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Emily Bard Goldberg, M.S. CCC-SLP

EDUCATION:

UNIVERSITY OF PITTSBURGH, Pittsburgh, PA

Doctor of Philosophy, Communication Science Disorders Aug. 2020-Present

Thesis: To be determined.

Advisor: Michael W. Dickey, Ph.D.

Master of Science, Speech Language Pathology Aug. 2015-June 2017

Thesis: Control of Lexical Inhibition in ASL and English-Reading Sentence Comprehension in Deaf and Hearing ASL Users

Advisors: Sheila Pratt, Ph.D. & Malcolm McNeil, Ph.D.

Bachelor of Philosophy, Communication Science Disorders Aug. 2011-April 2015

Honors Thesis: Assessing the Test-Retest Reliability of the American Sign Language Version of the Computerized Revised Token Test

Advisors: Sheila Pratt, Ph.D. & Malcolm McNeil, Ph.D.

RELEVANT RESEARCH EXPERIENCE:

The University of Pittsburgh Dept. of Communication Science & Disorders, Pittsburgh PA

Graduate Student Researcher (August 2020-Present)

Johns Hopkins University School of Medicine Dept. of Neurology, Baltimore MD

Clinical Speech Language Pathologist Researcher (September 2018 – August 2020)

- Worked among a team of Speech Language Pathologists, research assistants, postdoctoral research fellows, and physicians in the Stroke Cognitive Outcomes and Recovery (S.C.O.R.E.) lab under the supervision of Dr. Argye Hillis, MD.
- Administered research study protocols, including completion of behavioral speech and language batteries, providing language treatment, and delivering transcranial direct current stimulation (tDCS) with patients.
- Worked with individuals presenting with and without post-stroke language disorders (e.g. aphasia, aprosodia) and Primary Progressive Aphasia (PPA).
- Developed writing skills: constructing abstract proposals for conference presentations, manuscripts, textbook chapters, and clinical documents for patients such as summaries of performance.

The University of Pittsburgh Dept. of Communication Science & Disorders, Pittsburgh PA

Undergraduate Honors & Master's Thesis Projects (August 2013-May 2017)

- Conducted research to empirically investigate the language and cognitive-linguistic functions in Deaf American Sign Language (ASL) users, compared to hearing signers, across written English and ASL.
- Completed an independent master's level thesis project as an undergraduate student through the University of Pittsburgh Honors College.
- Collaborated with thesis mentors to identify clinically-relevant and pertinent research questions, made decisions regarding research study design, adhered to designated research-study protocol, managed data

adequately and in an organized manner, oversaw undergraduate students who volunteered to assist with data collection, and served as a leader on these projects. Produced two thesis papers and verbally defended both projects successfully.

RELEVANT CLINICAL EXPERIENCE:

Johns Hopkins Hospital, Physical Medicine and Rehabilitation, Baltimore, MD

Speech Language Pathologist, PRN (September 2018 – July 2020)

- Worked with a team of medical professionals to provide holistic patient care, including Occupational Therapists, Physical Therapists, nurses, doctors, and dietitians.
- Administered and interpreted a variety of speech, language, and cognitive communication standardized assessments, and formulates appropriate treatment goals and session plans.
- Provided speech, language, and dysphagia treatment; caters treatment depending on the needs and personal goals of the patient.
- Reviewed medical charts, summarizes relevant findings, and completes daily documentation efficiently.
- Worked with heterogeneous patient population presenting with disorders such as post-stroke aphasia, right hemisphere disorder, apraxia of speech, dysphagia, and dysarthria, resulting from a variety of etiologies including stroke, traumatic brain injury, multiple sclerosis, glioblastoma, myasthenia gravis, coronary artery disease post heart transplant, liver transplant, AIDS, etc.

Veterans Administration Pittsburgh Healthcare System, Pittsburgh, PA

Clinical Fellow (July 2017 – July 2018)

- Administered and interpreted clinical and instrumental swallow evaluations. Leader in Modified Barium Swallow Studies.
- Participated as a treating clinician in the Program for Intensive Residential Aphasia Treatment and Education (PIRATE).
- Gained experience administering a variety of speech, language, and cognitive communication assessments, designed treatment goals and program with consideration of patients' individual goals, and monitored progress.
- Worked with patients presenting with a variety of disorders including Aphasia, Dysphagia, Parkinson's disease, ALS, MS, myasthenia gravis, Dementia, Head & Neck Cancer, transgender voice, Apraxia of Speech, PVFMD, etc.

ADDITIONAL RELEVANT EXPERIENCES:

The University of Pittsburgh Center for Sleep and Circadian Science

Student Trainee (August 2021-Present)

Center for Neural Basis of Cognition Training Program – Carnegie Mellon University

Student Trainee (January 2021-Present)

- Will complete four core courses in cognitive neuroscience, cellular neuroscience, systems neuroscience, and computational neuroscience.
- Will deliver presentations regarding my research findings to faculty and colleagues.
- Engaged in the student committee council.

University of Pittsburgh Department of Communication Science and Disorders (CSD)

Teaching Assistant – Speech Science (January 2021- April 2021)

- Led laboratory sessions for 8 sections of undergraduate students (total of 90 students)
- Assisted instructor in course set-up, grading, and communication with students.
- Available to assist students during office hours and individually when needed.

Graduate Student Advisor (August 2015 - April 2017)

- Assisted undergraduate CSD in designation of plan of study and coursework.
- Completed documentation in timely and organized manner.

- Volunteered at advocacy events to recruit students for the major of CSD.
- Served as a teaching assistant on a study abroad program related to interdisciplinary rehabilitation teams.

Graduate Student Teaching Assistant (May 2017)

- Worked as a teaching assistant for a study abroad program hosted through the University of Pittsburgh School of Health and Rehabilitation Science, where I spent 4 weeks with a cohort of students from various health care majors (i.e. SLP, OT, PT, dietetics). Course content focused on international healthcare differences and the significance of interdisciplinary healthcare approach.
- Led group discussions in preparation for or following clinical site visits.
- Mentored students throughout the duration of the program, specifically related to group presentations and report writing.

University of Pittsburgh Honors College, Pittsburgh, PA

University Honors College Housemaster (Aug. 2015-April 2017)

- Supervised and mentored 101 University Honors College residents ages 18-21 years from a variety of cultural backgrounds.
- Organized, planned, and led building events while managing a building budget and demonstrating strong administrative skills.

University of Pittsburgh Dept. of Less Commonly Taught Languages, Pittsburgh PA

Teaching Assistant (Aug. 2014-Dec. 2014)

- Served as a TA for an American Sign Language Level 1 course.
- Attended all class sessions and supplemented course instruction when indicated.
- Hosted weekly office hours to provide tutoring and assistance to students outside of the classroom. Additionally, planned and organized periodic exam review sessions for students.
- Designed and implemented lesson plans pertaining to course syllabus and student learning outcomes.
- Assisted with course grading, including assessments, essays, and projects.

HONORS AND AWARDS

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|------------|---|
| May 2022 | National Institute on Deafness and Other Communication Disorders, <i>Research Symposium in Clinical Aphasiology Student Fellow</i> |
| April 2017 | Council of Academic Programs in Communication Sciences and Disorders, <i>Plural Publishing Award Recipient (1 of 2 recipients across the United States)</i> |
| April 2017 | Southwestern Pennsylvania Speech Language Hearing Association, <i>Student Honoree</i> |
| April 2015 | National Student Speech Language Hearing Association (NSSLHA), <i>Member Honors</i> |
| May 2014 | Outside of the Classroom Curriculum Pitt Advantage Grant Recipient |
| Feb. 2014 | University Honors College Scholarship Recipient |

LICENSES, CERTIFICATIONS & TRAININGS

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|-------------------|--|
| June 2019 | Functional Near-Infrared Spectroscopy (fNIRS) Advanced Data Analysis Training, <i>University of Pittsburgh</i> |
| July 2018-Present | Certificate of Clinical Competence (CCC), |

American Speech Language Hearing Association

July 2018-Present

Licensed Speech-Language Pathologist, State of Maryland

Oct. 2012-Present

Collaborative Institutional Training Initiative (CITI)

Aug. 2011-April 2015

American Sign Language Certificate Program
University of Pittsburgh

PRESENTATIONS:

Cavanaugh, R., Swiderski, A., **Goldberg, E.B.**, Hula, W.D., Evans, W.S., & Dickey, M.W. (Accepted). Within-trial evidence for the importance of feature generation during Semantic Feature Analysis. Oral presentation at the 2022 Academy of Aphasia, Philadelphia, PA.

Swiderski, A.M., Laconi, A., **Goldberg, E.B.**, Dickey, M.W., & Hula, W.D. (Accepted). Connectivity constrained analysis of the white matter correlates of taxonomic and semantic based naming errors. Poster presentation at the 2022 Society for Neurobiology of Language annual meeting, Philadelphia, PA.

Goldberg, E.B., Hula, W.D., Cavanaugh, R., Swiderski, A.M., Autenreith, A., & Dickey, M.W. (2022). *Cognitive functions supporting learning over time in naming treatment for aphasia*. Oral presentation at the 51st Clinical Aphasiology Conference, Wrightsville Beach, NC.

Sheppard, S.M., **Goldberg, E.B.**, Sebastian, R., Meier, E.L., & Hillis, A.E. (2022). *Transcranial Direct Current Stimulation of Inferior Frontal Gyrus Plus Verb Therapy Improves Naming in Primary Progressive Aphasia (PPA)*. Poster presentation at the 51st Clinical Aphasiology Conference, Wrightsville Beach, NC.

Goldberg, E.B., Meier, E.L., Sheppard, S.M., Breining, B.L., Walker, A., & Hillis, A.E. *Stroke Recurrence and its Influence on Spoken Output Following Acute Left or Right Hemisphere Stroke*. E-oral presentation at the 2021 American Speech Language Hearing Association Convention, Washington, DC.

Meier, E.L., Head, Catherine, **Goldberg, E.B.**, & Hillis, A.E. (2021). *Nonlinguistic Cognitive Skills in Acute Stroke Survivors with and without Aphasia*. E-oral presentation at the 2021 American Speech Language Hearing Association Convention, Washington, DC.

Goldberg, E.B., Meier, E.L., Sheppard, S.M., Walker, A., Breining, B.L., & Hillis, A.E. (2021). *Stroke recurrence and its influence on spoken output following acute left or right hemisphere stroke*. E-poster presentation at the 50th Clinical Aphasiology Conference.

Berube, S., **Goldberg, E.B.**, Sheppard, S.M., Ubellacker, D., Walker, A., Stein, C., & Hillis, A.E. (2021). *An Analysis of Right-Hemisphere Stroke Discourse in the Modern Cookie Theft Picture*. E-poster presentation at the 50th Clinical Aphasiology Conference.

Sheppard, S.M., Walker, A.E., Meier, E.L., Shea, J., **Goldberg, E.B.**, & Hillis, A.E. (2021). *Characterizing Neural Correlates and the Nature of Receptive Emotional Aprosodia in Acute Right Hemisphere Stroke*. E-Oral presentation at the 50th Clinical Aphasiology Conference.

Meier, E.L., Sheppard, S.M., Sebastian, R., Berube, S., **Goldberg, E.B.**, Shea, J., Stein, C.M., & Hillis, A.E. (2021). *Associations between resting state functional connectivity and picture description measures in left versus right hemisphere chronic stroke*. E-Oral presentation at the 50th Clinical Aphasiology Conference.

Meier, E.L., Sheppard, S.M., Sebastian, R., Berube, S., **Goldberg, E.B.**, Shea, J.S., Stein, C.M., & Hillis, A.E. (2021). *Resting state correlates of picture description in left versus right hemispheric chronic stroke*. Poster presentation at the 2021 Organization for Human Brain Mapping..

Stein, C.M., **Goldberg, E.B.**, Ubellacker, D., & Hillis, A.E. (2020). *SSRIs May Mitigate the Relationships Between Depression and Language Output and Depression and Lesion Volume After Stroke*. E-poster presentation at the 145th annual meeting of the American Neurological Association.

Walker, A., Bunker, L., Leigh, R., Meier, E.L., **Goldberg, E.B.**, & Hillis, A.E. (2020). *FLAIR Hyperintense Vessel Rating to Predict Penumbra in Acute Stroke*. . E-poster presentation at the 145th annual meeting of the American Neurological Association.

Meier, E.L., Sheppard, S.M., **Goldberg, E.B.**, Head, C.R., Woo, A.S., Ubellacker, D.M., Walker, A., & Hillis, A.E. (2020). Associations between naming errors, dysfunctional tissue and longitudinal language recovery after left hemisphere stroke. E-poster presentation at the 2021 Academy of Aphasia.

Goldberg, E.B., Meier, E.L., Sheppard, S.M., Breining, B.L. & Hillis, A.E. (2019). *Stroke Recurrence & Its Relationship with Acute and Chronic Language Abilities: A Retrospective Study*. Technical oral session at the 2019 American Speech Language Hearing Association Convention, Orlando, FL.

Goldberg, E.B., Pratt, S.R., McNeil, M.R., Zhen, L. (2019). *Effects of Executive Control on English & Sign Language Sentence Processing Among Deaf & Hearing Signers*. Technical oral session at the 2019 American Speech Language Hearing Association Convention, Orlando, FL.

Goldberg, E.B., Meier, E.L., Sheppard, S.M., Breining, B.L. & Hillis, A.E. (2019). *Stroke Recurrence and its Relationship with Acute Language Abilities: A Retrospective Study*. Oral presentation at the 49th Clinical Aphasiology Conference, Whitefish, MT.

Meier, E.L., Breining, B.L., Sheppard, S.M., **Goldberg, E.B.**, Faria, A.V., & Hillis, A.E. (2019). *Ventricular enlargement predicts naming abilities in patients with primary progressive aphasia independent of cortical atrophy*. Oral presentation at the 49th Clinical Aphasiology Conference, Whitefish, MT.

Goldberg, E.B. & Hillis, A.E. (2019). *Carotid Stenting Can Improve Contralateral Perfusion and Function*. Poster presentation at the 2019 American Neurological Association Annual Meeting, St. Louis, MO.

Meier, E.L., Breining, B.L., Sheppard, S.M., **Goldberg, E.B.**, Faria, A.V., & Hillis, A.E. (2019). *Comparison of qualitative and quantitative measures of leukoaraiosis in primary progressive aphasia*. Poster presentation at the 2019 American Neurological Association Annual Meeting, St. Louis, MO.

Goldberg, E.B., Pratt, S.R. & McNeil, M.R. (2018). *Control of Lexical Inhibition in ASL & English-Reading Comprehension in Deaf & Hearing ASL Users*. Technical oral session at the 2018 American Speech Language Hearing Association Convention, Boston, MA.

Washington, S., Pratt, S.R., McNeil, M.R., **Goldberg, E.B.** & Holmes, X. (2018). *Chance Performance on the American Sign Language Version of the Computerized Revised Token Test*. Poster presentation at the 2018 American Speech Language Hearing Association Convention, Boston, MA.

Goldberg, E.B., Pratt, S.R. & McNeil, M.R. (2016). *Sentence Comprehension in Deaf & Hearing Signers as Measured by the Computerized Revised Token Test*. Technical oral session at the 2016 American Speech Language Hearing Association Convention, Philadelphia, PA.

Goldberg E.B., McNeil, M.R., Pratt, S.R., Washington, S., DeHaan, K. & Shahan, M. (2015). *Assessing the Reliability of the American Sign Language Version of the Computerized Revised Token Test*. Poster presentation at the 2015 American Speech Language Hearing Association Convention, Denver, CO.

PEER-REVIEWED PUBLICATIONS:

Berube, S., **Goldberg, E.B.**, Sheppard, S., Zezinka Durfee, A., Ubellacker, D., Walker, A., Stein, C.M., & Hillis, A.E. (Accepted June 2022). An Analysis of Right Hemisphere Stroke Discourse in the Modern Cookie Theft Picture. *Submitted to the American Journal of Speech Language Pathology*.

Sheppard, S.M., **Goldberg, E.B.**, Sebastian, R., Walker, A., Meier, E.L., & Hillis, A.E. (2022). Transcranial Direct Current Stimulation Paired with Verb Network Strengthening Treatment (VNeST) Improves Verb Naming in Primary Progressive Aphasia: A Case Series. *American Journal of Speech Language Pathology*.

Fan, H., Su, P., Da May Lin, D., **Goldberg, E.B.**, Walker, A., Leigh, R., Hillis, A.E., & Lu, Hanzhang. (2022). Simultaneous Hemodynamic and Structural Imaging of Ischemic Stroke With Magnetic Resonance Fingerprinting Arterial Spin Labeling. *Stroke*, 53(6), 2016-2025.
<https://doi.org/10.1161/STROKEAHA.121.037066>

Meier, E.L., Sheppard, S.M., **Goldberg, E.B.**, Kelly, C.R., Walker, A., Ubellacker, D.M., Vitti, E., Ruch, K., & Hillis, A.E. (2022). Dysfunctional Tissue Correlates of Unrelated Naming Errors in Acute Left Hemisphere Stroke. *Language, Cognition, and Neuroscience*, 37(3), 330-347.
<https://doi.org/10.1080/23273798.0221.1980593>

Bunker, L.D., Walker, A., Meier, E.L., **Goldberg, E.B.**, Leigh, R., & Hillis, A.E. (2022). Hyperintense vessels on imaging account for neurological function independent of lesion volume in acute ischemic stroke. *NeuroImage: Clinical*, 34.

Meier, E.L., Kelly, C.R., **Goldberg, E.B.**, & Hillis, A.E. (2021). Executive control deficits and lesion correlates in acute left hemisphere stroke survivors with and without aphasia. *Brain Imaging and Behavior*, 16(2), 1-10. <https://doi.org/10.1007/s11682-021-00580-y>

Goldberg, E.B., Meier, E.L., Sheppard, S.M., Breining, B.L. & Hillis, A.E. (2021). Stroke recurrence and its relationship with language abilities. *Journal of Speech and Language Hearing Research*, 64(6).

Stockbridge, M.D., Berube, S., **Goldberg, E.**, Suarez, A., Mace, R., Ubellacker, D., & Hillis, A.E. (2021). Differences in linguistic cohesion within the first year following right-and left-hemisphere lesions. *Aphasiology*, 35(3), 357-371.

Meier, E.L., Sheppard, S.M., **Goldberg, E.B.**, Head, C.R., Walker, A., Ubellacker, D.M., & Hillis, A.E. (2020). Dysfunctional Tissue Correlates of Unrelated Naming Errors in Acute Left Hemisphere Stroke. *Neuropsychologia*, 148.

Keator, L.M., Faria, A.V., Kim, K.T., Saxena, S., Wright, A.E., Sheppard, S.M., Breining, B.L., **Goldberg, E.B.**, Tippett, D.C., Meier, E.M., & Hillis, A.E. (2020). An Efficient Bedside Measure Yields Prognostic Implications for Language Recovery in Acute Stroke Patients. *Cognitive and Behavioral Neurology*, 33(3), p. 192-200.

Meier, E.L., Breining, B.L., Sheppard, S.M., **Goldberg, E.B.**, Tippett, D.C., Tsapkini, K., Faria, A.V., & Hillis, A.E. (2020). White Matter Hyperintensities Contribute to Language Deficits in Primary Progressive Aphasia. *Cognitive and Behavioral Neurology*, 33(3), p. 179-191.

Tippett, D.C., Breining, B.L., **Goldberg, E.B.**, Meier, E.L., Sheppard, S.M., Sherry, E., Stockbridge, M., Suarez, A., Wright, A.E. & Hillis, A.E. (2020). Visuomotor figure construction and visual figure delayed recall and recognition in primary progressive aphasia. *Aphasiology*.

TEXTBOOK CHAPTERS

Goldberg, E.B. & Hillis, A.E. (2022). Sign language aphasia. In A.E. Hillis & J. Fridriksson (Eds.), *Handbook of Clinical Neurology*, Elsevier.

Manuscripts Submitted/Under Review

Stockbridge, M.D., Elm, J., Breining, B.L., Tippett, D., Sebastian, R., Cassarly, C., Spell, L.A., Sheppard, S.M., Vitti, E., Ruch, K., **Goldberg, E.B.**, Kelly, C., Keator, L., Fridriksson, J., & Hillis, A.E. (Submitted June 2022). Stimulating Language in Subacute Stroke (SLISSE): A randomized, double-blinded, sham-controlled efficacy study of transcranial direct current stimulation with language therapy.

Sharif, M.S., **Goldberg, E.B.**, Walker, A., Hillis, A.E., & Meier, E.L. (Under Review). The contribution of white matter pathology, hypoperfusion, lesion load, and stroke recurrence to language deficits following acute subcortical left hemisphere stroke. *Submitted to Public Library of Science*.

Manuscripts In Preparation

Goldberg, E.B., Pratt, S.R. & McNeil, M.R. (*In Preparation*). Assessing the test-retest reliability in the American Sign Language version of the Computerized Revised Token Test.

Goldberg, E.B., Hula, W.D., Cavanaugh, R., Swiderski, A., Autenreith, A., & Dickey, M.W. (*In Preparation*). Cognitive functions supporting learning over time in naming treatment for aphasia