

Robert B. Cavanaugh PhD, CCC-SLP

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Last updated on 2024-03-18

Education

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| 2023 | Ph.D. Communication Science and Disorders
University of Pittsburgh, Pittsburgh, PA
<i>Dissertation: Determinants of Multilevel Discourse Outcomes in Anomia Treatment for Aphasia</i> |
| 2015 | M.S. Speech and Hearing Sciences
University of North Carolina at Chapel Hill, Chapel Hill, NC
<i>Thesis: Working Memory Capacity and Subjective Communication Difficulties in High Level Aphasia</i> |
| 2013 | B.A. Communication Science and Disorders
University of Pittsburgh, Pittsburgh, PA |

Academic and Clinical Positions

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| 2023 — | Health Research Data Analyst
Product Owner, OHDSI Lab
Office of the Dean, Bouvé College of Health Sciences
Observational Health Data Science and Informatics Center, Roux Institute
Northeastern University, Portland, ME. |
| 2018 — 2023 | Graduate Student Researcher
Language Rehab and Cognition Lab, University of Pittsburgh
PI: William S. Evans PhD, CCC-SLP
Speech Pathology and Audiology, VA Pittsburgh Healthcare System
PI: William D. Hula PhD, CCC-SLP & Michael Walsh Dickey PhD |
| 2015 — 2018 | Speech-Language Pathologist
Carolinas Rehabilitation, Atrium Health, Charlotte, NC
Carolinas Neurosciences Institute, Atrium Health, Charlotte, NC |
| 2013 — 2015 | Graduate Research Assistant
Center for Aphasia and Related Disorders, UNC - Chapel Hill
PI: Katarina Haley PhD, CCC-SLP |
| 2010 — 2013 | Undergraduate Research Assistant
Eye and Ear Institute, University of Pittsburgh Medical Center
PI: Patrick Sparto, PhD, PT |

Funding

- 2024 — 2025 LeaRRN: Learning Health Systems Rehabilitation Research Network
Learning Health Systems (LHS) Scholar Program
Characterizing usual-care rehabilitation dose in intensive care and acute care settings
Role: PI; Direct Costs: \$12,539
- 2021 — 2023 NIH-NIDCD F31 DC019853 Ruth L. Kirschstein NRSA
Determinants of multilevel discourse outcomes in anomia treatment for aphasia
Role: PI; Impact Score: 25; Direct Costs: \$68,482
Sponsors: Michael Walsh Dickey & William S. Evans
- 2021 — 2023 Audrey Holland Endowed Award
Determinants of multilevel discourse outcomes in anomia treatment for aphasia
Role: PI; Direct Costs: \$2000
- 2019 — 2021 NIH-NCATS NRSA TL1 University of Pittsburgh
Comparing Treatment Intensity between Research and Clinical Practice in Post-Stroke Aphasia
Role: Predoctoral Fellow; PI: Kraemer (TL1TR001858)
Mentors: Michael Walsh Dickey, William S. Evans, & Catherine Palmer
- 2019 School of Health and Rehabilitation Sciences Research Development Fund
Role: PI; Direct Costs: \$1000
Faculty Sponsor: William S. Evans

Peer-reviewed Publications

- 2024 **Cavanaugh, R.**, Dickey, M. W., Hula, W. D., Fromm, D., Golovin, J., Wambaugh, J., Fergadiotis, G., & Evans, W. S. (Under Review). Determinants of Multilevel Discourse Outcomes in Anomia Treatment for Aphasia.
- Pierce, J. E., **Cavanaugh, R.**, Harvey, S., Dickey, M. W., Nickels, L., Copland, D., Togher, L., Godecke, E., Meinzer, M., Rai, T., Cadilhac, D. A., Kim, J., Hurley, M., Foster, A. M., Carragher, M., Wilcox, C., & Rose, M. (Under Review). High Intensity Aphasia Intervention is Minimally Fatiguing in Chronic Aphasia – An Analysis of Participant Self-Ratings from a Large Randomized Controlled Trial.
- Akers, C. M., Boyle, M., Swiderski, A. M., Hula, W. D., **Cavanaugh, R.**, & Elman, R. J. (2024). Changes in complete utterances following communication-based group treatment for chronic aphasia. *Aphasiology*, 1-24.
- Robinaugh, G., Henry, M. L., **Cavanaugh, R.**, & Grasso, S. M. (2024). Computer-Based Naming Treatment for Semantic Variant Primary Progressive Aphasia With History of Traumatic Brain Injury: A Single-Case Experimental Design. *Journal of Speech, Language, and Hearing Research*, 1-21.
- 2023 Wong, C.N., Wilczek, M.P., Smith, L.H., Bosse, J.D., Richard, E.L., **Cavanaugh, R.**, Manjourides, J., Orkaby, A.R. and Olivieri-Mui, B. (2023). Frailty Among Sexual and Gender Minority Older Adults: The All of Us Database. *The Journals of Gerontology: Series A*, glad149.

- Cavanaugh, R.,** Quique, Y.M., Swiderski, A.M., Kallhoff, L., Terhorst, L., Wambaugh J., Hula, W.D., Evans, William S (2023). Reproducibility in small-N treatment research: a tutorial using examples from aphasiology. *Journal of Speech, Language, and Hearing Research*.
- 2022 Quique, Y. M., **Cavanaugh, R.,** Lescht, E., & Evans, W. S. (2022). Applying adaptive distributed practice to self-managed computer-based anomia treatment: A single-case experimental design. *Journal of Communication Disorders*, 99, 106249. <https://doi.org/10.1016/j.jcomdis.2022.106249>
- Boyle, M., Akers, C. M., **Cavanaugh, R.,** Hula, W. D., Swiderski, A. M., & Elman, R. J. (2022). Changes in discourse informativeness and efficiency following communication-based group treatment for chronic aphasia. *Aphasiology*, 1-35.
- Nguy, B., Quique, Y.M., **Cavanaugh, R.,** Evans, William S. (2022) Representation in aphasia research: an examination of US treatment studies published between 2009 and 2019. *American Journal of Speech-Language Pathology*
- Cavanaugh R,** Quique YM, Dickey MW, Hula WD, Boss E, & Evans WS (2022). Practice-Related Predictors of Semantic Feature Verification Treatment for Aphasia. *American Journal of Speech-Language Pathology*. https://doi.org/10.1044/2021_AJSLP-21-00296
- 2021 **Cavanaugh, R.,** Kravetz C., Jarold L., Quique Y., Turner R., & Evans, W.S. (2021). Is There a Research–Practice Dosage Gap in Aphasia Rehabilitation? *American Journal of Speech-Language Pathology*, 30(5), 2115–2129. [10.1044/2021_AJSLP-20-00257](https://doi.org/10.1044/2021_AJSLP-20-00257).
- Evans W.S., **Cavanaugh R.,** Quique Y, Boss E, Starns J.J., & Hula W.D. (2021). Playing With BEARS: Balancing Effort, Accuracy, and Response Speed in a Semantic Feature Verification Anomia Treatment Game. *Journal of Speech, Language, and Hearing Research*. https://doi.org/10.1044/2021_JSLHR-20-00543
- Kersey, J., Evans, W. S., Mullen, K., Askren, A., **Cavanaugh, R.,** Wallace, S. E., Hula, W. D., Walsh Dickey, M., Terhorst, L., & Skidmore, E. (2021). Metacognitive Strategy Training Is Feasible for People With Aphasia. *OTJR: Occupation, Participation and Health*. <https://doi.org/10.1177/15394492211023196>
- Evans, W. S., **Cavanaugh, R.,** Gravier, M. L., Autenreith, A. S., Doyle, P. J., Hula, W. D., Dickey Michael, W., & Dickey, M. W. (2021). Effects of Semantic Feature Type, Diversity, and Quantity on Semantic Feature Analysis Treatment Outcomes in Aphasia. *American Journal of Speech-Language Pathology*. https://doi.org/10.1044/2020_AJSLP-19-00112
- 2020 **Cavanaugh, R.B.,** Haley, K.L. (2020). Subjective communication difficulties in very mild aphasia. *American Journal of Speech-Language Pathology*, 29(1S), 437–448. https://doi.org/10.1044/2019_AJSLP-CAC48-18-0222

Refereed Presentations

- 2023 **Cavanaugh, R.,** Olivieri-Mui, B., & Smith, L. (2023). Treatment Dosage in Aphasia Rehabilitation: From Research Efficacy to Real-World Evidence. Seminar accepted at the American Speech-Language Hearing Association Convention, Thursday, November 16, 2023, Boston, MA.

Wong, C. N., Smith, L. H., **Cavanaugh, R.**, & Olivieri-Mui, B. (2023). Unraveling the Mediating Role of Frailty: Understanding Health Care Utilization among Older Sexual and Gender Minority Adults in the All of Us Research Program. Poster presented at the 2023 OHDSI Symposium, East Brunswick, NJ.

Yanover, C., Smith, L., ElHay, T., Olivieri-Mui, B., Bivas-Benita, M., **Cavanaugh, R.**, Akiva, P., Wong, C. N., & Orkaby, A. (2023). Validation and Comparison of Frailty Indexes: An OHDSI Network Study. Poster presented at the 2023 OHDSI Symposium, East Brunswick, NJ.

Cavanaugh, R., Are there research - practice dosage gaps in neurorehabilitation? Invited talk presented at the Monthly Brain Injury Team Meeting, Carolinas Rehabilitation, September 12, 2023, Charlotte, NC

2022

Cavanaugh, R., Dalton, S., & Richardson, J. (2022). Novel Web Applications to Facilitate Discourse Analysis in Everyday Clinical Practice. Paper presented at the American Speech-Language-Hearing Association Annual Convention. Friday, November 18, 2022, New Orleans, Louisiana.

Cavanaugh, R., & Swiderski, A., Steel, S., Fergadiotis, G., Hula, W.D. (2022). Computer Adaptive Naming Assessment for Aphasia: A New Tool for SLPs. Paper presented at the American Speech-Language-Hearing Association Annual Convention. November 18, 2022, New Orleans, Louisiana.

Goldberg, E., Dickey, M., Hula, W., **Cavanaugh, R.**, Swiderski, A., & Autenreith, A. (2022). Cognitive Functions Supporting Learning Over Time in Naming Treatment for Aphasia. Paper presented at the American Speech-Language-Hearing Association Annual Convention. Friday, November 18, 2022, New Orleans, Louisiana.

Smith, A., Williams, C., Hambridge, T., Harmon, T., Wallace, S., Brancamp, T., Biel, M., Evans, W., & **Cavanaugh, R.** (2022). Basic Psychological Need Satisfaction and Frustration in Aphasia: Correlations With Aphasia Severity and Mood. Poster presented at the American Speech-Language-Hearing Association Annual Convention, Friday, November 18, 2022, New Orleans, Louisiana.

Cavanaugh R., Swiderski, A., Goldberg, E., Hula, W.D., Evans, W.S., Dickey, M.W., (2022) Within-trial evidence for the Importance of Feature Generation during Semantic Feature Analysis. Platform accepted at Academy of Aphasia (October 2022).

Note: Awarded Best Student Presentation

Cavanaugh R., Swiderski, A., Hula, W.D., Fergadiotis, G., Steel, S., (2022) The PNT-CAT: A Computer Adaptive Test Version of the Philadelphia Naming Test. Poster presented at the International Aphasia Rehabilitation Conference (June 2022).

Cavanaugh, R., Brancamp, T, Harmon, T, Wallace, S, Biel, M, Hambridge, T, Caputo, M, Evans, WS (2022). Measuring Post-traumatic Growth in People with Aphasia. Abstract for poster presentation, annual Clinical Aphasiology Conference (May 2022). Wrightsville Beach, NC

Brancamp, T, **Cavanaugh, R.**, Harmon, T, Wallace, S, Biel, M, Hambridge, T, Caputo, M, Evans, WS (2022). Individual-level predictors of post-traumatic growth and depreciation in aphasia. Abstract for platform presentation, annual Clinical Aphasiology Conference (May 2022). Wrightsville Beach, NC

Goldberg, E, Dickey, M.W., Hula, W.D., **Cavanaugh, R.** Swiderski, A., Autenreith, Alyssa. (2022). Cognitive functions supporting learning over time in naming treatment for aphasia. Abstract for platform presentation, annual Clinical Aphasiology Conference (May 2022). Wrightsville Beach, NC

Schliep, M., **Cavanaugh, R.**, Tierney-Hendricks, C., Schnek, S., Douglas, N., (2022). Leveraging Implementation Science to Advance the Reach of Aphasia Best Practices. Abstract for roundtable presentation, annual Clinical Aphasiology Conference (May 2022). Wrightsville Beach, NC

Evans, WS, Kelly, A, Meyer, E, Skidmore, E, Pompon, R, Flowers, R, Cavanaugh, R (2022). Adapting acceptance and commitment therapy for stroke survivors with aphasia. Abstract for platform presentation, annual Clinical Aphasiology Conference (May 2022). Wrightsville Beach, NC.

Steel, S., **Cavanaugh R.**, Fergadiotis, G., Hula, W.D., (2022) Bridging the gap: Measuring perceived barriers and facilitators of a novel anomia assessment tool. Lightning talk, Implementation Science is for All: A CSD Practice-Research Exchange (April 2022).

2021

Evans, W.S., Quique, Y.M., **Cavanaugh, R.** Lescht, E. (2021). Effects of adaptive distributed practice and stimuli variability in flashcard-based anomia treatment. Abstract for poster presentation, 59th Academy of Aphasia, Online

Cavanaugh, R. Quique, Y, Boss, E, Hula, W.D., and Evans, W.S. (2021). Practicing with BEARS: Active Ingredients in Semantic Feature Analysis. Abstract for poster presentation, 51st annual Clinical Aphasiology Conference, Online

Evans, W.S., **Cavanaugh, R.**, Quique, Y., Boss, E., Dickey, M.W., Doyle, P, Starns, J.J., and Hula, W.D., (2021). BEARS-Balancing Effort, Accuracy, and Response Speed in semantic feature verification anomia treatment. Abstract for platform presentation, 50th annual Clinical Aphasiology Conference, Online..

Quique, Y., **Cavanaugh, R.**, Starns, J.J., Boss, E., Hula, W.D., and Evans, W.S. (2021). Estimating the speed-accuracy tradeoff “Sweet Spot” in language performance for people with aphasia: replication and extension of a diffusion-model based approach. Abstract for poster presentation, 50th annual Clinical Aphasiology Conference, Online.

Boyle M, Akers C, **Cavanaugh R.**, Hula WD, Swiderski A, Elman R. (2021) Changes in informativeness following communication-based group treatment for chronic aphasia . Abstract for platform presentation, 50th annual Clinical Aphasiology Conference, Online.

Akers, C, Boyle M, Swiderski A, Hula WD, **Cavanaugh R.**, Elman R. (2021) Using complete utterances to measure change in conversational discourse following communication- based group treatment. Abstract for poster presentation, 51st annual Clinical Aphasiology Conference, Online

Cavanaugh, R., Kravetz, C., Jarold, L., Quique, Y., Turner, R., Evans, W.S. (2021). Is there a research-practice dosage gap in aphasia rehabilitation? Abstract for poster presentation, Aphasia Access Leadership Summit, online.

Nguy, B, **Cavanaugh, R.**, Quique, Y, Evans, WS. (2021). Are Aphasia Research Participants Representative of the Post-Stroke Aphasia Population in the US? Abstract for poster presentation, Aphasia Access Leadership Summit. Online conference.

- 2020 **Cavanaugh, R.**, Kravetz, C., Jarold, L., Quique, Y., Turner, R., Evans, W.S. (2020). Is there a research-practice dosage gap in aphasia rehabilitation? Abstract for poster presentation, 16th Annual Rehabilitation Institute Research Day. Pittsburgh, PA
- Cavanaugh, R.**, Terhorst, L., Swiderski, A.W., Hula, W.D., Evans, W.S. (2020). A Systematic Appraisal of Individual Effect Sizes in Aphasia Single-Case Designs via Simulation. Abstract for poster presentation, 58th Academy of Aphasia, Philadelphia PA.
- Evans, WS, **Cavanaugh, R.**, Quique, Y, Boss, E, Dickey, MW, Doyle, P, Starns, J, and Hula, W (2020). BEARS- Balancing Effort, Accuracy, and Response Speed in semantic feature verification anomia treatment. Abstract for platform presentation, annual Academy of Aphasia Conference (virtual online conference).
- Cavanaugh, R.**, Kravetz, C., Evans, W.S. Utilization and Disparities in Outpatient Aphasia Rehabilitation in Western Pennsylvania. Abstract for poster presentation, Pennsylvania Speech-Language Hearing Association Annual Conference, Pittsburgh, PA (Conference Canceled).
- 2019 **Cavanaugh, R.**, Evans, W.S., Gravier, M., Autenreith, A., Ashmore, E., Doyle, P., Hula, W., Dickey, M.W., (2019). Do the kinds of features that patients generate during Semantic Feature Analysis affect treatment outcomes? Poster presented at the 2019 Clinical Aphasiology Conference in Whitefish, MT.
- 2018 **Cavanaugh, R.B.**, Haley, K.L. (2018) Subjective communication difficulties in very mild aphasia. Abstract for poster presentation, 48th annual Clinical Aphasiology Conference, Austin, TX.
- 2014 **Cavanaugh, R.B.**, & Haley, K. (2014, April) Accounting for Aphasia-Related Language Deficits in Verbal Working Memory Assessments: A Literature Review. Poster presented at the 2014 SPHS Student Research Day in Chapel Hill, NC.

Media

- 2023 Determinants of Multilevel Disource Outcomes in Anomia Treatment for Aphasia. The Language Neuroscience Podcast (Dr. Stephen Wilson) episode #28, October 14, 2023
- 2021 Voltage Drop and Aphasia Treatment: Thinking About the Research-Practice Dosage Gap in Aphasia Rehabilitation: A Conversation with Rob Cavanaugh” Aphasia Access Conversations podcast, episode #77, October 28, 2021.

Software & Technology

- 2023 Smith, L.H., **Cavanaugh, R.** (2023). allofus: An R package to streamline use of the AllofUs Research Workbench. Version 0.1.0. Available from <https://cran.r-project.org/web/packages/allofus>
- 2022 **Cavanaugh, R.**, Smith, L.H. (2023). ohdsilab: Tools for using Roux OHDSI Lab at Northeastern University Version 0.0.0.9. Available from <https://github.com/roux-ohdsi/ohdsilab>
- 2022 **Cavanaugh, R.**, Aphasia Rehabilitation Research Technology Mapping Project <https://rob-cavanaugh.com/aphasia-tech-map/>
- 2022 **Cavanaugh, R.**, Dalton, S.G., Richardson, J, (2022). mainConcept. Available from: <https://rb-cavanaugh.shinyapps.io/mainConcept>
- 2022 **Cavanaugh, R.**, Dalton, S.G., Richardson, J, (2022). coreLexicon. Available from: <https://rb-cavanaugh.shinyapps.io/coreLexicon>

	Cavanaugh, R., Swiderski, A.M., Hula, W.D. (2022). acom: The Aphasia Communication Outcome Measure. Version 0.4.0.2 Available from https://github.com/rbcavanaugh/acom .
2022	Cavanaugh, R., Aphasia Research Finder. https://aphasiaresearch.org
	Cavanaugh, R., Swiderski, A.M., Fergadiotis, G. & Hula, W.D. (2022). pnt: Computer adaptive forms of the Philadelphia Naming Test. Version 0.1.1 Available from https://github.com/rbcavanaugh/pnt .
2021	Kowalski, J., and Cavanaugh R. (2021). TBDBr: Easy Access To TalkBankDB via R API. https://github.com/TalkBank/TalkBankDB-R

Scholarships and Awards

2022	NIH-NIDCD Academy of Aphasia conference grant (R13 DC017375-01) Plural Publishing Research Scholarship
2020	ANCDS Conference Student Fellowship NIH-NIDCD Academy of Aphasia conference grant (R13 DC017375-01)
2019	NIH-NIDCD Fellowship: Research Symposium in Clinical Aphasiology
2014	Adult Communication Disorders Annual Scholarship, UNC-Chapel Hill Robert W. Peters Award for excellence in research, UNC-Chapel Hill

Teaching

2023	Mentor, The All of Us Research Scholar Program
2022	Introduction to R: Workshop for incoming PhD students in CSD - University of Pittsburgh • Led, organized, and co-designed 3-day hybrid-remote workshop Introduction to R: Workshop for faculty, staff, and students in CSD - University of Pittsburgh • Led, organized, and co-designed 3-day hybrid-remote workshop CSD M.S. Clinical Integration Project • Review and feedback for M.S. - SLP students 1st year projects
2021	SPHS-S 685: Research and Ethics in Speech, Language, and Hearing Sciences (University of Indiana Bloomington; Dr. Brielle Stark) • Guest Lecture: Writing an NIH NRSA F31 Fellowship Application CSD M.S. Summative Assessment Project • Review and feedback for M.S. - SLP students comprehensive exams
2020	CSD 2230: Neurogenic Language and Cognitive Communication Disorders • Guest Lecture 1: TBI: Pathophysiology and Medical Considerations • Guest Lecture 2: Case studies in adult neurological communication disorders SPHS 742: Aphasia (University of North Carolina at Chapel Hill; Dr. Katarina Haley) • Guest Lecture: Applying treatment research in clinical practice settings CSD M.S. Summative Assessment Project • Review and feedback for M.S. - SLP students comprehensive exams

- 2019 CSD 2230: Neurogenic Language and Cognitive Communication Disorders
- Guest Lecture 1: TBI: Pathophysiology and Medical Considerations
 - Guest Lecture 2: Case studies in adult neurological communication disorders
- CSD M.S. Summative Assessment Project
- Review and feedback for SLP students comprehensive exams

Professional Memberships

- 2021 — Member, Collaboration of Aphasia Trialists: Effectiveness of Aphasia Interventions, Implementation Science
- 2016 — CCC-SLP: American Speech-Language and Hearing Association (ASHA)
- 2015 — SLP: Board of Examiners in Speech-Language Pathology, North Carolina
- 2015 — 2023 Member, ASHA SIG 2: Neurogenic Communication Disorders

Service

- 2023 — Ad hoc reviewer. International Aphasia Rehabilitation Conference
- 2020 — Ad hoc reviewer. Journal of Speech Language Hearing Research
- 2020 — Ad hoc reviewer. American Journal of Speech-Language Pathology.
- 2021 — Ad hoc reviewer. Aphasiology
- 2020 — 2022 Ad hoc reviewer, ASHA Annual Convention: Adult Language Section