y. B., Chen, J. J., & Meltzer, J. A. (2014, October 5-7). Stroke induced reorganization of the neural networks

- for sentence comprehension, and relationship to perilesional dysfunction revealed by MEG and ASL. *52nd Meeting of Academy of Aphasia*, Miami, FL.
35. **Kielar, A.**, °Deschamps, T., °Chu, R., °Panamsky, L., Khatamian, Y. B., Chen, J. J., & Meltzer, J. A. (2014, June 9-10). Functional reorganization of the neural networks for language after stroke and relationship to perilesional dysfunction revealed by MEG. *Advances in Stroke Recovery Meeting*, Ottawa, Ontario.
36. Meltzer J.A, **Kielar A.**, °Rose N.S., °Panamsky L., °Leigh R.C., °Links K.A. (2014, August 24-28). MEG activity for phonological and semantic resources in verbal short-term memory. *19th International Conference on Biomagnetism*, Halifax, Nova Scotia.
37. **Kielar, A.**, Meltzer, J. A., Moreno, S., Alain, C., & Bialystok, E. (2014, May 25-28). Oscillatory responses to sentence embedded semantic and syntactic violations: Effect of bilingualism. *8th Annual Canadian Association for Neuroscience Meeting*, Montreal, Quebec.
38. **Kielar, A.**, °Panamsky, L., & Meltzer, J. (2013, May 23). Brain networks for semantic and syntactic processing: Converging evidence from MEG and DTI. *7th Annual Canadian Association for Neuroscience Meeting*, Toronto, Ontario.
39. **Kielar, A.**, °Panamsky, L., & Meltzer, J. (2013, April 15). Localization of neural networks for semantic and syntactic processing using MEG. *20th Annual Cognitive Neuroscience Meeting*, San Francisco, CA, USA.
40. **Kielar, A.**, °Panamsky, L., & Meltzer, J. (2013, March 4-6). Mapping brain networks for semantic and syntactic processing using MEG in healthy and damaged brains. *23rd Annual Neuroscience Conference: Brain Plasticity and Rehabilitation*, Toronto, Ontario.
41. **Kielar, A.**, °Panamsky, L., Links, K., & Meltzer, J. (2012, August 23). Mapping of neural generators of electrophysiological responses to semantic and syntactic anomalies using MEG. *18th International Conference on Biomagnetism*, Paris, France.
42. **Kielar, A.**, Meltzer-Asscher, A., Mack, J., Weintraub, S., Mesulam, M. M., & Thompson, C.K. (2012, October). Electrophysiological responses to semantic and argument structure violations in agrammatic Primary Progressive Aphasia. *50th Annual Meeting of Academy of Aphasia*, San Francisco, CA.
43. **Kielar, A.**, Meltzer-Asscher, A., & Cynthia K. Thompson, C. K. (2012, May). Electrophysiological responses to argument structure violations in healthy adults and individuals with nonfluent Aphasia. *The 42nd Clinical Aphasiology Conference*, Lake Tahoe, CA.
44. **Kielar, A.**, Mack, J., Meltzer-Asscher, A., Wali, E., & Thompson, C. K. (2012, April). Neuronal Interactions for Words and Pseudowords during Lexical Decision. *The 19th Cognitive Neuroscience Society Meeting*, Chicago, IL.

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45. Schuchard, J., **Kielar, A.**, Barbieri, E., Thompson, C.K. (2012, April). Neural Correlates of Unaccusative and unergative verb processing. *The 19th Cognitive Neuroscience Society Meeting*, Chicago, IL.
 46. **Kielar, A.**, Mack, J., Meltzer-Asscher, A., Wali, E., & Cynthia K. Thompson, C. K. (2011, November). Neuronal Interactions for Words and Pseudowords during Lexical Decision: DCM model of lexical processing. *Society for the Neurobiology of Language*, Annapolis, MD.
 47. Schuchard, J., **Kielar, A.**, Barbieri, E., & Thompson, C.K. (2011, November). Neural correlates of unaccusative and unergative verb processing. *Society for the Neurobiology of Language, November*, Annapolis, MD.
 48. **Kielar, A.**, Meltzer-Asscher, A., & Thompson, C. K. (2011, October). ERP Responses to Argument Structure and Semantic Violations in Sentence Context in Healthy and Agrammatic Aphasic Adults. *49th Annual Meeting of the Academy of Aphasia*, Montreal, Quebec, October, 2011.
 49. **Kielar, A.**, & Thompson, C. K. (2011, June). ERP Investigation of Argument Structure and Semantic Processing in Healthy and Aphasic Adults. *17th Annual Meeting of the Organization for Human Brain Mapping*, Quebec City, Quebec.
 50. **Kielar, A.**, & Thompson, C. K. (2010, November). Electrophysiological investigation of argument structure processing in healthy and agrammatic aphasic adults. *2nd Annual Neurobiology of Language Conference*, San Diego, CA.
 51. **Kielar, A.**, Fix, S. C., Bonakdarpour, B., Parrish, T. B., & Thompson, C. K. (2010, June). Neural Correlates of Functional Category Recovery in Aphasia: An fMRI Study of Verb Inflection Production. *16th Annual Meeting of the Organization for Human Brain Mapping*, Barcelona, Spain.
 52. **Kielar, A.**, Fix, S. C., Bonakdarpour, B., Parrish, T. B., & Thompson, C. K. (2009, November). Neural correlates of functional category learning and recovery: An fMRI study of verb inflection production. *47th Annual Meeting of Academy of Aphasia*, Boston, MA.
 53. **Kielar, A.**, Fix, S.C., Bonakdarpour, B., Parrish, T. B., & Thompson, C. K. (2009, November). Neural correlates of verb inflection production: fMRI study of tense and agreement morphology. *Annual Neurobiology of Language Conference*, Chicago, IL.
 54. **Kielar, A.**, Stephen C. Fix, Bonakdarpour, B., Parrish, T. B., & Thompson, C. K. (2009, June). Neural correlates of verb production: fMRI study of tense and agreement morphology. *15th Annual Meeting of the Organization for Human Brain Mapping*, San Francisco, CA.
 55. **Kielar, A.**, & Orange, J. B. (2007, June). Processing of nouns and verbs by individuals with Dementia of Alzheimer's Type. *The Festival of International Conferences on*

Caregiving, Disability, Aging and Technology: Advances in NeuroRehabilitation (FICCDAT), Toronto, Ontario.

56. **Kielar, A.**, & Orange, J. B. (2007, February). Processing of nouns and verbs by individuals with Dementia of Alzheimer's Type. *The Canadian Institute of Health Research Symposium*, Montreal, Quebec.
57. **Kielar, A.**, Joanisse, M. F., & Newman, R. L. (2007, May). Neural processing of rule like and irregular patterns in language: An fMRI study of past tense priming. *The Cognitive Neuroscience Society Meeting*, New York, NY.
58. **Kielar, A.**, Joanisse, M. F., & Newman, R. L. (2006, April). How does the brain process complex words? ERP cross-modal priming study of derivational morphology. *The Cognitive Neuroscience Society Meeting*, San Francisco, CA.
59. **Kielar, A.**, & Joanisse, M. F. (2003, November). Individual differences in working memory and sentence comprehension under load. *The 44th Psychonomic Society Annual Meeting*, Vancouver, British Columbia.
60. **Kielar, A.**, & Joanisse, M. F. (2003, June). Individual differences in working memory and sentence comprehension. *The Canadian Society for Brain, Behaviour and Cognitive Sciences*, Hamilton, Ontario.
61. Abel, S. M., Sass-Kortsak, A., & **Kielar A.** (2001, October). The effects of safety gear worn in combination and hearing loss on earmuff attenuation and speech understanding. *The Annual Meeting of the Canadian Acoustical Association*, Allison, Ontario.

Local Conference Posters, Presentations and Showcases

1. **Kielar, A.**, °Nickels, K., Beeson, P., °Jebahi, F., °Frazier, N.J. (October, 2024). Individualized Noninvasive Electrical Brain Stimulation Combined with Behavioral Therapy Improves Language in Primary Progressive Aphasia. *BIO5 Research and Innovation Showcase*, University of Arizona.
2. °Frazier, N.J., °Nickels, K.V., **Kielar, A.** (January, 2023). Neuroimaging & Computational Methods Informing Individualized Targeting of Transcranial Direct Current Stimulation (tDCS) for Treatment of Primary Progressive Aphasia. *2023 Annual Undergraduate Biology Research Project Conference*, University of Arizona, Tucson, AZ.
3. °Slenkovich, E., °Nickels, K., °Jebahi, F., °Frazier, N., and **Kielar, A.** (May, 2023). The Methods, Neuromechanism, and Research Applications of tDCS. *Chemistry and Biochemistry Poster Fair*, University of Arizona, Tucson, AZ.
4. °Goehring, G. E., °Jebahi, F., **Kielar A.** (May, 2023). Predictors of Verbal Fluency Performance in Perisylvian Aphasia. *Pinnacle, the Franke Honors College's Annual Research Symposium*, University of Arizona, Tucson, AZ.

5. °Nickels, K., Beeson, P. M., Rising, K., °Jebahi, F., **Kielar, A.** (2022, December). Phonological Treatment Outcomes in Nonfluent/Agrammatic Variant Primary Progressive Aphasia: A Case Series Study. *GIDP Student Showcase*. University of Arizona, Tucson, AZ.
6. °Shen, M., & **Kielar, A.** (2020). fMRI Localizer Task for Cortical Responses to Phonology, Semantics, and Orthography: A Pilot Study. *NSCS Honors Thesis Presentations 2020*.
7. °Pertsovsky, S.H. & **Kielar, A.** (2020). Effects of Stroke Lesion on Language Performance and White Matter Connectivity in Post-Stroke Aphasia. *NSCS Honors Thesis Presentations 2020*.
8. **Kielar, A.**, Patterson, D. K., Chou, Y-H., °Mohr, S., & °Johnson, H. (2020, March). Changes in Functional Connectivity Induced by rTMS to the left supramarginal gyrus. *Research Innovating Showcase, BIO5 Institute, University of Arizona*.
9. Mike S., Moohr, S., Paterson, D., **Kielar, A.** (2019, August 2). Facilitating phonological processing with repetitive transcranial magnetic stimulation (rTMS). *24th Annual UROC Research Conference, University of Arizona, Graduate College*.
10. °Morrison, A., °Rice, L., °Mohr, S., **Kielar, A.** (2019, April 26). Speech deficits in patients with stroke-related aphasia: Analysis of narrative speech. *Neuroscience & Cognitive Science Poster Forum, University of Arizona, College of Science*.
11. °Skvarla, K., °Mohr, S., **Kielar, A.** (2019, April 26). Electrophysiological signature of verb argument processing: ERP study. *Neuroscience & Cognitive Science Poster Forum, University of Arizona, College of Science*.
12. °Morrison, A., °Rice, L., °Mohr, S., **Kielar, A.** (2018, Summer). Narrative production in stroke related aphasia and older adults. *Undergraduate Biology Research Project Day, University of Arizona*.

TEACHING

Classroom Teaching

Neurobiology of Language, SLHS 362, <i>University of Arizona</i>	2016-2025
Graduate Certificate in Neuroimaging Methods, Cognitive Sciences Graduate Interdisciplinary Program, <i>University of Arizona</i>	2022-2025
Neuroimaging Theory, Methods and Applications, COGS505, <i>University of Arizona</i>	2022-2025
Introduction to Neuroimaging Techniques and Applications, SLHS 597	2018-2023

University of Arizona

Graduate Seminar in Speech Disorders, SLHS 696a, 2017-2019
University of Arizona

Speech Perception, SLHS 568, *University of Arizona* 2017-2019

Cognitive Neuroscience of Event Related Potentials, Laboratory Instructor 2008
University of Western Ontario

Introduction to Cognition, Primary Instructor 2007
University of Western Ontario

Introduction to Test & Measurement, Teaching Assistant 2006-2007
University of Western Ontario

Research Methods and Statistical Analysis in Psychology, Teaching Assistant 2005-2006
University of Western Ontario

Research in Psycholinguistics, Teaching Assistant 2004-2005
University of Western Ontario

Introduction to Psycholinguistics, Teaching Assistant 2003-2004
University of Western Ontario

Statistics for Psychology, Teaching Assistant 2002-2003
University of Western Ontario

Introduction to Psychology, Teaching Assistant 2001-2002
University of Western Ontario

Guest Lectures and Seminars

Doctoral Seminar (2 sessions), SLHS 696A, Topic: Theories of Language Disorders, *University of Arizona* (Lead Instructor: Elena Plante) 2024

Doctoral Seminar, SLHS 696A, Topic: Current Topics in Reading and Spelling Research, *University of Arizona* (Lead Instructor: Pélagie Beeson) 2022

Graduate Seminar in Speech Disorders, SLHS 696A, Topic: Models of Language: Symbolic Rules vs. Connectionist Account, *University of Arizona* (Lead Instructor: Elena Plante) 2020

Graduate Seminar in Speech Disorders SLHS 696A, Topic: Neuroscience of Language: From Structure to Process, *University of Arizona* (Lead Instructor: Elena Plante) 2020

Disorders of Language Representation and Processing, Guest lecturer <i>Northwestern University</i> (Lead Instructor: Cynthia K. Thompson)	2010
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Workshops Taught

Tracking neuro-physiological changes using MEG/EEG hands-on analysis workshop, <i>Rotman Research Institute, Baycrest Hospital</i>	2013
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Neuroimaging Methods and Analysis Workshop with SPM, Primary Instructor <i>Northwestern University</i>	2010-2011
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STUDENT SUPERVISION AND MENTORSHIP

Independent Studies and Research Rotations Directed

University of Arizona

Research Engagement

Undergraduate (136 students)

Undergraduate Biology Research Project (UBRP)	2022-2025
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Directed Research, BIOC/SLHS/PSIO/NSCS 492/392 (7 students)	2018-2025
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Honors Research Independent Study, SLHS, ECOL, PSIO, NSCS (8 students)	2018-2025
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Undergraduate Honors Thesis, NSCS/NROS/ECOL/PSIO 498H (12 students)	2018-2025
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Independent Research Study, BIOC/ECOL/PSIO/MCB/NSCS/NROS/SLHS 399/499 (95 students)	2017-2025
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Physiology Undergraduate First Year Honors Research Project, W.A. Franke Honors College	2020-2022
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Undergraduate Research Opportunities (UROC)	2019-2020
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Undergraduate Biology Research Project (UBRP)	2018-2019
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Graduate (19 students)

Dissertation (Independent Study), SLHS 920 (multiple semesters)	2023-2025
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Masters Thesis, SLHS 910	2025-2026
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Independent Research Project, PhD, COGS 599 (3 students)	2023-2025
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Graduate Research Rotation, PhD, SLHS 900 (7 students)	2018-2023
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Graduate Independent Study Supervisor SLHS 699/599 (6 students)	2017-2023
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Teaching Engagements (49 students)

Undergraduate Preceptorship supervision for Neurobiology of Language, SLHS 362: SLHS 391/491/491H (34 students)	2016-2025
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Graduate Teaching Assistants supervised: SLHS 362(15 students)	2016-2025
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Northwestern University

Research Engagement

Graduate Laboratory Rotation co-supervisor, School of Communication Sciences and Disorders, Northwestern University	2011
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- Luke Freel
Title: *Event-Related Potential Responses in Primary Progressive Aphasia*

Graduate Independent Study co-supervisor, School of Communication Sciences and Disorders, Northwestern University	2010-2011
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- Eduardo Europa
Title: *Default-mode network in individuals with aphasia*

2010

Graduate Laboratory Rotation Advisor, Interdepartmental Neuroscience Program, Northwestern University	
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- Stephanie Valtierra
Title: *Using EEG to Investigate Language Processing in Healthy Adults and Aphasic patients*

Participation in Honors Programs (12 students)

University of Arizona

Faculty Mentor: Riley Weber, Physiology, Honors Thesis	2024-2025
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Faculty Mentor: Noah Frazier, Cognitive Neuroscience and Linguistics, Honors Thesis	2024-2025
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Faculty Mentor: Emily Abraham, Physiology, Honors Thesis	2022-2023
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Faculty Mentor: Goehring, Elle Elizabeth, NSCS, Honors Thesis	2022-2023
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Faculty Mentor: Emily Abraham, Physiology and W.A. Franke Honors College First Year Honors Independent Research Project	2021-2022
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Title: *Depression, Cognitive Function, and Aging Population*

Faculty Mentor: Nina Fenzl, Independent Honors Project, SLHS362	2021
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Faculty Mentor: Kimberly Skvarla, NSCS 498H, Honors Thesis	2018-2019
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Faculty Mentor: Alexis Morisson, NSCS 498H, Honors Thesis	2018-2019
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Faculty Mentor: Steffi Haya Pertsovsky, NSCS 498H, Honors Thesis	2019-2020
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Faculty Mentor: Zhiying (Mike) Shen, NSCS & Linguistics, 498H, Honors Thesis	2019-2020
Faculty Mentor: Kenna Lovelace, SLHS 499H, Honors Thesis	2018 Spring
Faculty Mentor: Kenna Lovelace, SLHS 491H, Honors Preceptorship	2018 Fall

Mentorship and Advising Activities

Mentoring Programs (13 programs)

Faculty Mentor, <i>Fostering Underrepresented Employees' Resilience and Zeal for Academic (FUERZA)</i> , University of Arizona Mentee: Isabella A. Lopez (4 semesters)	2024-2025
Neuroscience Education and Undergraduate Research Opportunity (NEURO) program, training site at the University of Arizona. NIH-NINDS Program "Enhancing Neuroscience Diversity through Undergraduate Research Education Experiences (ENDURE)	2023-ongoing
Faculty Mentor, QUEST Program in the W.A. Franke Honors College Mentee: Emily Abraham, University of Arizona https://frankehonors.arizona.edu/academics/research/quest-project	2022-2024
Faculty mentor, Undergraduate Biology Research Program (UBRP), summer research opportunity for undergraduate students, University of Arizona Mentees: Noah J. Frazier (4 semesters)	2021-2024
Faculty Mentor, Academy of Aphasia Mentorship Program, Mentees: Danielle Fahey, Kana Nolpez	2021
Faculty mentor, Keep Youth in Science (KEYS) Research Internship Program, BIO5 Institute, University of Arizona	2018-2023
Faculty Mentor, International Exchange Medical Student with Steven Rapcsak, Student: Domink Pizem, University of Arizona	2018
Faculty mentor, Undergraduate Biology Research Program (UBRP), summer research opportunity for undergraduate students, University of Arizona Mentee: Alexis Morrison (3 semesters)	2018-2020
Research Mentor, Undergraduate Research Opportunities Consortium (UROC), University of Arizona: Mentee: Mike Shen (2 semesters)	2018-2020
Faculty mentor, Arizona's Science, Engineering, and Math Scholars program (ASEMS). Mentees: Cristina Aguirre Perez, Jordan Amanda Dasen, Cecillia Cirerol, University of Arizona	2017, 2018
Science Research Project Mentor, Student Science and Technology Research Co-op Program, University of Toronto, Toronto, Ontario, Canada	2016-2017
Science Research Project Mentor, Science and Technology Research Co-op Program, University of Toronto, Toronto, Ontario, Canada and University of Arizona	2017, 2016, 2015

Professional Mentorship (Postdoctoral Fellows)

Mentor, Mentee: Katlyn Nickels, Postdoctoral Fellow funded by Arizona Alzheimer's Consortium Grant. 2023-2025

Project: Treatment of Logopenic Primary Progressive Aphasia

Mentor, Academy of Aphasia, Student Mentorship Program, 2021
Mentees: Danielle Fahey, Kana Nolpez

Mentor, Visiting Scholar, China Ocean University, 2020-2021
Mentee: Yule Peng

Publons Academy Mentor, Member of Publons Academy as a mentor to help train early career researchers in peer review 2020-present

Mentor, Organization for Human Brain Mapping OHBM Student and Postdoc Student Interest Group (SIG), International Online Mentoring Program. 2019-2021
Mentees: Andrew Lyn (University of Kansas), Han Zhang (China)

Student Advising (31 students)

Speech, Language and Hearing Sciences M.S., SLP Professional Program

Sofia Fabi (graduate SP2026) Anna Langerova (graduate SP2026) 2025-2026
Genevieve Mcfarlan (graduate SP2026) Gracie Williams (graduate SP2026)

Libby Egleson (graduate SP2025) Dylan Sadowsky (graduate SP2025) 2024-2025
Miranda Pieper (graduate SP2025) Huiying Liang (graduate SP2025)
Reese Xander (graduate SP2025)

Huiying Liang (graduate SP2024) Emily Navaro (graduate SP2024) 2023-2024
Alexa Liss (graduate SP2024) Madison Zbinden (graduate SP2024)
Alexis Ahumada (graduate SP2024)

Melanie Basinger (graduate SP2022) Harfm Ann Erika (graduate SP2022) 2022-2023
Mandisa Cassell-Stallings (graduate SP2022) Charlotte Reilly (graduate SP2022)
Alyson Lizotte (graduate SP2022) Lisa Tovey (graduate SP2022)
Rachel Neglia (graduate SP2022) Lisa Sheperd (graduate SP2023)
Emilia Banuelos (graduate SP2023)

Kendal Church (graduated SP2019) Chrystal Chau (graduate SP2020) 2016-2021
Patrice Moritz (graduated SP2019) Kimberly Dusto (graduate SP2020)
Abigail Hibala (graduate SP2021) Anna Marchitti (graduate SP2021)
Lauren Lahey (graduate SP2021) Chelsey-Wichmann (graduate SP2021)

Contribution to Clinical Instruction

Created opportunities for supervised clinical and observation hours by clinical faculty (approx. 50 hours) for Speech-Language Pathology MS students at the 2017-2020

University of Arizona within my research laboratory (Sara Mohr, Alysa Sachs, Amelia Guzik)

Theses Directed and in Progress

Undergraduate Honors Theses (9 students)

Physiology, Honors Thesis Student: Riley Weber Title: <i>Neural Correlates of Primary Progressive Aphasia Syndromes and Advances in Neurorehabilitation</i>	2024-2025
Neuroscience & Cognitive Science, Linguistics, Honors Thesis Student: Noah J. Frazier Title: <i>Modeling Effects of Progressive Cortical Atrophy and Stroke Lesions on the Induced Current Flow in Transcranial Direct Current Stimulation (tDCS)</i>	2024-2025
Physiology, W.A. Franke Honors College, University of Arizona Student: Emily Abraham Title: <i>Quantifying perceptions of primary progressive aphasia in students Enrolled in health related majors.</i>	2022-2023
Ecology and Evolutionary Biology, Honors Thesis, University of Arizona Student: Gabrielle Goehring Title: <i>Predictors of Verbal Fluency Performance in Perisylvian Aphasia.</i>	2022-2023
Neuroscience & Cognitive Science, Honors Thesis, University of Arizona Student: Steffi Haya Pertsovsky Title: <i>Effects of Stroke Lesion on Language Performance and White Matter Connectivity in Post-Stroke Aphasia</i>	2019-2020
Neuroscience & Cognitive Science & Linguistics Honors Thesis, University of Arizona Student: Zhiying (Mike) Shen Title: <i>fMRI Localizer Task for Cortical Responses to Phonology, Semantics, and Orthography: A Pilot Study</i>	2019-2020
Neuroscience & Cognitive Science Honors Thesis, University of Arizona Student: Alexis Morisson Title: <i>Narrative and Story Gist Production in Individuals with Chronic Aphasia</i>	2018-2019
Neuroscience & Cognitive Science Honors Thesis, University of Arizona Student: Kimberly Skvarla Title: <i>Electrophysiological Correlates of Verb Argument Structure Processing</i>	2018-2019
Psychology Honors Thesis co-advisor, University of Western Ontario	2004-2005

Student: Katherine Freeman

Title: *An ERP Investigation of Processing and Representation of English Past Tense*

Master's Thesis

Sofia Fabi, Masters of Science, Speech, Language and Hearing Sciences, 2025-2026
University of Arizona
Title: *Symbols Use in Written Narratives by Individuals with Primary Progressive Aphasia.*

Dissertations Directed and in Progress

Chair: Heyri Lee, Major: Speech, Language, and Hearing Sciences, 2025-2029
Minor: Cognitive Sciences, University of Arizona
Graduation expected: Spring 2029

Chair: Fatima Jebahi, Major: Speech, Language, and Hearing Sciences; 2021-2025
Minor: Cognitive Sciences, University of Arizona
Graduation expected Summer 2025

Co-Chair: Katlyn Nickels, Major: SLHS, University of Arizona 2022-2023
co-directed with Pélágie Beeson
Graduated: Spring 2023

PARTICIPATION IN GRADUATE PROGRAMS

Doctoral Dissertation Examination Committees

Student: Laura Baiocco, Psychology Department, University of Arizona, 2025
Graduation Expected Spring 2026 (Chair: Vicky Tzuyin Lai)

Student: Ellen Evelyn Robison Williams, School of Biomedicine Faculty of 2024
Health and Medical Sciences, The University of Adelaide and South Australian
Health and Medical Research Institute (Chair: Prof. Stacie Attrill)
Title: *Non-Invasive Brain Stimulation in the Treatment of Post-Stroke Aphasia: Challenged and Opportunities for Translation.*

Student: Katlyn V. Nickels, Speech, Language, and Hearing Sciences, University 2023
of Arizona Title: *Addressing Phonological Deficit in Primary Progressive
Aphasia* (Chair: Beeson, Co-Chair: Kielar)

Student: Alyssa N. Sachs, Speech, Language, and Hearing Sciences, University 2023
of Arizona Title: *Examining the Consequences of Phonological Impairment in
Aphasia, Alexia, and Agraphia* (Chair: Beeson)

Doctoral Dissertation Prospectus Committees

Laura Baiocco, Psychology Department, University of Arizona 2025

Title: *An Investigation on the Role of Emotion in Metaphor Comprehension via Behavioral and Electrophysiological Measures*

Katlyn V. Nickels, Speech, Language and Hearing Sciences, University of Arizona 2022

Title: *Addressing Phonological Deficit in Primary Progressive Aphasia*

Fatima Jebahi, Speech, Language and Hearing Sciences, University of Arizona 2024

Title: *Characterizing Noun and Verb Retrieval Across Discourse Elicitation Tasks in Logopenic Variant of Primary Progressive Aphasia*

Alysa Sachs, Speech, Language and Hearing Sciences, University of Arizona, 2021
Title: *Examining the Consequences of Phonological Impairment in Aphasia, Alexia, and Agraphia.*

Audiology Doctoral Research Projects (ADP)

Hailey Dean: Audiology, University of Arizona 2023
Title: *Systematic Review of Literature on the Relationship Between Hearing Loss and Dementia* (Chair: Cone)

Aaron Whiteley, Audiology, University of Arizona 2019
Title: *Establishing a Visual Guideline for the Locus of the Auditory Cortex in Humans* (Chair: Musiek)

Jared Carter, Audiology, University of Arizona 2018
Title: *Informational and energetic masking effects on speech-evoked cortical auditory potentials* (Chair: Cone)

Bryan Wong, Audiology, University of Arizona 2018
Title: *Planum Temporale: Morphological Taxonomy of the posterior superior temporal plane* (Chair: Musiek)

Barrett St. George, Audiology, University of Arizona 2017
Title: *Modern Views on the Anatomy of Planum Temporale* (Chair: Musiek)

Doctoral Formative Examinations

Audiology AuD

Bryan Wong, Audiology, University of Arizona 2019
(Chair: Musiek)

Barrett St. George, Audiology, University of Arizona 2017
Title: *The Anatomy of Planum Temporale*
(Chairs: Musiek, Cone)

SLHS PhD

Fatima Jebahi, Speech, Language, and Hearing Sciences, University of Arizona 2021

(Chair: Kielar)	
Katlyn Nickels, Speech, Language, and Hearing Sciences, University of Arizona	2020
(Chair: Beeson)	
Alyssa Sachs, Speech, Language, and Hearing Sciences, University of Arizona	2018
(Chair: Beeson)	

Doctoral Comprehensive Examinations

Audiology AuD

Aaron Whiteley, University of Arizona (Chair: Musiek)	2020
Emily Ann Leady, University of Arizona (Chair: Marrone)	2019
Amber Jahan Sulahria, University of Arizona (Chair: Marrone)	2019
Lauren Ann Renken, University of Arizona (Chair: Marrone)	2019
Bryan Wong, University of Arizona (Chair: Musiek)	2019
Barrett St.George, University of Arizona (Chair: Cone)	2017

Speech Language and Hearing Sciences

Fatima Jebahi, University of Arizona (Chair: Kielar)	2023
Katlyn Nickels, University of Arizona (Chair: Beeson)	2022
Alyssa N. Sachs, University of Arizona (Chair: Beeson)	2021

Psychology

Laura Baiocco, Psychology Department, University of Arizona, Psychology (Chair: Vicky Tzuyin Lai)	2024
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Linguistics

Leah Rice, Department of Linguistics, Minor in Speech, Language, and Hearing Sciences, University of Arizona (Chair Tom Bever, Co-Chair: Kielar)	2019
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Master of Science Examination Committees

Katlyn Nickels, Speech, Language, and Hearing Sciences, University of Arizona (Chair: Beeson)	2021
Heidi Mettler, Speech, Language, and Hearing Sciences, University of Arizona (Chair: Alt)	2019
Alyssa Sachs, Speech, Language, and Hearing Sciences, University of Arizona Title: <i>Long Term Recovery of Naming Abilities in Individuals with Aphasia</i> (Chair: Beeson)	2019
Jared Carter, Audiology, University of Arizona Title: <i>Informational and energetic masking effects on speech-evoked cortical auditory potentials</i> (Chair: Cone)	2018
Alex Tucci, Speech, Language, and Hearing Sciences, University of Arizona Title: <i>Item analysis for the development of the Shirts and Shoes Test for 6-year olds</i> (Chair: Plante)	2017

Grants and Research Support

Current Research Funding

Using Noninvasive Electrical Brain Stimulation to Improve Language in the Logopenic variant of Alzheimer's Disease P30 AG072980 2024-2026

Source: NIH, National Institutes on Aging (NIA) and Arizona Alzheimer's Research Center (ADRC), Arizona Department of Health and Human Services

Role: PI (Co-investigators: Beeson, Rapcsak, Nickels)

Effort: 40 % (Responsibility: 80%)

Amount: \$120,000

Direct: \$120,000, Indirect: \$61,094

Award Period: July 2024-July 2026

Interaction between the BDNF genotype and treatment response to noninvasive brain stimulation in the language variant of Alzheimer's disease. 2023-2026

Source: FY24 RII Core Facilities Pilot Program, Research: Innovation and Impact

Role: PI (Co-investigators: Beeson, Nickels, Maltman)

Effort: 30% (Responsibility 70%)

Amount: requested \$6,331

Direct: \$ 6,331, Indirect: NA

Award Period: June 1, 2024-June, 2025

Teaching Grants

Title: NINDS ENDURE Award Application: Neuroscience Education and Undergraduate Research Opportunity (NEURO) 2025-2027

Source: NINDS

Role: Co-I Faculty mentor (PI: Emily Dennis)

Years of funding: 2024-2026

Credit: 10%, FTE: none

Source: NIH Blueprint Program for Enhancing Neuroscience through Undergraduate Research Education Experiences (BP-ENDURE) (R25)

Amount: Direct: \$3,452,405, Indirect: \$3,295,746

Status: Pending

Enhancing Training Opportunities in Neuroimaging Research Methods 2023-2025

Source: Provost Investemnet Fund

Role: PI (Co-investigators: Patterson)

Effort: 40 % (Responsibility: 50%)

Amount: \$38,000, Indirect: N/A

Award Period: January 2024-December 2025

Completed Research Funding

<p>Language Therapy Paired with Noninvasive Neuromodulation to Enhance Functional Language Skills in Logopenic variant of Alzheimer's Disease Source: Arizona Alzheimer's Consortium, State of Arizona--Arizona Department of Health and Human Services Role: PI (Co-investigators: Beeson, Rapcsak, Borgstrom) Effort: 40 % (Responsibility: 80%) Amount: \$30,693 Direct: \$30,693, Indirect: NA Award Period: July 1, 2023-June 31, 2024</p>	2023-2024
<p>Treatment of language in Alzheimer's Disease (AD) combining behavioral intervention with noninvasive neuromodulation informed by measures of neural responsiveness Source: Innovations in Healthy Aging Initiative, Grand Challenges of Aging, The University of Arizona Health Sciences Role: PI (Co-investigators: Beeson, Rapcsak, Rising, Patterson) Effort: 40% (Responsibility: 80%) Amount Requested: \$100000; Awarded: \$63,487 Direct: \$63,487, Indirect: NA Award Period: May 4th, 2022-April 30th, 2023</p>	2022-2023
<p>Stimulating Language in Alzheimer's Dementia by Combining Noninvasive Neuromodulation and Language Therapy Informed by Multimodal Measures of Neurodynamics Source: Data Science Institute--University of Arizona, National Science Foundation (NSF), UA-Transdisciplinary Research in Principles of Data Science (TRIPODS) Role: PI (Co-investigators: Beeson, Rapcsak, Rising, Basak-Shah) Effort: 40% (Responsibility: 80%) Amount: Requested \$42,553 Direct: \$42,553, Indirect: NA Award Period: January 15-December 15 2022</p>	2022-2023
<p>Enhancing Treatment of Language in Alzheimer's Disease (AD) with Transcranial Direct Current Stimulation (tDCS) Source: Core Facilities Grant, University of Arizona, Research: Innovation and Impact Internal Funding Program Role: PI (Co-investigators: Beeson, Rapcsak, Rising, Basak-Shah) Effort: 40 % (Responsibility: 80%) Amount: \$9,200 Direct: \$9,200, Indirect: NA Award period: June 31, 2021-June 31, 2022</p>	2021-2022
<p>Treatment of language in Alzheimer's Disease (AD): A pilot study of neuromodulation and language therapy informed by measures of neurodynamics</p>	2021-2022

Source: Arizona Alzheimer's Consortium, State of Arizona--Arizona Department of Health and Human Services

Role: PI (Co-investigators: Beeson, Rapcsak, Rising, Fisher, Basak-Shah)

Effort: 40 % (Responsibility: 80%)

Amount awarded: \$30,440

Direct: \$30,440, Indirect: NA

Award period: July 31, 2021-June 31, 2022

Stimulating Language in Alzheimer's Dementia by Combining Noninvasive Neuromodulation and Language Therapy Informed by Multimodal Measures of Neurodynamics 2022

Source: Data Science Institute

Role: PI (Co-investigators: Beeson, Rapcsak, Rising, Basak-Shah)

Award Period: January 15, 2022 -December 15, 2022

Enhancing Treatment of Language in Alzheimer's Disease (AD) with Transcranial Direct Current Stimulation (tDCS) 2021-2022

Source: Core Facilities Grant, University of Arizona, Research: Innovation and Impact Internal Funding Program

Role: PI (Co-investigators: Beeson, Rapcsak, Rising, Basak-Shah)

Effort: 40 % (Responsibility: 80%)

Amount: \$9,200

Direct: \$9,200, Indirect: NA

Award period: June 31, 2021-June 31, 2022

Awarded

Development of Personalized Non-Invasive Neurostimulation Protocol for Treatment of Language Deficit in Post-Stroke Aphasia 2019-2021

Source: BIO5 Institute University of Arizona: Team Scholars Program

Role: PI (Co-investigators: Beeson, Rapcsak, Chou)

Effort: 30 % (Responsibility: 80%)

Amount awarded: \$80,451

Direct: \$80,451, Indirect: N/A

Award period: June 30, 2019-June 30, 2021

Development of Individualized Neuromodulation Protocol for Treatment of Language Deficits in Stroke Aphasia 2019-2020

Source: Core Facilities Grant, University of Arizona

Role: PI

Amount awarded: \$10,000

Direct: \$10000, Indirect: NA

Award period: May 15, 2019-May 14, 2020

Individualized Neuromodulation Protocol for Treatment of Language Deficits in Stroke-Related Aphasia 2019-2020

Source: University of Arizona College of Science Dean's Innovation and Education Award

Role: PI
 Effort: 40 % (Responsibility: 100%)
 Amount awarded: \$10,000
 Direct: \$15000, Indirect: NA
 Award period: June 30, 2019-April 30, 2021

Neural Correlates of Grammatical Deficit in Stroke-Related Aphasia: Role of Word Sound and Meaning 2017-2018

Source: Faculty Seed Grant, University of Arizona

Role: PI
 Effort: 20 % (Responsibility: 100%)
 Amount awarded: \$10,000
 Direct: \$10000, Indirect: NA
 Award period: June 15, 2017-June 15, 2018

HONORS AND AWARDS

Nominated for Young Investigator Paper Award, the International Federation of Clinical Neurophysiology (IFCN).	2022
University of Arizona College of Science Dean's Innovation Award	2019-2020
Nominated for Sloan Research Fellowship: College of Science, University of Arizona	2019
Ontario Research Coalition Early Researcher Award: \$2,750	2012-2013
Ontario Research Coalition Early Researcher Award: \$3,385	2011-2012
Western Graduate Research Scholarship: \$5,000	2007
Alzheimer's Society Graduate Research Award: \$11,500	2006-2007
Ontario Graduate Scholarship (OGS): \$15,000	2006-2007
Western Graduate Research Scholarship: \$1,000	2006
Natural Science and Engineering Research Council of Canada (NSERC: PGS-B) Scholarship: \$38,000	2004-2006
Graduate Tuition Scholarship, The University of Western Ontario: \$6,000	2004-2005
Ontario Graduate Scholarship for Science and Technology (OGSST): \$15,000	2003-2004
Special University Scholarship, The University of Western Ontario: \$5,000	2002-2003
Ontario Graduate Scholarship (OGS): \$15,000	2001-2002
University of Toronto Fourth Year Honours List	2000
University of Toronto, Third Year Honours List	1999
The University of Toronto Women's Association, Lois Dove Memorial Scholarship: \$1,000	1999
Ontario Scholar Award	1995

PROFESSIONAL DEVELOPMENT ACTIVITIES

Research Workshops and Seminars

Diffusion Weighted Imaging Summer Student Group Discussions, University of Arizona	2024
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Neuroimaging Workshops: Research Innovation and Impact (RII)	2022-2023
TMS safety workshop, University of Arizona	2020
Rigor, Reproducibility, Replicability, and Generalizability in Scientific Research, RII, University of Arizona	2020
Data management on High Performance Computing Systems, University of Arizona	2019
Introduction to High Performance Computing, University of Arizona	2019
Brain Imaging, Genetics and the Prevention of Alzheimer's Disease, Genetics and Genomics Grand Rounds Eric M. Reiman, MD	2019
Brain Mapping Workshop, University of Arizona	2016-2020
EEG Source Localization Workshop, EGI, Eugene, OR	2018
Transcranial Magnetic Stimulation Workshop, BIO5, University of Arizona	2018
Bayesian Statistics: A Paradigm for the 21 st Century Science BIO5 Institute, University of Arizona	2018
Lesion-symptom mapping techniques workshop	2018
Advanced data analysis using dense array EEG, EGI, Eugene, OR	2017
Grant Writing SLHS 696A	2017
Introduction to Transcranial Magnetic Stimulation Workshop	2015
Introduction to Partial Least Squares (PLS)	2015
Stroke Program in Neurorecovery (SPiN), University of Ottawa, Ottawa, Canada	2014
Tracking Neurophysiological Changes using MEG/EEG Workshop Baycrest Hospital, Toronto, Ontario	2013
Signal Processing in MATLAB Workshop Baycrest Hospital, Toronto, Ontario	2013
Discourse in Dementia and Aphasia: Assessment and Treatment Workshop	2012

Baycrest Hospital, Toronto, Ontario

MEG training workshop organized by the Canada MEG Consortium 2011
University of Montreal, Montreal, Quebec

Multimodal Functional Neuroimaging: Integrating EEG, MEG and fMRI 2011
OHBM, Quebec

Neuroimaging in Aphasia Treatment Research Workshop 2009
Northwestern University, Evanston, IL

Advanced Workshop in SPM8 for Network Analysis 2008
Northwestern University, Chicago, IL

Professional Communication Workshop 2000
University of Western Ontario, London, Ontario

CONTRIBUTION TO INSTRUCTIONAL INNOVATIONS

Teaching Workshops

Mentor Institute Mentorship Through Effective Networks, Transformational 2024 Summer
Opportunities, and Research Training

Increasing diversity, Developing and Strengthening a Pipeline of Diverse 2024 Fall
Students and Faculty (Facilitator: Dr. Kia Johnson)

Faculty Learning Communities (FLC): Using Artificial Intelligence tools in 2023 Fall
classroom teaching to help students learn (Facilitator: Kathleen Kennedy)

Faculty Learning Communities (FLC): Small Teaching (Facilitator: Amy Lynn 2022 Fall
Graham)

Faculty Learning Communities (FLC). What Inclusive Instructors Do: Principles 2022 Spring
and Practices for Excellence in College Teaching

Faculty Learning Communities (FLC). Small Teaching On-line (Facilitators: 2020 Fall
Tierra Stimson, Dana Narter)

Teaching with Zoom: See and Do Online Workshops (UA-1661-1) 2020

Building your D2L Course Site 2020

OIA Synchronous Teaching & Learning 2020

Teaching a Large Online Course Mini-Course 2020

Faculty Learning Communities, Teaching Initiative, Undergraduate STEM Education Project Faculty Learning Community	2016-2020
Diversity in the Classroom Workshop Series, University of Arizona	2020
Faculty Learning Communities (FLC). Small Teaching On-line (Facilitators: Tierra Stimson, Dana Narter)	2020
Leader in Classroom: Diversity and Inclusion Certificate, University of Arizona	2019
Spreading Science Through Education, Science Diplomacy and New Career Paths: Some Lessons Learned from Experience	2018
Design for Learning Instructional Workshop, Office of Instructional Assessment (OIA), University of Arizona	2018
Undergraduate STEM Education Project Faculty Learning Community (FLC) Participant (Facilitators: Veronica Mullins, Richard Harper) University of Arizona, Association of American Universities	2018
Coaching for our Future: Issues in Supervision University of Arizona	2017
AAU STEM Faculty Learning Communities participant University of Arizona	2016-2018
CUES, UA Learning Initiative: Improving How Universities Teach Science	2017
Undergraduate STEM Education Project Faculty Learning Community (FLC) Participant (Facilitators: Erin Docter, Ray Barnes) University of Arizona, Association of American Universities	2017
Undergraduate STEM Education Project Faculty Learning Community (FLC) Participant (Facilitator: Mary Alt) University of Arizona, Association of American Universities	2016

CURRICULUM AND COURSE DEVELOPMENT

Co-Chair: Neuroimaging Curriculum Committee, Cognitive Science Graduate Interdisciplinary Program, University of Arizona	2023-ongoing
Course Development: COGS505 and NSCS405 AZ Online courses for graduate and undergraduate curriculum, Cognitive Science GIDP and Neuroscience	2023-2025
Curriculum Development: Graduate Certificate in Neuroimaging Methods	2021-2023

Course Development: SLHS597 Introduction to Neuroimaging Methods and Applications	2018-2021
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Curriculum Committee: Neuroscience Cognitive Science (NSCS)	2016-2020
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MIDSEMESTER PEER TEACHING OBSERVATIONS

Teaching Evaluations

COGS 505 by Jannette Hoit, SLHS	2023 Spring
SLHS 362 by Florian Hafner, SLHS	2023 Fall
SLHS 362 by Kate Bunton, SLHS, Instructional Support, Office of Academic Affairs	2022 Fall
SLHS 597 by Jannette Hoit, SLHS	2018 Spring
SLHS362 by Erin Docter, OIA	2017 Fall

Observation of Other Instructors

Teaching Observation: Dianne Patterson, SLHS 399, 497, 597, Computer Skills for Research Lab	2018
Teaching Observation: Veronica Mullins, NSC 150C1 Sustainable Nutrition and Food Systems (120)	2017
Teaching Observation: Elena Plante, Grant Writing Workshop	2017
Teaching Observation: Amy Graham, General Chemistry, SEL200	2016

SERVICE AND OUTREACH

Local and State Outreach

BIO5 Research and Innovation Showcase Event, University of Arizona	2024 Fall
Brain Imaging Center Data Blitz, University of Arizona, Research Talk: <i>Multimodal Neuroimaging of Language</i> .	2023 Fall
Language and Neuroimaging Research. Presented at the Undergraduate Biology Research Project (UBRP) Outreach Event, University of Arizona.	2022 Fall
Community Lecture, <i>Neuromodulation Approaches to Aphasia Treatment</i> . Tucson Aphasia Center. Presented research talk to the community members, patients and clinicians.	2019 Spring
Community lecture, <i>Language and the Brain</i> . Tucson Aphasia Center. Presented research talk to the community members, patients and clinicians.	2018 Spring
Research Match-Making, Physiology Undergraduate Program, University of Arizona	2017 Spring
Undergraduate Biology Research Project (UBRP) recruitment event, University of Arizona. <i>Neuroimaging of Language</i> .	2017 Spring

Department of Linguistics recruitment event, University of Arizona.
Investigation of Language with Neuroimaging.

2017 Fall

National and International Service

Editorial Contributions to Science

Review Board Member: *OBM Neurobiology* 2023

Guest Associate Editor: *Frontiers in Aging Neuroscience*, Special Topic
 Collection: *Oscillatory Brain Activity as a Marker of Brain Function and
 Dysfunction in Aging and in Neurodegenerative Disorders*. Reviewed and
 Edited 10 research papers. 2020-2022

Guest Associate Editor: *Frontiers in Alzheimer's Disease and Related
 Dementias* 2021-2022

Guest Associate Editor: *Aging Neuroscience Archive* 2021-2022

Editorial Board Member: *NeuroSci* 2020-2022

Associate Editor: *Frontiers in Aging Neuroscience* 2020-present

Review Editor: *Frontiers in Human Neuroscience* 2020-present

Editorial Board Member: *Frontiers* 2020-present

Associate Editor: *Frontiers in Aging Neuroscience* 2020-2022

Scientific Board

Member: Academy of Aphasia Board 2023,
 2024, 2025

Reviewer for Scientific Peer-Reviewed Journals (35 journals)

Reviews (multiple rounds) were completed for these journals

<i>Alzheimer's and Dementia</i>	2022, 2024
<i>Aphasiology</i>	2020, 2022, 2024
<i>Bilingualism, Language and Cognition</i>	2018, 2019
<i>Brain and Behavior</i>	2020
<i>Brain Sciences</i>	2021, 2024
<i>Cortex</i>	2015, 2016, 2018
<i>eLife</i>	2020
<i>eNeuro-Society of Neuroscience</i>	2018
<i>European Journal of Neuroscience</i>	2019, 2022
<i>Frontiers in Aging Neuroscience</i>	2021, 2022 x 5 papers
<i>Frontiers in Communication: Psychology of Language</i>	2021

<i>Frontiers in Neuroscience: Auditory Cognitive Neuroscience</i>	2020
<i>Frontiers in Human Neuroscience</i>	2022 x2
<i>Brain Imaging and Stimulation</i>	
<i>Frontiers in Human Neuroscience</i>	2022
<i>Cognitive Neuroscience</i>	
<i>Frontiers in Human Neuroscience: Speech and Language</i>	2016
<i>Frontiers in Neuroscience: Brain Imaging Methods</i>	2021
<i>Frontiers in Psychology: Language Sciences</i>	2019
<i>Journal of Visualized Experiments (JoVE)</i>	2023
<i>Human Brain Mapping</i>	2016, 2023
<i>Journal of Neuroscience</i>	2019
<i>Neurobiology of Aging</i>	2019, 2020
<i>Neurobiology of Language</i>	2021
<i>NeuroCase</i>	2021
<i>NeuroImage</i>	2014, 2019, 2020, 2021, 2022, 2024
<i>NeuroImage: Clinical</i>	2019, 2020, 2021, 2022 2023
<i>Neuropsychologia</i>	2009, 2015, 2018
<i>Neurorehabilitation and Neural Repair</i>	2019, 2023
<i>Neuropsychological Rehabilitation</i>	2018, 2019, 2020, 2021
<i>PLOS ONE</i>	2024
<i>Scientific Reports-Nature</i>	2018, 2021
<i>The International Journal of High School Research</i>	2020
<i>OBM Neurobiology</i>	2020

Conference Reviewer

63 rd Annual Meeting of the Academy of Aphasia, San Diego, California	2025
62 nd Annual Meeting of the Academy of Aphasia, Nara, Japan	2024
61 st Annual Meeting of the Academy of Aphasia, Reading, London, England	2023
New Ways of Analyzing Variation 49 Conference (NWAV 49)	2021
49 th Clinical Aphasiology Conference (CAC)	2019
20 th International Conference on Biomagnetism (BIOMAG)	2016

Grant Proposal Reviewer

National Institutes of Health, National Institute on Deafness and Other Communication Disorders (NIH/NIDCD), Clinical Trials in Communication Disorders.	2025
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Arizona Alzheimer's Disease Research Center, Developmental Grants Reviewer	2025
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Arizona Alzheimer's Consortium Pilot Project Grant Applications, Arizona Alzheimer's Disease Research Center	2024
National Institutes of Health, National Institute on Deafness and Other Communication Disorders, Language and Communication (LCOM) Study Panel (NIH/NIDCD).	2024
National Institutes of Health, National Institute of Deafness and other Communication Disorders (NIH/NIDCD), Language and Communication Study Section, Biobehavioral and Behavioral Processes Integrated Review Group (8 applications)	2023
National Institute of Neurological Disorders and Stroke (NINDS) Special Emphasis Panel, Clinical trials and Biomarker studies in StrokeNet (2 applications)	2023
National Institutes of Health, National Institute on Deafness and Other Communication Disorders (NIH/NINDS): Voice Speech and Language, Applications for Research Opportunities for New Investigators to Promote Workforce Diversity (R01 and F31, 4 applications)	2023
National Institutes of Health, National Institute of Neurological Disorders and Stroke (NIH/NINDS) StrokeNet Review Panel (5 applications)	2022
National Institutes of Health, National Institute of Deafness and other Communication Disorders, Special Emphasis Panel. Voice Speech and Language Review (7 applications)	2022
Medical Research Council, United Kingdom, Type: Clinician Scientist Fellowships	2019
Medical Research Council, United Kingdom. Type: Senior Fellowships in Hearing Research	2018
Medical Research Council, United Kingdom. Type: Research Grant Proposals, Neurosciences & Mental Health Board	2018
Medical Research Council, United Kingdom, Type: Research Grant Proposals	2017, 2018
Medical Research Council, United Kingdom. Type: Research Grant Proposals, Neurosciences & Mental Health Board	2017
Medical Research Council, United Kingdom. Type: Research Grant Proposals, Neurosciences & Mental Health Board	2017
Rotman Research Institute Internal Review Committee	2012, 2013

Conference Planning and Program Committees

Chair: Program and Organizing Committee 63 rd Annual Meeting of the Academy of Aphasia, San Diego, California	2024-2025
Vice-Chair, Program and Organizing Committee 62 nd Annual Meeting of the Academy of Aphasia, Nara, Japan	2023-2024
Program Committee 49th Clinical Aphasiology Conference (CAC)	2019

Departmental Committees

University of Arizona

Student Awards and Scholarship Reviewer for Speech Language and Hearing Sciences	2024, 2025
Chair: Information Technology Specialist Search Committee, SLHS (served till June 2023)	2023
Member and Reviewer: Tenure-Track Faculty Search Committee (15 applications reviewed, 2 faculty hired)	2022-2023
Reviewer: PhD Admissions (Professional Programs)	2022-2024
Reviewer: MS Admissions (Professional Programs)	2022-2024
Member and Contributor: Strategic Initiatives Building our Team Task Force	2021, 2022
Member: Student Recruitment & Involvement Group	2021
Member: Graduate Admissions and Policy	2020, 2021
Member and Reviewer: Doctoral Admission	2019, 2021
Faculty Member and Department Representative, ASHA Convention Graduate School Fair	2021
Member: Graduate Student Orientation Days	2017-2020
Member: Graduate Student Recruitment/Visitation Days	2017-2022
Organizer: SLHS Colloquium, Data Blitz Event	2017

College Committees

Chair: College of Science Faculty Council	2025-2026
College of Science Faculty Council Representative for SLHS	2024-2025
Chair: IT Manager Search Committee, Brain Mind and Behavior	2023
Co-Chair Program Development and Admission Committee: Graduate Certificate in Neuroimaging Methods, CoGSci GIDP	2022-2026
Member: MRI Scientist Search Committee, Translational Bioimaging Resources	2021-2022
Member: Clinical Neuropsychology Tenure Track Faculty Hire Search Committee, Department of Psychology, University of Arizona	2022
Member: SLHS Tenure Track Faculty Hire Search Committee	2022
Chair: IT Manager Search Committee, Brain Mind and Behavior	2021
Member: Data Safety and Monitoring Board, Psychology	2018, 2021
Member: Brain Mapping Workshop Group	2016-2021

University Committees

Speaker Host: CogSci GIDP Colloquium and (visitor: Dr. Kyrana Tsapkini): Cognitive Science Seminar Series, Graduate Interdisciplinary Program in Cognitive Science (GIDP)	2025
Member: The Future of Cognitive Science at the University of Arizona Planning Committee	2024

Member: Scientific Advisory Committee, Brain Imaging Center Initiative (BICI) at the University of Arizona	2022-2023
Co-chair: Neuroimaging Curriculum Committee. Leading development of coursework for graduate and undergraduate education at University of Arizona	2023
Member and Reviewer: Provost Investment Fund (PIF) Grant Proposal Review Committee (16 proposals)	2023
Reviewer: Outstanding Postdoctoral Scholar Award Application Review Panel	2023
Co-Chair and Program Oversight Committee, Certificate in Neuroimaging Methods, Graduate Interdisciplinary Program in Cognitive Science (GIDP)	2021-2026
Speaker Host: CogSci GIDP Colloquium and (visitor: Dr. Priyanka Shah-Basak): Cognitive Science Seminar Series, Graduate Interdisciplinary Program in Cognitive Science (GIDP)	2022
Grant Reviewer: Research Development Services (RDI)	2022
Grant Reviewer: Research Advancement Grants Program, Research Innovation and Impact (RII)	2021
Member: Cognitive Science GIDP Executive Committee	2021-present
Member: Translational Bioimaging Resource (TBIR) 3T Advisory Committee	2019-2022
Judge, Grad Slam: University of Arizona Graduate College Competition	2018
Member: MRI Operations Committee Member, Faculty Research Advisory Committee (FRAC)	2018-2022
Member: Curriculum Committee, Neuroscience Cognitive Science (NSCS) Curriculum Committee	2016-2020

PROFESSIONAL MEMBERSHIP

	<u>Member Since</u>
Arizona Alzheimer's Consortium	2023
American Society of Neurorehabilitation (ASNR)	2022
American Speech-Language and Hearing Association (ASHA)	2017
Special Interest Group 2 Neurogenic Communication Disorders, American Speech-Language-Hearing Association (ASHA)	2017
Academy of Aphasia (AoA)	2014

The Psychonomic Society	2014
Heart and Stroke Foundation Canadian Partnership for Stroke Recovery	2013
Canadian Association for Neuroscience	2012
Organization for Human Brain Mapping (OHBM)	2009
Society for Neurobiology of Language (SNL)	2009
Cognitive Neuroscience Society (CNS)	2006

MEDIA FEATURES

University of Arizona in the News: “Novel treatment approach for language disorder shows promise”. https://news.arizona.edu/news/novel-treatment-approach-language-disorder-shows-promise	Spring 2025
The Morning Voice where we celebrate the WONDER! at the University, “Treatment for aphasia with brain stimulation”. Broadcasting from the Bustos Media studios at KVOI Radio, Tucson, Arizona.	Spring 2025
Eureka Alert: “Novel treatment approach for language disorder shows promise” https://www.eurekaalert.org/news-releases/1081217	Spring 2025
Medical Press: Combining brain stimulation with speech therapy shows promise for restoring language in primary progressive aphasia, https://medicalxpress.com/news/2025-04-combining-brain-speech-therapy-language.html	Spring 2025
ScienceDaily: “Novel treatment approach for language disorder shows promise” https://www.sciencedaily.com/releases/2025/04/250421221121.htm	Spring 2025
Arizona Alzheimer’s Consortium: video interview summarizing my research for lay audiences and expressing the exciting possibilities it holds for Alzheimer's disease research. https://vimeo.com/showcase/10683891	Fall 2023
Biz Tucson, featured in the article: “Fighting Aphasia” University of Arizona a Leader in Speech, Language & Hearing Sciences	Fall 2022
Radio Broadcast, Thesis Thursday, KXCI 91.3: “Neuromodulation in Dementia”	May 25, 2020
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Some can combat dementia by enlisting still healthy parts of the brain <http://healthmedicinet.com/i/some-can-combat-dementia-by-enlisting-still-healthy-parts-of-the-brain/> April 17, 2018

SKILLS

Neuroimaging Analysis:	functional magnetic resonance imaging (fMRI; task-based, resting state); voxel based morphometry, voxel-lesion symptom mapping, lesion segmentation, noninvasive neuromodulation (tDCS, rTMS)
Electrophysiology:	ERPs, EEG-task and resting state, oscillatory signals
Software	SPM, CONN Toolbox, AFNI, ITK-Snap, BrainVision Analyzer, NetStation Tools, Neuroscan data acquisition and analyzer, EEGLab, ERPLab
Hardware	High density Electro Geodesic Lab, Geodesic Sensor Net (GSN), MagPro Stimulator, NeuroConn stimulator, Localite TMS neuronavigation