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**EDUCATION**

- 2019 Ph.D., Speech and Hearing Science, Arizona State University, Tempe, AZ.  
2015 M.S., Communication Disorders, Arizona State University, Tempe, AZ.  
2011 B.S., Psychology, University of Vermont, Burlington, VT.

**PROFESSIONAL APPOINTMENTS**

- 2022- Assistant Professor, Department of Speech, Language, and Hearing Sciences, Purdue University, West Lafayette, IN.  
2018-2022 Assistant Professor, Speech-Language Pathology Program, Midwestern University, Glendale, AZ.  
2019- Adjunct Faculty, College of Health Solutions, Arizona State University, Tempe, AZ.  
2018 Clinical Supervisor, Arizona State University Speech and Hearing Clinic, Tempe, AZ.  
Clinical Populations: Aphasia, TBI  
2014-2019 Site Project Manager, Multisite Aphasia Research Consortium (NIDCD, R01 DC009659 & DC03681), Arizona State University, Tempe, AZ.

**PUBLICATIONS: PEER-REVIEWED**

(\* = Student under my mentorship; † = co-first author listed in alphabetical order)

1. Rogalsky, C., Basilakos, A., Rorden, C., Pillay, S., **LaCroix, A. N.**, Keator, L., Mickelsen, S., Anderson, S. W., Love, T., Fridriksson, J., Binder, J., & Hickok, G. (2022). The neuroanatomy of speech processing: A large-scale lesion study. *Journal of Cognitive Neuroscience*, 34(8), 1355-1375.
2. **LaCroix, A. N.**, \*James, E., & Rogalsky, C. (2021). Neural resources supporting language production versus comprehension in chronic post-stroke aphasia: an activation likelihood estimate study. *Frontiers in Human Neuroscience*, 1-23.
3. †Fitzhugh, M. C., †**LaCroix, A. N.**, & Rogalsky, C. (2021). Distinct contributions of working memory and attentional control to sentence comprehension in noise in persons with stroke. *Journal of Speech, Language, and Hearing Research*, 1-12.
4. **LaCroix, A. N.**, Baxter, L. C., & Rogalsky, C. (2021). Auditory attention following a left hemisphere stroke: comparisons of alerting, orienting, and executive control performance using an auditory Attention Network Test. *Auditory Perception and Cognition*, 1-14.
5. **LaCroix, A. N.**, Tully, M., & Rogalsky, C. (2020). Assessment of alerting, orienting, and executive control in persons with aphasia using the Attention Network Test. *Aphasiology*, 1-16.
6. **LaCroix, A. N.**, Blumenstein, N., Tully, M., Baxter, L. C., & Rogalsky, C. (2020). Effects of prosody on the cognitive and neural resources supporting sentence comprehension: A behavioral and lesion-symptom mapping study. *Brain and Language*, 203, 104756.

7. **LaCroix, A. N.**, Blumenstein, N., Houlihan, C., & Rogalsky, C. (2019). The effects of prosody on sentence comprehension: Evidence from a neurotypical control group and seven cases of chronic stroke. *Neurocase*, 1-12.
8. Rogalsky, C., **LaCroix A. N.**, Chen, K., Anderson, S. W., Damasio, H., Love, T., & Hickok, G. (2018). The neurobiology of agrammatic sentence comprehension: a lesion study. *Journal of Cognitive Neuroscience*, 30(2), 234-255.
9. **LaCroix, A.**, Diaz, A. F., & Rogalsky, C. (2015). The relationship between the neural computations for speech and music is context-dependent: a review and meta-analysis. *Frontiers in Psychology*, 6, 1138.

### **INVITED TALKS & ORAL CONFERENCE PRESENTATIONS**

1. **LaCroix, A. N.** & Rogalsky, C. (2020, November). *Auditory attention in persons with aphasia: comparisons of alerting, orienting, and executive control performance in an auditory Attention Network Test*. Paper presented at the 19th annual Auditory Perception, Cognition, and Action Meeting, Virtual event.
2. Christensen, S., Lyons, J., & **LaCroix, A. N.** (2020, November). *Attention Control in Aphasia: Insights Gained from a Non-verbal Auditory Attention Control Task*. Paper presented at the 2020 American Speech-Language-Hearing Association Annual Convention, San Diego, CA, USA (event canceled).
3. Wash, E., Wolford, G., & **LaCroix, A. N.** (2020, November). *Clinical Education Outcomes from an Intensive Aphasia Treatment Protocol*. Paper presented at the 2020 American Speech-Language-Hearing Association Annual Convention, San Diego, CA, USA (event canceled).
4. **LaCroix, A. N.** & Rogalsky, C. (2019, March). *Alerting, orienting, and executive control: Post-stroke effects of attention abilities on speech comprehension*. Paper presented at the 2019 Cognitive Neuroscience Society Meeting, San Francisco, CA, USA.
5. **LaCroix, A.**, Fitzhugh, M. C., & Rogalsky, C. (2018, March). *Combining the powers of neuroimaging and neuropsychology to improve speech comprehension post-stroke*. Invited CEU oral presentation, Community Partnerships: Research and Supervision Update. Arizona State University, Tempe, AZ, USA.
6. **LaCroix, A.**, Cai, J., Baxter, L., & Rogalsky, C. (2016, November). *The relationship between functional reorganization, language and cognition post-stroke: A neuroimaging and behavioral case study*. Paper session presented at the 2016 American Speech-Language-Hearing Association Annual Convention, Philadelphia, PA, USA.
7. Rogalsky, C., **LaCroix, A.**, Chen, K., Andersen, S. W., Damasio, H., Love, T., & Hickok, G. (2015, October). *Damage to Broca's area OR the anterior temporal lobe is implicated in stroke-induced agrammatic comprehension: It depends on the task*. Paper session presented at the 53<sup>rd</sup> Meeting of the Academy of Aphasia, Tucson, AZ, USA.
8. Cai, J., Diaz, A., **LaCroix, A.**, Blumenstein, N., Hays, G., Baxter, L., & Rogalsky, C. (2015, April). *Functional reorganization of language and music perception post-stroke: fMRI and behavioral evidence*. Paper session presented at the 2015 Arizona Speech-Language-Hearing Association Convention, Phoenix, AZ, USA.

### **POSTER PRESENTATIONS**

(\* = Student under my mentorship)

1. \*Levi, S., \*Zwyghuizen, S., Smith, L., & **LaCroix, A. N.** (2022, April). *Adapting VNEST to treat Spanish language deficits in aphasia*. Poster session presented at the 2022 Arizona Speech-Language-Hearing Association Convention, Litchfield Park, AZ, USA.
2. \*DeClue, E., \*Schabarum, K., Wash, E., & **LaCroix, A. N.** (2022, April). *The effects of exercise on verbal language in aphasia*. Poster session presented at the 2022 Arizona Speech-Language-Hearing Association Convention, Litchfield Park, AZ, USA.
3. \*McMillon, A., \*Perreira, S., & **LaCroix, A.N.** (2022, April). *A preliminary study investigating the relationship between the Attention Network Test and the Test of Everyday Attention*. Poster presented at the 2022 Kenneth A Suarez Research Day, Midwestern University, Glendale, AZ, USA.
4. \*Dovorany, N. & **LaCroix, A.N.** (2022, April). *The impact of music on attentional control performance*. Poster presented at the 2022 Kenneth A Suarez Research Day, Midwestern University, Glendale, AZ, USA.
5. Ratiu, I., \*Greene-Winek, A., \*Simon, S., \*Groth, H., **LaCroix, A.N.** (2021, November). *Are complex verbal tasks more sensitive to deficits of mild traumatic brain injury?* Poster presented at the hybrid Annual Meeting of the Psychonomic Society, New Orleans, LA.
6. \*Perreira, S., \*McMillon, A., & **LaCroix, A.N.** (2021, November). *Auditory attention, visual attention, and speech perception in persons with aphasia: a preliminary study*. Poster presented at the 20th annual Auditory Perception, Cognition, and Action Meeting, Virtual event.
7. \*Groth, H., Ratiu, I., & **LaCroix, A.N.** (2021, April). *The relationship between word finding and cognition: an eye-tracking study*. Poster presented at the 2021 Kenneth A Suarez Research Day, Midwestern University, Glendale, AZ, USA.
8. Winek-Greene, A., **LaCroix, A.N.**, & Ratiu, I. (2021, April). *Executive function and lexical assess in individuals with mild traumatic brain injury*. Poster presented at the 2021 Kenneth A Suarez Research Day, Midwestern University, Glendale, AZ, USA.
9. \*Levanovic, L., \*Schumacher, S., & **LaCroix, A. N.** (2020, November). *Effects of an Intensive Therapy Program for Aphasia on Quality of Life*. Poster presented at the 2020 American Speech-Language-Hearing Association Annual Convention, San Diego, CA, USA (event canceled).
10. \*Kure, G. & **LaCroix, A. N.** (2020, November). *Changes in Quality of Life Following Participation in a Conversation-Based Stroke Support Group*. Poster presented at the 2020 American Speech-Language-Hearing Association Annual Convention, San Diego, CA, USA (event canceled).
11. **LaCroix, A. N.** & Christensen, S. C., (2020, November). *Impact of an Intensive Treatment Program on Agrammatism in Persons with Aphasia*. Poster presented at the 2020 American Speech-Language-Hearing Association Annual Convention, San Diego, CA, USA (event canceled).
12. **LaCroix, A. N.**, \*James, E., Hays, G., & Rogalsky, C. (2020, October). *The role of the right hemisphere in receptive and productive language recovery: an activation likelihood estimate study*. Poster session presented at the 2020 Meeting of the Society for the Neurobiology of Language, Virtual event.
13. Hsueh, Y., Zhu, H., **LaCroix, A. N.**, Fitzhugh, M. C., DePinto, E., Alaaf, Z., Mallapragada, S., Baxter, L. C., & Rogalsky, C. (2020, October). *An investigation of the relationships between right hemisphere structural MRI measures and language abilities in left hemisphere stroke*

- survivors. Poster session presented at the 2020 Meeting of the Society for the Neurobiology of Language, Virtual event.
14. Fitzhugh, M. C., **LaCroix, A. N.**, Rogalsky, C. (2020, October). Distinct contributions of working memory and attentional control to sentence comprehension in noise in individuals with left hemisphere stroke. Poster session presented at the 2020 Meeting of the Society for the Neurobiology of Language, Virtual event.
  15. **LaCroix, A. N.**, Rehwalt, C., Ordaz, E., & Rogalsky, C. (2020, May). *Attention! Behavioral evidence of distinct contributions of attention and working memory to speech comprehension.* Poster session presented at the 2020 Cognitive Neuroscience Society Meeting, Boston, MA, USA.
  16. **LaCroix, A. N.**, Tully, M., Chao, S., Daliri, A., & Rogalsky, C. (2019, November). *An investigation of auditory motor integration following left hemisphere stroke using auditory feedback perturbation.* Poster session presented at the 2019 American Speech-Language-Hearing Association Convention, Orlando, FL, USA.
  17. **LaCroix, A. N.** & Rogalsky, C. (2019, March). *Alerting, orienting, and executive control: Post-stroke effects of attention abilities on speech comprehension.* Poster session presented at the 2019 Cognitive Neuroscience Society Meeting, San Francisco, CA, USA.
  18. **LaCroix, A. N.**, Cai, J., Baxter, L. C., & Rogalsky, C. (2018, November). *Using prosody to improve spoken language comprehension in aphasia.* Poster session presented at the 2018 American Speech-Language-Hearing Association Convention, Boston, MA, USA.
  19. **LaCroix, A. N.**, Cai, J., Baxter, L. C., & Rogalsky, C. (2018, April). *Using prosody to improve spoken language comprehension in aphasia.* Poster session presented at the 2018 Arizona Speech-Language-Hearing Association Convention, Tucson, AZ, USA.
  20. Rehwalt, C., **LaCroix, A. N.**, & Rogalsky, C. (2018, April). *The effects of music on auditory-motor integration for speech: A behavioral study of older adults.* Poster session presented at the 2018 Arizona Speech-Language-Hearing Association Convention, Tucson, AZ, USA.
  21. **LaCroix, A.**, Johnson, L., Blumenstein, N., Maze, S., Baxter, L. C., & Rogalsky, C. (2017, March). *The neurobiology of prosody and sentence structure: A fMRI study.* Poster session presented at the 2017 Cognitive Neuroscience Society Meeting, San Francisco, CA, USA.
  22. **LaCroix, A.**, Blumenstein, N., Houlihan, C., & Rogalsky, C. (2016, August). *Shared and distinct cognitive resources for syntax and prosody: a sentence comprehension study.* Poster session presented at the 2016 Meeting of the Society for the Neurobiology of Language, London, England.
  23. **LaCroix, A.**, Rogalsky, C., Chen, K., Hays, G., Anderson, S. W., Damasio, H., Love, T., & Hickok, G. (2015, March). *The neurobiology of agrammatic sentence comprehension: A lesion study.* Poster session presented at the 2015 Cognitive Neuroscience Society Meeting, San Francisco, CA, USA.

### AWARDS AND GRANTS

2021	Grammy Museum Research Grant (\$20,000; not funded)
2020	ASHFoundation New Investigators Research Grant (\$10,000; not funded)
2018-2019	American Heart Association Predoctoral Fellowship (\$53,688)

- 2018 Graduate College Dissertation Completion Fellowship, Arizona State University (\$8500)
- 2018 Saffran Student Scholar, 13<sup>th</sup> Annual Eleanor M. Saffran Conference on Cognitive Neuroscience and Rehabilitation of Communication Disorders (Travel Award)
- 2018 Graduate College Fellowship, Arizona State University (\$5000)
- 2016-2017 Marilyn Miller Quintana Moline Fellowship, Department of Speech and Hearing Science, Arizona State University (\$5300)
- 2015-2016 Graduate and Professional Student Association and Graduate Education Research Grant, Arizona State University (\$750)

### **TEACHING APPOINTMENTS**

#### **Purdue University: Instructor**

- 2022- SLHS 11500 Introduction to Human Communicative Disorders
- 2022- SLHS 51900 Cognitive Communication Disorders

#### **Midwestern University: Instructor**

- 2020-2021 SLPPG 628 Motor Speech Disorders
- 2019-2021 SLPPG 540 Diagnostic Assessment and Treatment Planning
- 2018-2022 SLPPG 526 Aphasia
- 2019 SLPPG 527 Neurological Disease and Injury

#### **Arizona State University: Co-Instructor**

- 2018 SHS 485 Acquired Speech and Language Disorders

### **STUDENT MENTORSHIP**

#### **Midwestern University: Master's Level**

##### *Thesis Committee Chair*

- Nicholas Dovorany (Biomedical Sciences Program; Graduated 2022)
- Michael Ramirez (Speech-Language Pathology Program; Graduated 2022)
- Sara Perriera (Speech-Language Pathology Program; Graduated 2022)
- Hannah Groth (Speech-Language Pathology Program; Graduated 2021)

##### *Thesis Committee Member*

- Emily Sebranek (Speech-Language Pathology Program; Graduated 2022)
- Monica Bender (Speech-Language Pathology Program; Graduated 2022)
- Alexandra Greene-Winek (Speech-Language Pathology Program; Graduated 2021)
- Jeanine Lyons (Speech-Language Pathology Program; Graduated 2020)
- Miyka Whiting (Speech-Language Pathology Program; Graduated 2020)

### **PROFESSIONAL AFFILIATIONS**

- American Speech-Language-Hearing Association (ASHA)  
Certificate of Clinical Competence in Speech Language Pathology, 2017-Present

Arizona Department of Health Services  
License, Speech Language Pathology, 2015-Present  
Arizona Speech-Language-Hearing Association (ArSHA), Member, 2018  
Society for the Neurobiology of Language, Member, 2016-Present  
Cognitive Neuroscience Society, Member, 2015-Present

## **PROFESSIONAL SERVICE**

### **Purdue University: Department Service**

2022 Ringel Symposium Program Committee  
2022 Undergraduate Student Recruitment and Success Committee

### **Midwestern University: University Service**

2022 Kenneth A Suarez Research Day Student Poster Judge  
2019-2021 University Institutional Review Board Member, Midwestern University

### **Midwestern University: Department Service**

2020-2021 Speech-Language Pathology Diversity Task Force Co-Chair, Midwestern University  
2019-2022 Speech-Language Pathology Academic Review Committee Member, Midwestern University  
2019-2022 Speech-Language Pathology Admissions Committee Member, Midwestern University  
2019-2022 Speech-Language Pathology Research Committee Member, Midwestern University

### **Other Service**

2022 Ad hoc reviewer, *European Journal of Neuroscience*, *Frontiers in Psychology*, *American Journal of Speech Language Pathology*  
2022 Review of *Neuroanatomy for Speech-Language Pathology and Audiology, Second Edition* for Jones & Bartlett Learning  
2022 Midwestern University Website Revision Focus Group  
2022 Therapy Insight CEU Panelist (2022, January): Building Connections to Reduce Isolation and Improve Therapy Outcomes: <https://vimeo.com/665330471>  
2021 SLP and Communication Disorders Webinar for Better Speech and Hearing Month, Midwestern University  
2021 Ad hoc reviewer, *Auditory Perception and Cognition*  
2020-2022 Mentor for the Interprofessional Healthcare Course (COREG 1560), Midwestern University  
2020 Ad hoc reviewer, *Aphasiology; Cognitive and Behavioral Neurology; Cortex*  
2019 Ad hoc reviewer, *Aging, Neuropsychology, and Cognition*  
2019-2022 SLPA Advisory Council Member, Estrella Mountain Community College

- 2015-2019 National Student Speech Language Hearing Association Board Member, Arizona State University
- 2015-2018 Graduate and Professional Student Association Grant Reviewer, Arizona State University