Robert B. Cavanaugh PhD, CCC–SLP

💼 Academic & Clinical Positions

2023 —

Health Research Data Analyst

Office of the Dean, Bouvé College of Health Sciences
Observational Health Data Science and Informatics Center, Roux Institute
Product Owner, Roux Institute OHDSI Lab
Northeastern University, Portland, ME.

2018 — 2023

PhD Student / NRSA Predoctoral Fellow

Language Rehab and Cognition Lab, University of Pittsburgh
PI: William S. Evans Speech Pathology and Audiology, VA Pittsburgh Healthcare System
PI: William D. Hula & Michael Walsh Dickey

2015 — 2018

Speech-Langauge Pathologist

Carolinas Rehabilitation, Atrium Health
Carolinas Neurosciences Institute, Atrium Health, Charlotte, NC

🎓 Education

2023

PhD, Communication Science and Disorders

University of Pittsburgh, Pittsburgh, PA
Dissertation: Determinants of Multilevel Discourse Outcomes in Anomia Treatment for Aphasia

2015

M.S. Speech and Hearing Sciences

University of North Carolina at Chapel Hill, Chapel Hill, NC
Thesis: Working Memory Capacity and Subjective Communication Difficulties in High Level Aphasia

2013

B.A. Communication Science and Disorders

University of Pittsburgh, Pittsburgh, PA

✏️ Grant Support

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 TL1 University of Pittsburgh CTSI NRSA

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

📄 Selected Publications

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.

2022

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.

Curriculum Vitae

Speech-language pathologist turned quantitative clinical researcher and health research data analyst. Passionate about improving outcomes for individuals with neurogenic communication disorders.

Contact

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🌐 rbcavanaugh.github.io

⭘ Github

🎓 Google Scholar

ⓘ 0000-0002-2114-6565

Key Interests

🌐 Real-world evidence generation for healthcare decision making in neurorehabilitaiton

👥 Improving treatment effectiveness, population-level outcomes, and quality of life for individuals with post-stroke aphasia

📈 Quantitative methods, Open-source software development, Open science, & Science communication

⊞ Technology for aphasia rehabilitation

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

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.

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

🖳 Selected 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.

2022   **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.

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 Analsyis. Platform accepted at Academy of Aphasia (October 2022).
Note: Awarded Best Student Presentation

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

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).

🖥 Technology

2023   Smith, L.H., **Cavanaugh, R.** (2023). allofus: An R package to streamline use of the AllofUs Research Workbench. Version 0.0.0.9. Available from https://github.com/roux-ohdsi/allofus

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.

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.

🖥 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.