#### **CONTACT INFORMATION**

Department of Communication Sciences and Disorders **Temple University** 1701 N. 13<sup>th</sup> Street (Weiss Hall, room 270-A) Philadelphia, PA 19122 phone: (215) 204-1148

e-mail: emaas@temple.edu web: https://sites.temple.edu/slablab/ ORCID: https://orcid.org/0000-0003-4452-2196 Google Scholar: https://tinyurl.com/EdwinMaas

#### **EDUCATION**

2006-2007	Post-doctoral training, Speech Motor Control
	Boston University (BU) $\&$ Massachusetts Institute of Technology (MIT)
	Advisors: Frank H. Guenther, PhD, & Joseph S. Perkell, DMD, PhD
1999-2006	PhD, Language and Communicative Disorders
	San Diego State University (SDSU) $\&$ University of California, San Diego (UCSD)
	Dissertation: The Nature and Time Course of Motor Programming in Apraxia of Speech
	Advisor: Donald A. Robin, PhD, CCC-SLP
1995-1998	MA, Neurolinguistics (cum laude)

- MA, Neurolinguistics (cum laude)
  University of Groningen (the Netherlands)
  Thesis: Sentence Comprehension and Sentence Anagrams in Broca's and Wernicke's
  Aphasics
  Advisor: Roelien Bastiaanse, PhD
- 1994-1995 BA, Dutch Linguistics and Literature **University of Groningen** (the Netherlands)

#### **ACADEMIC POSITIONS and AFFILIATIONS**

2018-present	Associate Professor (tenured) <b>Temple University</b> , Philadelphia, PA; Communication Sciences and Disorders
2015-2018	Assistant Professor <b>Temple University</b> , Philadelphia, PA; Communication Sciences and Disorders
2010-2015	Assistant Professor <b>University of Arizona</b> , Tucson, AZ; Speech, Language, and Hearing Sciences
2008-2009	Research Associate <b>University of Arizona</b> , Tucson, AZ; Speech, Language, and Hearing Sciences
2008-2009	Adjunct Instructor <b>University of Arizona</b> , Tucson, AZ; Speech, Language, and Hearing Sciences
2007	Adjunct Instructor <b>Massachusetts General Hospital Institute of Health Professions,</b> Boston, MA; Communication Sciences and Disorders
2006	Adjunct Instructor <b>Northeastern University,</b> Boston, MA; Speech-Language Pathology and Audiology

2003-2004	Adjunct Instructor San Diego State University, San Diego, CA; Speech, Language, and Hearing Sciences
1998-1999	Visiting Scholar <b>San Diego State University</b> , San Diego, CA; Speech, Language, and Hearing Sciences <b>University of California, San Diego</b> , La Jolla, CA; Psychology
1999	Clinical Linguist <b>Rehabilitation Center Rijndam,</b> Rotterdam, the Netherlands; Rotterdam Aphasia Foundation
1999	Lab Manager <b>University of Groningen,</b> Groningen, the Netherlands; <i>Linguistics</i>
1997-1998	Research Assistant <b>University of Groningen,</b> Groningen, the Netherlands; <i>Linguistics</i>
1997	Clinical Linguist (intern) <b>Rehabilitation Center Rijndam,</b> Rotterdam, the Netherlands; Rotterdam Aphasia Foundation

### AWARDS & HONORS

2014	Fellowship, National Institutes of Health (NIH), Fourteenth Annual OBSSR/NHLBI
	Summer Institute on Randomized Behavioral Clinical Trials
2010	Fellowship, American Speech-Language-Hearing Foundation & Research and Scientific
	Affairs Committee (ASHA-RSAC), Grant Review and Reviewer Training Program
2009	Fellowship, American Speech-Language-Hearing Association & National Institute on
	Deafness and Other Communication Disorders (ASHA/NIDCD), Lessons for Success
2008	Editor's Award, American Journal of Speech-Language Pathology, for Maas et al. (2008)
2005	Student Research Travel Award, American Speech-Language-Hearing Association (ASHA)
2004, 2005	Student Fellowship, National Institute on Deafness and Other Communication Disorders
	(NIDCD), Research Symposium in Clinical Aphasiology
2004	Graduate Student Scholarship, American Speech-Language-Hearing Foundation
2004	Kala Singh Memorial Scholarship
2002	Junior Mentor, Clinical Aphasiology Conference, First Annual Mentoring Luncheon
2001, 2003	Scholarship, Friends of the International Center at the University of California, San Diego
2001	International Student Scholarship, Phi Beta Delta
1998	Scholarship, VSB Bank (the Netherlands) for research training at San Diego State
	University and University of California, San Diego

### **RESEARCH SPECIALTIES**

Speech production (focus on **speech motor planning** and **phonological planning**) Speech disorders in children and adults (focus on **apraxia of speech** and **phonological disorders**) Speech motor learning (focus on **principles of motor learning** in **speech treatment**) Clinical trial design (including **randomized controlled trials** and **single-case experimental designs**)

### **RESEARCH FUNDING**

#### **Under Review**

2024-2027 National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) R21 (PI: Heller Murray) Intelligibility and Dysphonia in Children with Vocal Fold Nodules Role: Co-Investigator (PI: E. Heller Murray) Total requested: \$594,375 (direct cost \$375,000)

#### **Active**

2023-2025	Michael J. Fox Foundation for Parkinson's Research MJFF-023300 (PI: Moya-Galé) Understand Me for Life: Using Noise-Augmented Automatic Speech Recognition to Improve Intelligibility in Parkinson's Disease. Role: Co-Investigator (PI: G. Moya-Galé; Co-PI: B. Keller) Total award: \$500,000
2021-2026	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) Ro1 DCo18781 (PI: Hoover) Understanding Mechanisms of Change and Optimal Parameters in Conversation Treatment for Aphasia Role: Co-Investigator (PI: E. Hoover; Co-Investigator: G. DeDe) Total award: \$3,218,654 (direct cost \$2,453,813)
2020-2024	National Health and Medical Research Council (Australian Government) APP1182901 Clinical Trials and Cohort Studies (PI: McCabe) Dynamic Speech Therapy for Children with Apraxia Role: Co-Investigator & Site PI (Project PI: P. McCabe; Co-Investigators: S. Arora, R. Heard, E. Murray, J. Preston, A. Purcell, & D. Thomas) Total award: \$903,067 (AUS \$)
2019-2024	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) Ro1 DC017768 (PI: Maas) ASSIST: Child Apraxia Speech Treatment Role: PI (Co-Investigators: S. Caspari & J. Wu) Total award: \$2,169,698 (direct cost \$1,368,895)

### Completed

2021-2023 Once Upon a Time... Foundation Treatment grant (PI: Preston) The Effect of Treatment Intensity Using Dynamic Temporal and Tactile Cueing in Childhood Apraxia of Speech Treatment Role: Co-PI (PI: J. Preston; Co-PI: P. McCabe) Total award: \$669,000 (awarded but returned due to disagreement with funder)

2017-2020	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) R21 DC015859 (PI: Hoover) A Comparison of the Effects of Dosage and Group Dynamics on Discourse Outcomes in Aphasia Role: Co-Investigator (PI: E. Hoover; Co-Investigator: G. DeDe) Total award: \$498,560 (direct cost \$348,992)
2016-2017	Childhood Apraxia of Speech Association of North America (CASANA) Treatment Research Grant (PI: Maas) Bang for your Buck: A Systematic Investigation of Amount and Intensity of Practice in Treatment for Childhood Apraxia of Speech Role: PI (Consultants: C. Gildersleeve-Neumann, K. Jakielski, & R. Stoeckel) Total award: \$35,000
2016-2017	Cleft Palate Foundation Junior Investigator Research Grant (PI: Scheer-Cohen) Applying Principles of Motor Learning in Articulation Therapy for Children with Cleft Palate Role: Mentor/Consultant (PI: A. Scheer-Cohen) Total award: \$5,000
2013-2016	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) Ro3 DC013152 (PI: Preston) Ultrasound Biofeedback for Therapy-Resistant Children with Speech Sound Disorders Role: Consultant (PI: J. Preston) Total award: \$557,214 (direct cost \$300,000)
2010-2015	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) Ko1 DC010216 (PI: Maas) Psycholinguistic Investigations of Development and Disorders of Speech Production Role: PI (Mentors: L. Gerken & B. Story) Total award: \$704,259 (direct cost \$651,548)
2009-2012	<b>American Speech-Language-Hearing Foundation</b> New Century Scholars Research Grant (PI: Maas) <i>Feedback and Feedforward Control Mechanisms in Apraxia of Speech</i> Role: PI (Collaborators: F. Guenther & B. Story) Total award: \$10,000
2009-2010	<b>Childhood Apraxia of Speech Association of North America (CASANA)</b> Treatment Research Grant (PI: Maas) Practice Schedule and Feedback Frequency in Treatment for Childhood Apraxia of Speech Role: PI (Co-Investigator: K. Farinella) Total award: \$12,000

## OTHER FUNDING

(training grants, conference grants, intramural funding)

### <u>Under Review</u>

2024-2025 National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) F31 (PI: Littlejohn) Acoustic Measures in Diagnosis and Subtyping of Childhood Apraxia of Speech Role: Sponsor (PI: M. Littlejohn; Co-Sponsors E. Heller Murray, L. Dumenci, & J. Reilly) Total requested: \$73,289

### In Revision

### 2022-2026 **Department of Education**

Preparation of Special Education, Early Intervention, and Related Services Leadership Personnel grant (Assistance Listing Number/CFDA 84.325D) (PD: Bedore) Intervention and Higher Education Pedagogy in CSD for a Diverse Society Role: Co-Director (Project Director: L. Bedore) Total requested: \$1,147,792 (direct cost \$1,109,048)

### <u>Active</u>

# 2020-2023 Portland State University

Faculty grant (PI: Gildersleeve-Neumann) Effectiveness, Efficacy, and Efficiency of Therapy for Speech Sound Disorders in Bilingual Children: Comparing Spanish-English Bilingual and English-Monolingual Treatment Delivery Role: Consultant (PI: C. Gildersleeve-Neumann) Total awarded: \$15,000

### **Completed**

2020-2022	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) F31 DCo18723 (PI: Beiting) The Impact of Individual-Level Factors on Progress in Speech Therapy for Children with Childhood Apraxia of Speech (CAS) Role: Sponsor (PI: M. Beiting; Co-Sponsors: D. Coffman & J. Iuzzini-Seigel) Total awarded: \$63,024
2019-2021	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) F31 DC017654 (PI: Spencer) Neural Mechanisms of Speech Production in Intervention for Residual Speech Sound Disorders Role: External Co-Sponsor (PI: C. E. Spencer; Sponsor: S. Boyce) Total award: \$84,848

2018	<b>Temple University Graduate School</b> First Summers Research Grant (PI: Beiting) Treatment for Speech Disorders in Children with Autism Spectrum Disorder: A Novel Treatment Role: Mentor (PI: M. Beiting) Total award: \$6,500
2017	<b>Temple University Graduate School</b> First Summers Research Grant (PI: van Zelst) Unpacking Active Ingredients and Optimizing Treatment Outcomes for Children with Childhood Apraxia of Speech: Simultaneous Audio & Visual Entrainment (SAVE) Treatment Role: Mentor (PI: A. van Zelst) Total award: \$6,500
2017	<b>Once Upon A Time Foundation</b> Conference Grant (PI: Maas) Treatment of Childhood Apraxia of Speech using DTTC (February 25-26, 2017) Role: PI (organizer) Total award: \$20,997
2015-2017	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) F31 DC014375 (PI: Mailend) Speech Motor Planning in Apraxia of Speech and Aphasia Role: Co-Sponsor (PI: ML. Mailend; Sponsor: P. Beeson) Total award: \$86,240

# Not Awarded

2022-2026	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) K23 (PI: Heller Murray) Quantifying the role of vocal and articulatory variability in pediatric dysphonia Role: Mentor (PI: E. Heller Murray) Total requested: \$914,719 (direct cost \$846,961)
2019	National Institutes on Deafness and Other Communication Disorders (NIH/NIDCD) T32 (PI: Reilly) Plasticity in Learning and Communication: A Lifespan Perspective Role: Faculty Affiliate (PI: J. Reilly)
2019	Autism Speaks Predoctoral Training Award (PI: Beiting) Autism Centered Therapy for Childhood Apraxia of Speech (ACT4CAS) Role: Advisor (PI: M. Beiting) Total requested: \$70,000

2018	<b>Autism Science Foundation</b> Predoctoral Training Award (PI: Beiting) Autism Centered Therapy for Childhood Apraxia of Speech (ACT4CAS) Role: Advisor (PI: M. Beiting) Total requested: \$25,000
2014	<b>American Speech-Language-Hearing Foundation</b> Clinical Research Grant (PI: Maas) A Systematic Investigation of Amount and Intensity of Practice in Treatment for Childhood Apraxia of Speech Role: PI Total requested: \$50,000
2008	<b>American Speech-Language-Hearing Association</b> Advancing Academic Research Careers (AARC) Role: PI Total requested: \$5,000
2008	<b>University of Arizona</b> Faculty Small Grant <i>Learning New Speech Utterances: Effects of Practice Schedule</i> Role: PI Total requested: \$10,000

## **PUBLICATIONS**

(\* indicates student co-author)

## Peer-Reviewed Journal Articles

<u>In Review</u>

a. **Maas, E.** (submitted). Treatment for childhood apraxia of speech (CAS): Past, present, and future. *Manuscript in review.* 

## <u>In Press</u>

a. \*King, C. R., Wambaugh, J. L., & **Maas, E.** (in press). A comparison of Sound Production Treatment and Metrical Pacing Therapy for apraxia of speech: A single-case experimental design. *American Journal of Speech-Language Pathology*.

# <u>Published</u>

- 1. \*Keller, S., & **Maas, E.** (2023). Self-reported communication attitudes of children with childhood apraxia of speech: An exploratory study. *American Journal of Speech-Language Pathology*, 32, 1806-1824.
- \*Spencer, C., Vannest, J., Preston, J. L., Maas, E., Sizemore, E. R., McAllister, T., Whalen, D. H., Maloney, T., & Boyce, S. (in press). Neural changes in children with residual speech sound disorder after ultrasound biofeedback speech therapy. *Journal of Speech, Language, and Hearing Research,* 66, 3223-3241.
- 3. Mailend, M.-L., **Maas, E.**, & Story, B. H. (2021). Apraxia of speech and the study of speech production impairments: Can we avoid further confusion? Reply to Romani (2021). *Cognitive Neuropsychology*, 38, 309-317.
- 4. Hoover, E., DeDe, G., & **Maas, E.** (2021). A randomized controlled trial of the effects of group conversation treatment on monologic discourse in aphasia. *Journal of Speech, Language, and Hearing Research,* 64, 4861-4875.
- 5. \*Beiting, M., & **Maas, E.** (2021). Autism-Centered Therapy for Childhood Apraxia of Speech (ACT4CAS): A single-case experimental design study. *American Journal of Speech-Language Pathology*, 30, 1525-1541.
- 6. \*Spencer, C., Vannest, J., **Maas, E.**, Preston, J. L., Redle, E., Maloney, T., & Boyce, S. (2021). Neuroimaging of the Syllable Repetition Task in children with residual speech sound disorder. *Journal of Speech, Language, and Hearing Research, 64, 2223-2233.*
- 7. \*Mailend, M.-L., **Maas, E.**, Beeson, P., Story, B., & Forster, K. (2021). Examining speech motor planning difficulties in apraxia of speech and aphasia via the sequential production of phonetically similar words. *Cognitive Neuropsychology*, *38*, *72-87*.
- 8. Murray, E. J., Iuzzini-Seigel, J., **Maas, E.**, Terband, H., & Ballard, K. J. (2021). Differential diagnosis of childhood apraxia of speech compared to other speech sound disorders: A systematic review. *American Journal of Speech-Language Pathology*, 30, 279-300.

- 9. Terband, H., Rodd, J., & **Maas, E.** (2020). Testing hypotheses about the underlying deficit of apraxia of speech (AOS) through computational neural modeling with the DIVA model. *International Journal of Speech-Language Pathology*, 22, 475-486.
- Maas, E., Gildersleeve-Neumann, C., Jakielski, K., \*Kovacs, N., Stoeckel, R., \*Vradelis, H., & \*Welsh, M. (2019). Bang for your buck: A single-case experimental design study of practice amount and distribution in treatment for childhood apraxia of speech. *Journal of Speech, Language, and Hearing Research*, 62, 3160-3182.
- Terband, H., Namasivayam, A., Maas, E., van Brenk, F., \*Mailend, M.-L., Diepeveen, S., van Lieshout, P., & Maassen, B. (2019). Assessment of childhood apraxia of speech: A review/tutorial of objective measurement techniques. *Journal of Speech, Language, and Hearing Research*, 62, 2999-3032.
- 12. DeDe, G., Hoover, E., & **Maas, E.** (2019). Two to tango or the more the merrier? A randomized controlled trial of the effects of group size in aphasia conversation treatment on standardized tests. *Journal of Speech, Language, and Hearing Research, 62,* 1437-1451.
- 13. \*Mailend, M.-L., **Maas, E.**, Beeson, P., Story, B., & Forster, K. (2019). Reprogramming the speech motor buffer: Evidence from apraxia of speech and aphasia. *Neuropsychologia*, *127*, *171-184*.
- 14. Preston, J. L., Leece, M. C., McNamara, K., & **Maas, E.** (2017). Variable practice during ultrasound visual feedback treatment for childhood apraxia of speech. *American Journal of Speech-Language Pathology*, 26, 840-852.
- 15. **Maas, E.** (2017). Speech versus nonspeech: What are we talking about? International Journal of Speech-Language Pathology, 19, 345-359.
- 16. **Maas, E.**, & \*Mailend, M.-L. (2017). Fricative contrast and coarticulation in children with and without speech sound disorders. *American Journal of Speech-Language Pathology*, 26, 649-663.
- 17. Preston, J. L., Leece, M. C., & **Maas, E.** (2017). Motor-based treatment with and without ultrasound feedback for residual speech sound errors. *International Journal of Language and Communication Disorders*, 52, 80-94.
- Preston, J. L., Leece, M. C., & Maas, E. (2016). Intensive treatment with ultrasound visual feedback for speech sound errors in childhood apraxia. Frontiers in Human Neuroscience, 10:440. doi: 10.3389/fnhum.2016.00440
- 19. McAllister Byun, T., Swartz, M. T., Halpin, P. F., Szeredi, D., & **Maas, E.** (2016). Direction of attentional focus in biofeedback treatment for /r/ misarticulation. International Journal of Language and Communication Disorders, 51, 384-401.
- 20. Preston, J. L., **Maas, E.**, Whittle, J., Leece, M. C, & McCabe, P. (2016). Limited acquisition and generalisation of rhotics with ultrasound visual feedback in childhood apraxia. *Clinical Linguistics* & *Phonetics*, 30, 363-381.
- 21. Terband, H., Maassen, B., & **Maas, E.** (2016). Een procesgerichte aanpak van differentiaaldiagnose en therapieplanning bij spraakontwikkelingsstoornissen. *Stem-, Spraak-, en Taalpathologie, 21,* 1-31. [ A process-oriented approach to differential diagnosis and treatment planning in childhood speech sound disorders.]

- 22. Ballard, K. J., Wambaugh, J. L., Duffy, J. R., Layfield, C., **Maas, E.**, Mauszycki, S., & McNeil, M. R. (2015). Treatment for acquired apraxia of speech: A systematic review of intervention research between 2004 and 2012. *American Journal of Speech-Language Pathology*, *24*, 316-337.
- 23. **Maas, E.**, \*Mailend, M.-L., & Guenther, F. H. (2015). Feedforward and feedback control in apraxia of speech (AOS): Effects of noise masking on vowel production. *Journal of Speech, Language, and Hearing Research, 58,* 185-200.
- 24. Preston, J. L., McCabe, P., Rivera-Campos, A., Whittle, J. L., Landry, E., & **Maas, E.** (2014). Ultrasound visual feedback treatment and practice variability for residual speech sound errors. Journal of Speech, Language, and Hearing Research, 57, 2102-2115.
- 25. **Maas, E.**, \*Gutiérrez, K., & Ballard, K. J. (2014). Phonological encoding in apraxia of speech and aphasia. *Aphasiology*, 28 (1), 25-48.
- 26. \*Mailend, M.-L., & **Maas, E.** (2013). Speech motor planning in apraxia of speech: Evidence from a delayed picture-word interference task. *American Journal of Speech-Language Pathology*, 22, S380-S396.
- 27. **Maas, E.**, & \*Mailend, M.-L. (2012). Speech planning happens before speech execution: Contributions of on-line reaction time methods in the study of apraxia of speech. *Journal of Speech, Language, and Hearing Research, 55,* S1523-S1534.
- 28. **Maas, E.**, \*Butalla, C. E., & Farinella, K. A. (2012). Feedback frequency in treatment for childhood apraxia of speech. *American Journal of Speech-Language Pathology*, *21*, 239-257.
- 29. **Maas, E.**, & Farinella, K. A. (2012). Random versus blocked practice in treatment for childhood apraxia of speech. *Journal of Speech, Language, and Hearing Research, 55*, 561-578.
- 30. Ghosh, S. S., Matthies, M. L., Maas, E., Hanson, A., Tiede, M., Ménard, L., Guenther, F. H., Lane, H., & Perkell, J. S. (2010). An investigation of the relation between sibilant production and somatosensory and auditory acuity. *Journal of the Acoustical Society of America*, 128 (5), 3079-3087.
- 31. Austermann Hula, S. N., Robin, D. A., **Maas, E.**, Ballard, K. J., & Schmidt, R. A. (2008). Effects of feedback frequency and timing on acquisition, retention, and transfer of speech skills in acquired apraxia of speech. *Journal of Speech, Language, and Hearing Research,* 51 (5), 1088-1113.
- 32. **Maas, E.**, Robin, D. A., Wright, D. L., & Ballard, K. J. (2008). Motor programming in apraxia of speech. *Brain and Language*, 106, 107-118.
- 33. **Maas, E.**, Robin, D. A., Austermann Hula, S. N., Freedman, S. E., Wulf, G., Ballard, K. J., & Schmidt, R. A. (2008). Principles of motor learning in treatment of motor speech disorders. *American Journal of Speech-Language Pathology*, *17*, 277-298. (Received 2008 Editor's Award).
- 34. Ballard, K. J., **Maas, E.**, & Robin, D. A. (2007). Treating control of voicing in apraxia of speech with variable practice. *Aphasiology*, *21* (12), 1195-1217.
- 35. Freedman, S. E., **Maas, E.**, Caligiuri, M. P., Wulf, G., & Robin, D. A. (2007). Internal vs. external: Oralmotor performance as a function of attentional focus. *Journal of Speech, Language, and Hearing Research*, 50 (1), 131-136.
- 36. Love, T., **Maas, E.,** & Swinney, D. (2003). The influence of language exposure on lexical and syntactic language processing. *Experimental Psychology*, 50 (3), 204-216.

- 37. Bastiaanse, R., Edwards, S., **Maas, E.,** & Rispens, J. (2003). Assessing comprehension and production of verbs and sentences: The Verb and Sentence Test (VAST). *Aphasiology*, *1*7 (1), 49-73.
- 38. **Maas, E.**, Barlow, J., Robin, D., & Shapiro, L. (2002). Treatment of sound errors in aphasia and apraxia of speech: Effects of phonological complexity. *Aphasiology*, 16 (4/5/6), 609-622.
- 39. Bastiaanse, R., Rispens, J., & **Maas, E.** (2000). De Werkwoorden- en Zinnentest (WEZT). Een nieuw diagnostisch instrument voor afasie. *Logopedie en Foniatrie,* 72 (12), 259-267. [The Verb and Sentence Test (VAST). A new diagnostic instrument for aphasia. ]
- 40. **Maas, E.** (1998). Zinsbegrip en zinsanagrammen bij Broca-patiënten en Wernicke-patiënten. Toegepaste Taalwetenschap in Artikelen, 60 (1), 65-76. Proceedings of the ANéLA/VKL/WAP conference, Amsterdam, May 1998). [Sentence comprehension and sentence anagrams in Broca's aphasia patients and Wernicke's aphasia patients.]

## Invited Peer-Reviewed Articles

- a. \*Littlejohn, M., & **Maas, E.** (in press). How to cut the pie is no piece of cake: Toward a processoriented approach to the assessment and diagnosis of speech sound disorders. *International Journal of Language and Communication Disorders*.
- 1. Mailend, M.-L., & **Maas, E.** (2021). To lump or to split? Possible subtypes of apraxia of speech. *Aphasiology*, 35, 592-613.
- 2. Terband, H., Maassen, B., & **Maas, E.** (2019). A model of speech development and disorders for diagnosis and treatment planning. *Folia Phoniatrica et Logopaedica*, *7*1, 216-227.
- 3. **Maas, E.** (2015). Optimalisering van spraaktherapie: De toepassing van trainingsprincipes voor het leren van motorische vaardigheden. *Stem-, Spraak-, en Taalpathologie, 20,* 44-70. [Optimization of speech therapy: The application of principles of motor learning.]
- 4. **Maas, E.**, Gildersleeve-Neumann, C. E., Jakielski, K. J., & Stoeckel, R. (2014). Motor-based intervention protocols in treatment of childhood apraxia of speech (CAS). *Current Developmental Disorders Reports*, 1 (3), 197-206.
- 5. **Maas, E.** (2010). Conditions of practice and feedback in treatment for apraxia of speech. Perspectives on Neurophysiology and Neurogenic Speech and Language Disorders, 20 (3), 81-87.

## **Book Chapters**

- Terband, H., Maassen, B., & Maas, E. (2016). Towards a model of pediatric speech sound disorders (SSD) for differential diagnosis and therapy planning. In P. van Lieshout, B. Maassen, & H. Terband, (Eds.), Speech Motor Control in Normal and Disordered Speech: Future Developments in Theory and Methodology (pp. 81-110). American Speech-Language-Hearing Association.
- Maas, E., & Robin, D. A. (2009). Motor speech disorders: Apraxia and dysarthria. In L. Justice (Ed.), Communication Sciences and Disorders: An Introduction (2<sup>nd</sup> edition) (pp. 392-425). Merrill Prentice Hall.

- 3. **Maas, E.**, Freedman, S. E., & Robin, D. A. (2009). Traumatic brain injury. In M.R. McNeil (Ed.), *Clinical Management of Sensorimotor Speech Disorders (2<sup>nd</sup> edition)* (pp. 391-393). Thieme.
- 4. Freedman, S. E., **Maas, E.**, & Robin, D. A. (2009). Neurofibromatosis. In M.R. McNeil (Ed.), *Clinical Management of Sensorimotor Speech Disorders (2<sup>nd</sup> edition)* (pp. 352-353). Thieme.
- 5. Robin, D. A., **Maas, E.**, Sandberg, Y., & Schmidt, R. A. (2007). Motor control and learning and childhood apraxia of speech. In P. Hall, L. Jordan, & D.A. Robin (Eds.), *Developmental Apraxia of Speech. Theory and Clinical Practice* (2<sup>nd</sup> edition) (pp. 67-86). Pro-Ed.
- 6. **Maas, E.** & Robin, D. A. (2005). Motor speech disorders: Apraxia and dysarthria. In L. Justice (Ed.), Communication Sciences and Disorders: An Introduction (pp. 180-211). Merrill Prentice Hall.

## <u>Tests</u>

1. Bastiaanse, R., **Maas, E.,** & Rispens, J. (2000). *De Werkwoorden en Zinnentest (WEZT*). Lisse: Swets & Zeitlinger. [The Verb and Sentence Test (VAST). ]

## Published Abstracts and Conference Proceedings

- 1. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Stoeckel, R., & Wu, J. (2022). A randomized controlled trial of ASSIST for childhood apraxia of speech: Initial findings. *Stem-, Spraak- en Taalpathologie, 27,* Supplement, 166-167.
- 2. **Maas, E.**, Schölderle, T., Williams, P., Hayden, D., Iuzzini-Seigel, J., Kent, R., Murray, E., Nip, I., & Terband, H. (2022). Pediatric motor speech disorders: A panel discussion on a consensus Delphi project. *Stem-, Spraak- en Taalpathologie, 27,* Supplement, 47-48.
- 3. \*Purcell, C., Wambaugh, J., & **Maas, E.** (2022). A comparison of Sound Production Treatment and Metrical Pacing Therapy for apraxia of speech. *Stem-, Spraak- en Taalpathologie, 27,* Supplement, 176-177.
- 4. \*Beiting, M., Iuzzini-Seigel, J., & **Maas, E.** (2022). An exploratory analysis of individual-level predictors of CAS treatment response. *Stem-, Spraak- en Taalpathologie, 27,* Supplement, 45-46.
- 5. Hoover, E. L., DeDe, G., & **Maas, E.** (2018). Effects of group size on conversation treatment outcomes: results of standardized testing. *Aphasiology*, 32 (S1), 93-95.
- 6. **Maas, E.** (2017). Principles of motor learning in treatment for apraxia of speech. Frontiers in Human Neuroscience. Conference Abstract: Academy of Aphasia 55<sup>th</sup> Annual Meeting. doi: 10.3389/conf.fnhum.2017.223.00094.
- 7. \*Mailend, M.-L., **Maas, E.**, & Beeson, P. (2017). Examining the articulatory buffer in apraxia of speech. *Stem-, Spraak- en Taalpathologie, 22 Supplement,* 107.
- 8. \*van Zelst, A., & **Maas, E.** (2017). Speech timing in children with and without speech sound disorders: Acoustic measures of absolute and relative timing accuracy. *Stem-, Spraak- en Taalpathologie, 22 Supplement,* 113.
- 9. Terband, H., Rodd, J., & **Maas, E.** (2015). Simulations of feedforward and feedback control in apraxia of speech (AOS): Effects of noise masking on vowel production in the DIVA model. In: The 18th International Congress of Phonetic Sciences (ICPhS 2015).

- 10. Byun, T. M., Richtsmeier, P., & **Maas, E.** (2013). Covert contrast in child phonology is not necessarily extragrammatical. In LSA 2013 Annual Meeting Extended Abstracts. Linguistic Society of America.
- 11. **Maas, E.**, \*Mailend, M.-L., & Guenther, F. H. (2011). The role of auditory feedback in apraxia of speech: Effects of feedback masking on vowel contrast. *Stem-, Spraak- en Taalpathologie,* 17 (*suppl.*), 14.
- 12. **Maas, E.**, Robin, D. A., Steinhauer, V., Ballard, K. J., Magnuson, C. E., & Wright, D. L. (2006). Motor programming in apraxia of speech: A reaction time approach. *Stem-, Spraak- en Taalpathologie,* 14 (*suppl.*), 69.
- 13. Rhee, J. H., Robin, D. A., **Maas, E.**, & Wright, D. L. (2006). Motor programming during speech articulation: An application of Klapp's two-process model. *Journal of Sport and Exercise Psychology*, 28, S152-S153.
- 14. Wright, D. L., Robin, D. A., **Maas, E.**, & Magnuson, C. E. (2006). A general motor programming deficit contributes to apraxia of speech. *Journal of Sport and Exercise Psychology*, *28*, S195.
- 15. Bastiaanse, R., & **Maas, E.** (1998). Verb movement in agrammatic production. Brain and Language, 65, 52-55.

## <u>Other</u>

- 1. \*Skoog, K., & **Maas, E.** (2020). Predicting intelligibility: An investigation of speech sound accuracy in childhood apraxia of speech. *CommonHealth*, 1 (2), 44-56.
- 2. Maassen, B., Terband, H., **Maas, E.**, & Namasivayam, A. (2019). Preface Special Issue: Select Papers from the 7<sup>th</sup> International Conference on Speech Motor Control. *Journal of Speech, Language, and Hearing Sciences*, 62, 2923-2925.

## **PRESENTATIONS**

### (\* indicates student co-author)

## Invited Presentations

- a. **Maas, E.** (2025). ASSIST: Lessons from a randomized controlled trial of treatment for childhood apraxia of speech. Invited speaker for the 2025 Research Symposium on Clinical Trials for Treatment Effectiveness at the American Speech-Language-Hearing Association Convention (Washington, DC, November 2025).
- Maas, E. (2023). Dragons and astronauts: An epic saga of a randomized controlled trial of treatment for childhood apraxia of speech. Invited presentation at the Danish Speech-Language-Hearing Association's 100<sup>th</sup> anniversary conference (Nyborg, Denmark, March 2023).
- 2. **Maas, E.** (2022). Highlights from the 3<sup>rd</sup> Apraxia Kids Research Symposium. Invited presentation for the 2022 Apraxia Kids National Conference (Las Vegas, NV, July 2022).
- 3. **Maas, E.** (2022). Treatment for childhood apraxia of speech: Where are we and where do we go? Invited plenary presentation for the 2022 Childhood Apraxia of Speech Research Symposium (Las Vegas, NV, July 2022).
- 4. **Maas, E.** (2021). Childhood apraxia of speech (CAS) and speech sound disorders (SSD): How to cut the pie is no piece of cake. Invited presentation at a special panel session (with Susan Rvachew and Tricia McCabe) at the International Association of Logopedics and Phoniatrics meeting (virtual, December 2021).
- 5. Robin, D. A., & **Maas, E.** (2021). Evidence-based treatments for apraxia of speech in adults. Invited presentation for the New Hampshire Speech-Language-Hearing Association (virtual, September 2021).
- 6. Robin, D. A., & **Maas, E.** (2021). Fish or fowl: Diagnosing apraxia of speech in adults. Invited presentation for the New Hampshire Speech-Language-Hearing Association (virtual, September 2021).
- 7. **Maas, E.** (2020). Principles of motor learning and childhood apraxia of speech. Invited speaker for the 2020 on-line conference of ABRAPRAXIA (Brazilian Childhood Apraxia of Speech Association) (October 2020).
- 8. **Maas, E.** (2019). ASSIST: A phase 1 randomized controlled trial of integral stimulation speech therapy for childhood apraxia of speech (CAS). Invited research seminar in the Division of Speech and Language Pathology, Karolinska Institutet (Stockholm, Sweden, December 2019).
- 9. **Maas, E.** (2019). Principles of motor learning and speech production. Invited presentation at the Karolinska Institutet Winter Course on Speech Production Theoretical models related to neuromotor speech disorders in children and adults (Stockholm, Sweden, December 2019).
- 10. **Maas, E.** (2019). Speech production models in relation to apraxia of speech (AOS). Invited presentation at the Karolinska Institutet Winter Course on Speech Production Theoretical models related to neuromotor speech disorders in children and adults (Stockholm, Sweden, Dec. 2019).
- 11. **Maas, E.** (2019). Treatment for childhood apraxia of speech (CAS). Invited presentation at the Brain Korea Workshop at Ewha Womans University (Seoul, South Korea, August 2019).

- 12. **Maas, E.**, Santos Ford, D., & Vasiloff, G. (2019). Summer Camps for Childhood Apraxia of Speech. Invited Round Table discussion at the National Conference on Childhood Apraxia of Speech (Pittsburgh, PA, July 2019).
- 13. **Maas, E.** (2018). Evidence-based treatment for childhood apraxia of speech. Invited presentation at the International Conference on Special Education and Speech Therapy, dedicated to the 50<sup>th</sup> anniversary of Special Education & Speech Therapy at Tartu University (Tartu, Estonia, Oct. '18)
- 14. **Maas, E.** (2018). Zijn principes voor het leren van motorische vaardigheden relevant voor spraakontwikkelingsdyspraxie (SOD)? [Are principles of motor learning relevant for childhood apraxia of speech (CAS)?]. Invited talk in special session (with Ben Maassen, Veerle Waelkens, & Karin Brinkmann), presented at the annual conference of the VVL (Vlaamse Vereniging voor Logopedisten) [Flemish Speech-Language Pathology Association] (Gent, Belgium, March 2018).
- 15. Maas, E. (2018). Theoretisch kader bij spraakontwikkelingsdyspraxie (SOD): Waar gaat het mis? [Theoretical framework for childhood apraxia of speech (CAS): What goes wrong?]. Invited talk in special session (with Ben Maassen, Veerle Waelkens, & Karin Brinkmann), presented at the annual conference of the VVL (Vlaamse Vereniging voor Logopedisten) [Flemish Speech-Language Pathology Association] (Gent, Belgium, March 2018).
- 16. **Maas, E.** (2017). Principles of motor learning in treatment for apraxia of speech. Invited presentation in symposium on learning (with Gary Dell, Erica Middleton, Brenda Rapp, & Sofia Vallila Rohter), presented at the Academy of Aphasia (College Park, MD, November 2017).
- 17. **Maas, E.** (2017). Principles of motor learning: What are they and do they work for speech motor learning? Invited presentation at the Winter School on Speech Perception and Production (Berlin, Germany, January 2017).
- 18. **Maas, E.** (2016). Phonological planning and speech motor planning: Insights from speech-language production disorders. Invited presentation (*Speech and Language Science* committee) for panel entitled Disorders at the interface of language and motor control: Experiments and modeling (with Joe Duffy, Lisa Goffman, & Frank Guenther), presented at the American Speech-Language-Hearing Association Convention (Philadelphia, PA, November 2016).
- 19. Baker, E., & **Maas, E.** (2016). Making evidence-based decisions for children with speech sound disorders. Invited short course (*Speech Sound Disorders* committee), presented at the American Speech-Language-Hearing Association Convention (Philadelphia, PA, November 2016).
- 20. **Maas, E.** (2016). Principles of motor learning in treatment of apraxia of speech. Invited presentation at the Annual Eleanor M. Saffran Conference on Cognitive Neuroscience and Rehabilitation of Communication Disorders (Philadelphia, PA, September 2016).
- 21. **Maas, E.** (2016). An introduction to principles of motor learning in treatment for CAS: What are they and do they work? Invited presentation at the National Childhood Apraxia of Speech Conference (Itasca, IL, July 2016).
- 22. **Maas, E.** (2016). Apraxia of speech: Treatment approaches and their evidence. Invited oral seminar presented at the Annual Illinois Speech-Language-Hearing Association Convention (Rosemont, IL, February 2016).
- 23. **Maas, E.** (2016). Apraxia of speech: Current views on assessment and diagnosis. Invited oral seminar presented at the Annual Illinois Speech-Language-Hearing Association Convention (Rosemont, IL, February 2016).

- 24. **Maas, E.** (2014). Principles of motor learning in childhood speech disorders. Invited oral seminar for the Motor Speech Disorders in Adults and Children committee, presented at the American Speech-Language-Hearing Association Convention (Orlando, FL, November 2014).
- 25. **Maas, E.** (2013). An introduction to principles of motor learning and their relevance for speech and voice. Invited short course entitled *Motor Learning Principles: Clinical Implications for Voice Disorders*, presented at the American Speech-Language-Hearing Association Convention (Chicago, IL, November 2013).
- 26. **Maas, E.** (2013). State of the Art in CAS Neurocognitive-Behavioral Research: Some thoughts for moving forward in assessment and treatment. Panel response presented at the Childhood Apraxia of Speech Research Symposium (Atlanta, GA, February 2013).
- 27. **Maas, E.** (2012). Snake oil, fish oil, ethics, and evidence in the field of communication pathology. Invited short course, Department of Communication Pathology, University of Pretoria (Pretoria, South Africa, August 2012)
- 28. **Maas, E.** (2011). Interpreting the evidence in evidence-based practice: A tutorial on single-subject treatment research. Paper presented at the National Childhood Apraxia of Speech Conference (San Diego, CA, July 2011).
- 29. **Maas, E.** (2010). Principles of motor learning: A brief introduction. Invited presentation for short course entitled Motor Learning Principles: Clinical Implications for Stuttering & Other Disorders, at the American Speech-Language-Hearing Association Convention (Philadelphia, PA, Nov. 2010).
- 30. **Maas, E.** (2010). Principles of motor learning in childhood apraxia of speech. Invited presentation at the Grunewald-Blitz Workshop (Tucson, AZ, September 2010).
- 31. **Maas, E.** (2010). Principles of motor learning applied to childhood apraxia of speech: An overview and new evidence. Invited presentation at the National Conference on Childhood Apraxia of Speech (Pittsburgh, PA, July 2010).
- 32. Farinella, K., & **Maas, E.** (2010). Applying principles of motor learning to treatment for childhood apraxia of speech: New evidence. Invited presentation at the Arizona Speech-Language Hearing Association Convention (Phoenix, Arizona, April 2010).
- 33. **Maas, E.** (2009). Speech / spoken language planning in children. Invited presentation at the Auditory Cognitive Neuroscience Society Meeting (Tucson, AZ, January 2009).
- 34. Shapiro, L., Swinney, D., & **Maas, E.** (2003). The contributions of lexical and structural information in language comprehension. Invited symposium presented at the Clinical Aphasiology Conference (Orca's Island, WA, May 2003).
- 35. **Maas, E.** & Barlow, J. A. (2003). Complexity in language and learning: implications for planning treatment. Invited presentation at the First Annual Southern California Conference on Speech, Language and Hearing Sciences (San Diego, CA, February 2003).

## Peer-Reviewed Conference Presentations

## <u>Submitted</u>

- \*Littlejohn, M., & Maas, E. (submitted). Validity of acoustic measures of prosody in childhood apraxia of speech. Presentation submitted to the 22<sup>nd</sup> Biennial Conference on Motor Speech (San Diego, CA, February 2024).
- b. \*Littlejohn, M., & **Maas, E.** (submitted). Speech planning in children with and without speech sound disorders. Presentation submitted to the 22<sup>nd</sup> Biennial Conference on Motor Speech (San Diego, CA, February 2024).
- c. \*Keller, S., & **Maas, E.** (submitted). Beyond impairment: Self-reported communication attitudes of children with childhood apraxia of speech (CAS). Presentation submitted to the 22<sup>nd</sup> Biennial Conference on Motor Speech (San Diego, CA, February 2024).
- \*Littlejohn, M., Beiting, M., Caspari, S., Gildersleeve-Neumann, C., Stoeckel, R., & Maas, E. (submitted). Reliability and convergent validity of expert clinical opinion in the diagnosis of childhood apraxia of speech. Presentation submitted to the 22<sup>nd</sup> Biennial Conference on Motor Speech (San Diego, CA, February 2024).
- e. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Niculae-Caxi, T., Stoeckel, R., & Wu, J. (submitted). ASSIST speech therapy for childhood apraxia of speech (CAS): Effects on speech accuracy. Presentation submitted to the 22<sup>nd</sup> Biennial Conference on Motor Speech (San Diego, CA, February 2024).
- f. **Maas, E.**, \*Cook, S., Alper, R., & Caspari, S. (submitted). How frustrating! Child frustration in intensive treatment for childhood apraxia of speech (CAS). Presentation submitted to the 22<sup>nd</sup> Biennial Conference on Motor Speech (San Diego, CA, February 2024).
- g. Nip, I., Allison, K., Case, J., Iuzzini-Seigel, J., Kent, R., Maas, E., Schölderle, T., Terband, H., & Hayden, D. (submitted). An e-Delphi study on the assessment of pediatric motor speech disorders. Presentation submitted to the 22<sup>nd</sup> Biennial Conference on Motor Speech (San Diego, CA, February 2024).

## Oral Presentations

- a. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Niculae-Caxi, T., Stoeckel, R., & Wu, J. (accepted). Caregiver-rated functional outcomes from a randomized controlled trial of speech therapy for childhood apraxia of speech (CAS). Paper accepted to the American Speech-Language-Hearing Association Convention (Boston, MA, November 2023).
- b. Maas, E., Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Niculae-Caxi, T., Stoeckel, R., & Wu, J. (accepted). Effects of treatment intensity in virtual speech therapy for childhood apraxia of speech (CAS). Paper accepted to the American Speech-Language-Hearing Association Convention (Boston, MA, November 2023).

- 1. McCabe, T., Gomez, M., Preston, J., **Maas, E.**, Purcell, A., Thomas, D., Murray, E., Leece, M., Caballero, N., Beiting, M., Staples, T., & Heard, R. (2023). Reflections from the Dynamic Study: A randomised control trial comparing Dynamic Temporal and Tactile Cueing and usual care for children with childhood apraxia of speech. Paper presented at the World Congress of the International Association of Logopedics and Phoniatrics (Auckland, New Zealand, August 2023)
- 2. Hoover, E., DeDe, G., Szabo, G., Kulkarni, V., Kohen, F., Vitale, S., & **Maas, E.** (2023). Effects of conversation treatment for individuals with aphasia: Replication and extension of a randomized controlled trial. Paper presented at the Nordic Aphasia Conference (Reykjavik, Iceland, June 2023).
- 3. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C. E., Stoeckel, R., & Wu, J. (2022). Initial treatment efficacy of ASSIST for childhood apraxia of speech: A randomized controlled trial. Paper presented at the American Speech-Language Hearing Association Convention (New Orleans, La., November 2022).
- Maas, E., Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C. E., Niculae-Caxi, T., Stoeckel, R., & Wu, J. (2022). Virtual speech therapy for childhood apraxia of speech (CAS): Effects of intensity on functional outcomes. Paper presented at the American Speech-Language Hearing Association Convention (New Orleans, La., November 2022).
- 5. \*Beiting, M., **Maas, E.**, & Iuzzini-Seigel, J. (2022). An exploratory analysis of individual-level predictors of CAS treatment response. Paper presented at the International Conference on Speech Motor Control (Groningen, the Netherlands, August 2022)
- 6. **Maas, E.**, Schölderle, T., Williams, P., Hayden, D., Iuzzini-Seigel, J., Kent, R., Murray, E., Nip, I., & Terband, H. (2022). Pediatric motor speech disorders: A panel discussion on a consensus Delphi project. Panel presented at the International Conference on Speech Motor Control (Groningen, the Netherlands, August 2022).
- 7. Maas, E., Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Niculae-Caxi, T., Stoeckel, R., & Wu, J. (2022). Virtual ASSIST speech therapy for childhood apraxia of speech (CAS): Effects of intensity on caregiver-rated functional outcomes. Paper presented at the Childhood Apraxia of Speech Research Symposium (Las Vegas, NV, July 2022).
- 8. \*Keller, S., & **Maas, E.** (2022). Self-reported communication attitudes of children with childhood apraxia of speech. Paper presented at the Childhood Apraxia of Speech Research Symposium (Las Vegas, NV, July 2022).
- 9. \*Beiting, M., Iuzzini-Seigel, J., & **Maas, E.** (2022). Speech perception abilities of children with CAS: Preliminary findings. Paper presented at the Childhood Apraxia of Speech Research Symposium (Las Vegas, NV, July 2022).
- 10. \*Skoog, K., & **Maas, E.** (2021). Predicting intelligibility: An investigation of speech sound accuracy in childhood apraxia of speech. Paper presented at the American Speech-Language Hearing Association Convention (Washington, DC, November 2021).
- 11. **Maas, E.**, \*Mahoney, P., DeDe, G., & Kohen, F. (2021). Script training in apraxia of speech (AOS): Effects of feedback type. Paper presented at the American Speech-Language Hearing Association Convention (Washington, DC, November 2021).

- 12. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Stoeckel, R., & Wu, J. (2021). Parentrated functional outcomes from a randomized controlled trial for childhood apraxia of speech (CAS). Paper presented at the American Speech-Language Hearing Association Convention (Washington, DC, November 2021).
- 13. **Maas, E.,** \*Potkovac, G., DeDe, G., & Kohen, F. (2021). Feedback control in treatment for apraxia of speech. Paper presented at the American Speech-Language Hearing Association Convention (Washington, DC, November 2021).
- 14. **Maas, E.,** \*Mahoney, P., DeDe, G., & Kohen, F. (2020 accepted). Script training in apraxia of speech (AOS): Effects of feedback type. Paper accepted for the American Speech-Language Hearing Association Convention (San Diego, CA, November 2020). CANCELED due to COVID-19.
- 15. \*Skoog, K., & **Maas, E.** (2020 accepted). Predicting intelligibility: An investigation of speech sound accuracy in childhood apraxia of speech. Paper accepted for the American Speech-Language Hearing Association Convention (San Diego, CA, November 2020). CANCELED due to COVID-19.
- 16. Hoover, E., DeDe, G., & **Maas, E.** (2020 accepted). Conversation treatment for aphasia: Finding your recipe for success. Oral seminar accepted for the American Speech-Language Hearing Association Convention (San Diego, CA, November 2020). CANCELED due to COVID-19.
- 17. Hoover, E., DeDe, G., & **Maas, E.** (2021). Conversation treatment: What's in a narrative? Paper presented at the British Aphasiology Society conference (virtual, September 2021).
- Maas, E., Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Stoeckel, R., & Wu, J. (2020 accepted). Making an impact: Functional outcomes following treatment for childhood apraxia of speech. Paper accepted for the 2020 Childhood Apraxia of Speech Research Symposium (Plano, TX, July 2020). CANCELED due to COVID-19.
- 19. \*Beiting, M., & **Maas, E.** (2020 accepted). Autism-Centered Therapy for Childhood Apraxia of Speech. Paper accepted for the 2020 Childhood Apraxia of Speech Research Symposium (Plano, TX, July 2020). CANCELED due to COVID-19.
- 20. Hoover, E., DeDe, G., & **Maas, E.** (2020 accepted). The relative benefits of different discourse measures for varied profiles of aphasia. Roundtable accepted for the Clinical Aphasiology Conference (Hawaii, HI, May 2020). CANCELED due to COVID-19.
- 21. DeDe, G., Hoover, E., & **Maas, E.** (2020 accepted). Conversation Treatment: What's in a narrative? Paper accepted to the 2020 International Aphasia Rehabilitation Conference (Vancouver, Canada, June 2020). CANCELED due to COVID-19.
- 22. Terband, H., Rodd, J., & **Maas, E.** (2018). Testing hypotheses about the underlying deficit of apraxia of speech (AOS) through computational neural modelling with the DIVA model. Paper presented at the Nederlandse Vereniging voor Fonetische Wetenschappen Dag van de Fonetiek (Dutch Org. for Phonetic Sciences Day of Phonetics) (Groningen, the Netherlands, Dec. 2018).
- 23. Murray, E., Iuzzini-Seigel, J., **Maas, E.**, Terband, H., & Ballard, K. J. (2018). Diagnosis of childhood apraxia of speech compared to other speech sound disorders: A systematic review. Paper presented at the American Speech-Language-Hearing Association Convention (Boston, MA, November 2018).
- 24. Hoover, E., DeDe, G., **Maas, E.**, & McFee, A. (2018). Conversational group treatment approaches: The influence of group size. Oral seminar presented at the American Speech-Language-Hearing Association Convention (Boston, MA, November 2018).

- 25. \*Van Zelst, A., & **Maas, E.** (2018). Unpacking active ingredients for treatment of childhood apraxia of speech: Simultaneous Audio-Visual Entrainment (SAVE) treatment. Paper accepted for the American Speech-Language-Hearing Association Convention (Boston, MA, November 2018). WITHDRAWN.
- 26. DeDe, G., Hoover, E., & **Maas, E.** (2018). Effects of group size on conversation treatment outcomes: Results of standardized testing. Paper presented at the Clinical Aphasiology Conference (Austin, TX, May 2018).
- 27. Maas, E., Gildersleeve-Neumann, C. E., Jakielski, K., \*Kovacs, N., Stoeckel, R., \*Vradelis, H., \*Welsh, M., & \*van Zelst, A. (2018). Treatment amount and intensity in childhood apraxia of speech (CAS). Paper accepted for presentation at the Biennial Conference on Motor Speech (Savannah, GA, February 2018). WITHDRAWN due to illness.
- 28. Terband, H., Rodd, J., & **Maas, E.** (2018). Testing hypotheses about the underlying deficit of apraxia of speech (AOS) through computational neural modelling: Effects of noise masking on vowel production in the DIVA model. Paper presented at the Biennial Conference on Motor Speech (Savannah, GA, February 2018).
- 29. **Maas, E.**, Gildersleeve-Neumann, C. E., Jakielski, K., \*Kovacs, N., Stoeckel, R., \*Vradelis, H., \*Welsh, M., & \*van Zelst, A. (2017). Treatment for childhood apraxia of speech (CAS): Amount and intensity of practice. Paper presented at the American Speech-Language-Hearing Association Convention (Los Angeles, CA, November 2017).
- 30. \*Mailend, M.-L., & **Maas, E.** (2016). The effect of phonetic similarity on speech motor planning in apraxia of speech and aphasia. Paper presented at the American Speech-Language-Hearing Association Convention (Philadelphia, PA, November 2016).
- 31. **Maas, E.** (2016). Principles of motor learning in treatment for CAS: An update and new findings. Paper presented at National Conference on Childhood Apraxia of Speech (Itasca, IL, July 2016).
- 32. \*Mailend, M.-L., Beeson, P. M, & **Maas, E.** (2016). Reprogramming phonetically similar words in apraxia of speech and aphasia. Paper presented at the Clinical Aphasiology Conference (Charlottesville, VA, May 2016).
- 33. **Maas, E.** (2016). Speech and nonspeech: What are we talking about? Paper presented at the Biennial Conference on Motor Speech (Newport Beach, CA, March 2016).
- 34. Terband, H., Rodd, J., & **Maas, E.** (2015). Simulations of feedforward and feedback control in apraxia of speech (AOS): Effects of noise masking on vowel production in the DIVA model. Paper presented at the International Congress of Phonetic Sciences (Glasgow, Scotland, Aug. 2015).
- 35. \*Mailend, M.-L., **Maas, E.**, & Forster, K. I. (2014). Interference from phonetic similarity in masked priming. Paper presented at the American Speech-Language-Hearing Association Convention (Orlando, FL, November 2014).
- 36. **Maas, E.,** \*Alvarez, L., & \*Mailend, M.-L. (2014). Fricative production in children with speech sound disorders. Paper presented at the American Speech-Language-Hearing Association Convention (Orlando, FL, November 2014).
- 37. **Maas, E.**, \*Bueno, F., \*Mailend, M.-L., & Guenther, F. (2014). Feedback and feedforward control in apraxia of speech (AOS): Noise masking effects on fricative production. Paper presented at the Clinical Aphasiology Conference (St. Simon's Island, GA, May-June 2014).

- 38. **Maas, E.**, \*Bueno, F., \*Mailend, M.-L., & Guenther, F. H. (2014). Effects of feedback masking on fricative contrast in speakers with and without apraxia of speech. Paper presented at the Biennial Conference on Motor Speech (Sarasota, FL, February-March 2014).
- 39. Ballard, K. J., Wambaugh, J. L., Duffy, J. R., Layfield, C., **Maas, E.**, Mauszycki, S. C., & McNeil, M. R. (2013).Updated treatment guidelines for acquired apraxia of speech: Systematic review of studies 2004 to 2012. Paper presented at the American Speech-Language-Hearing Association Convention (Chicago, IL, November 2013).
- 40. **Maas, E.**, & \*Phillips, E. (2013). Phonological representations in children with and without speech sound disorders. Paper presented at the American Speech-Language-Hearing Association Convention (Chicago, IL, November 2013).
- 41. McAllister Byun, T., **Maas, E.**, & Swartz, M. T. (2013). Motor learning principles in /r/ treatment: Direction of attentional focus. Paper presented at the American Speech-Language-Hearing Association Convention (Chicago, IL, November 2013).
- 42. **Maas, E.**, \*Mailend, M.-L., & Guenther, F. H. (2013). Feedback and feedforward control in speech production in apraxia of speech and aphasia. Paper presented at the Clinical Aphasiology Conference (Tucson, AZ, May-June 2013).
- 43. **Maas, E.**, \*Mailend, M.-L., & Guenther, F. H. (2012). The role of auditory feedback during speech production in apraxia of speech. Paper presented at the Biennial Conference on Motor Speech (Santa Rosa, CA, March 2012).
- 44. **Maas, E.** (2011). Speech planning happens before speech execution: An argument for using reaction time measures in apraxia of speech. Paper presented at the symposium "Apraxia of Speech: Mechanisms and Symptoms" (Groningen, the Netherlands, June 2011).
- 45. **Maas, E.**, \*Mailend, M.-L., & Guenther, F. H. (2011). The role of auditory feedback in apraxia of speech (AOS): Effects of feedback masking on vowel contrast. Paper presented at the International Conference on Speech Motor Control (Groningen, the Netherlands, June 2011).
- 46. **Maas, E.**, & Farinella, K. A. (2010). Feedback frequency in treatment for childhood apraxia of speech. Paper presented at the American Speech-Language-Hearing Association Convention (Philadelphia, PA, November 2010).
- 47. Perkell, J. S., Matthies, M. L, Ghosh, S. S., **Maas, E.**, Hanson, A., Guenther, F. H., Lane, H., Ménard, L., & Tiede, M. (2008). Auditory and somatosensory goals for sibilants. Paper presented at the Acoustical Society of America meeting (Paris, France, June 2008).
- 48. **Maas, E.**, Robin, D., Magnuson, C., Wright, D., & Ballard, K. (2005). Motor programming in apraxia of speech: central or modality-specific deficit? Paper presented at the American Speech-Language-Hearing Association Convention (San Diego, CA, November 2005).
- 49. Ballard, K. J., **Maas, E.**, Robin, D. A., Guo, L-.Y. (2005). Treating interarticulator coordination in apraxia of speech with variable practice. Paper presented at the Clinical Aphasiology Conference (Sanibel Island, FL, May-June 2005).
- 50. Wright, D. L., Magnuson, C. E., Robin, D., **Maas, E.**, & Ballard, K. (2005). Programming timing during movement sequences: An investigation of apraxia of speech. Paper presented at the European Workshop on Movement Science (Vienna, Austria, June 2005).

- 51. Austermann, S., Robin, D., Ballard, K., **Maas, E.**, & Schmidt, R. (2004). Low versus high frequency feedback in apraxia of speech. Paper presented at the Biennial Conference on Motor Speech (Albuquerque, NM, March 2004).
- 52. **Maas, E.**, Barlow, J., Robin, D., & Shapiro, L. (2001). Treatment of phonological errors in aphasia and apraxia of speech: Effects of phonological complexity. Paper presented at the Clinical Aphasiology Conference (Santa Fe, NM, June 2001).
- 53. **Maas, E.,** Barlow, J., Morris, D., Robin, D., & Shapiro, L. (2000). Treatment of phonological errors in aphasia: Effects of complexity. Paper presented at the Annual International Aphasia Rehabilitation Conference (Rotterdam, the Netherlands, August 2000).
- 54. **Maas, E.** (1998). Zinsbegrip en zinsanagrammen in Broca-patiënten en Wernicke-patiënten. Paper presented at the ANéLA/VKL/WAP Conference (Amsterdam, the Netherlands, May 1998).

### Poster Presentations

- a. \*Smith, M., Ballard, K., **Maas, E.**, Plante, A., & Robin, D. (accepted). An investigation of motor programming in childhood apraxia of speech. Poster accepted to the American Speech-Language-Hearing Association Convention (Boston, MA, November 2023).
- \*Littlejohn, M., & Maas, E. (2023). Unit priming in children with typical speech and language development. Posted presented at the 17<sup>th</sup> annual Eleanor M. Saffran Conference on Cognitive Neuroscience & Rehabilitation of Communication Disorders. (Philadelphia, PA, September 2023).
- 2. DeDe, G., Hoover, E., Szabo, G., Kulkarni, V., Kohen, F., Vitale, S., & **Maas, E**. (2023). Effects of conversation treatment for individuals with aphasia: Replication and extension of a randomized controlled trial. Poster presented at the Clinical Aphasiology Conference (Atlantic City, NJ, May-June 2023).
- 3. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Stoeckel, R., & Wu, J. (2022). A randomized controlled trial of ASSIST for childhood apraxia of speech: Initial findings. Poster presented at the International Conference on Speech Motor Control (Groningen, the Netherlands, August 2022).
- 4. \*Purcell, C., Wambaugh, J., & **Maas, E.** (2022). A comparison of Sound Production Treatment and Metrical Pacing Therapy for apraxia of speech. Poster presented at the International Conference on Speech Motor Control (Groningen, the Netherlands, August 2022).
- 5. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Niculae-Caxi, T., Stoeckel, R., & Wu, J. (2022). Virtual ASSIST speech therapy for childhood apraxia of speech (CAS): Effects of intensity on caregiver-rated functional outcomes. Poster presented at the Apraxia Kids National Conference (Las Vegas, NV, July 2022).
- 6. \*Keller, S., & **Maas, E.** (2022). Self-reported communication attitudes of children with childhood apraxia of speech. Poster presented at the Apraxia Kids National Conference (Las Vegas, NV, July 2022).
- \*Beiting, M., Iuzzini-Seigel, J., & Maas, E. (2022). Speech perception abilities of children with CAS: Preliminary findings. Poster presented at the Apraxia Kids National Conference (Las Vegas, NV, July 2022).

- 8. McCabe, P., Preston, J., **Maas, E.**, Purcell, A., Thomas, D., Murray, E., Heard. R., Cronin, P., & Gomez, M. (2022). Dynamic Temporal and Tactile Cueing: A protocol for a two phase randomised control trial. Poster presented at the Speech Pathology Australia National Conference (Melbourne, Australia, May 2022).
- 9. \*Purcell, C., Wambaugh, J., & **Maas, E.** (2022). A comparison of Sound Production Treatment and Metrical Pacing Technique for apraxia of speech. Poster presented at the Clinical Aphasiology Conference (Wrightsville Beach, NC, May 2022)
- \*Keller, S., & Maas, E. (2022). Self-reported communication attitudes of children with childhood apraxia of speech. Poster presented at the 21<sup>st</sup> Biennial Conference on Motor Speech (Charleston, SC, February 2022).
- Maas, E., Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Niculae-Caxi, T., Stoeckel, R., & Wu, J. (2022). Intensity of virtual ASSIST speech therapy for childhood apraxia of speech: Preliminary findings from caregiver-rated functional outcomes. Poster presented at the 21<sup>st</sup> Biennial Conference on Motor Speech (Charleston, SC, February 2022).
- Maas, E., \*Mahoney, P., DeDe, G., & Kohen, F. (2022). Effects of feedback type in script training for apraxia of speech (AOS). Poster presented at the 21<sup>st</sup> Biennial Conference on Motor Speech (Charleston, SC, February 2022).
- 13. \*Beiting, M., Iuzzini-Seigel, J., & **Maas, E.** (2022). Speech perception abilities among children with childhood apraxia of speech: Preliminary findings. Poster presented at the 21<sup>st</sup> Biennial Conference on Motor Speech (Charleston, SC, February 2022).
- 14. **Maas, E.,** \*Potkovac, G., DeDe, G., & Kohen, F. (2022). Self-controlled vs. clinician-controlled feedback in treatment for apraxia of speech. Poster presented at the 21<sup>st</sup> Biennial Conference on Motor Speech (Charleston, SC, February 2022).
- 15. McCabe, P., Preston, J., Maas, E., Purcell, A., Thomas, D., Murray, E., Gomez, M., Heard, R., & Cronin, P. (2022). Protocol for a two-arm cross-over randomized control trial examining Dynamic Temporal and Tactile Cueing (DTTC) and usual care in childhood apraxia of speech treatment. Poster presented at the 21<sup>st</sup> Biennial Conference on Motor Speech (Charleston, SC, February 2022).
- 16. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Stoeckel, R., & Wu, J. (2021). Making an impact: Functional outcomes following treatment for childhood apraxia of speech. Poster presented at the 2021 National Conference on Apraxia of Speech (virtual, July 2021).
- 17. \*Spencer, C., Vannest, J., Redle Sizemore, E., Preston, J. L., **Maas, E.**, McAllister, T., Whalen, D. H., Tiede, M., & Boyce, S. (2021). Functional connectivity in children with RSSD. Poster presented at the Boston Speech Motor Control Symposium (Boston, MA, June 2021).
- 18. Hoover, E., DeDe, G., & **Maas, E.** (2021). Conversation Treatment: What's in a narrative? Poster presented at the Clinical Aphasiology Conference (virtual, May 2021).
- 19. \*Spencer, C., Vannest, J., Boyce, S., **Maas, E.**, Preston, J., & Redle, E. (2020). Neural changes in children with residual speech sound disorder (RSSD) after ultrasound biofeedback therapy. Poster presented at the 12<sup>th</sup> annual International Seminar on Speech Production (virtual, December 2020).
- 20. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Stoeckel, R., & Wu, J. (2020 accepted). Parent-rated functional outcomes from a randomized controlled trial for childhood apraxia of speech (CAS). Paper accepted for the American Speech-Language Hearing Association Convention (San Diego, CA, November 2020). CANCELED due to COVID-19.

- 21. Hoover, E., DeDe, G., & **Maas, E.** (2020 accepted). Conversation Treatment: What's in a narrative? Poster accepted for the Clinical Aphasiology Conference (Hawaii, HI, May 2020). CANCELED due to COVID-19.
- 22. **Maas, E.**, Caspari, S., \*Beiting, M., Gildersleeve-Neumann, C., Stoeckel, R., & Wu, J. (2020). Parentrated functional outcomes of treatment for childhood apraxia of speech: Preliminary findings from a randomized controlled trial. Poster presented at the 20<sup>th</sup> Biennial Conference on Motor Speech (Santa Barbara, CA, February 2020).
- 23. \*Beiting, M., & **Maas, E.** (2020). Autism-centered therapy for childhood apraxia of speech. Poster presented at the 20<sup>th</sup> Biennial Conference on Motor Speech (Santa Barbara, CA, February 2020).
- 24. \*Spencer, C., Vannest, J., **Maas, E.**, Preston, J., Redle, E., & Boyce, S. (2020). Neuroimaging of the Syllable Repetition Task in children with residual speech sound disorder (RSSD). Poster presented at the 20<sup>th</sup> Biennial Conference on Motor Speech (Santa Barbara, CA, February 2020).
- 25. \*Beiting, M., & **Maas, E.** (2019). Autism-Centered Therapy for Childhood Apraxia of Speech. Poster presented at the American Speech-Language-Hearing Association Convention (Orlando, FL, November 2019).
- 26. \*Beiting, M., & **Maas, E.** (2019). Autism-Centered Therapy for Childhood Apraxia of Speech. Poster presented at the Eleanor M. Saffran Conference on Cognitive Neuroscience and Rehabilitation of Communication Disorders (Philadelphia, PA, September 2019).
- 27. Murray, E., Iuzzini-Seigel, J., **Maas, E.**, Terband, H. & Ballard, K. (2019) Diagnosis of childhood apraxia of speech versus other speech sound disorders: A systematic review. Poster presented at the Speech Pathology Australia conference (Brisbane, Australia, June 2019).
- 28. **Maas, E.**, & \*Sanwald, T. (2019). Priming in apraxia of speech and aphasia: Preparing sounds or articulator movements? Poster accepted for the Clinical Aphasiology Conference (Whitefish, MT, May-June 2019). WITHDRAWN due to schedule conflict.
- 29. \*Leach, C., Martin, N., Kohen, F., & **Maas, E.** (2019). Effects of rapid versus standard word presentation treatment in letter-by-letter readers. Poster presented at the Clinical Aphasiology Conference (Whitefish, MT, May-June 2019).
- 30. \*Beiting, M., \*Mailend, M.-L., \*Gross, L., & **Maas, E.** (2018). Development of speech motor control: Evidence from coarticulation in adults, typical, and speech disordered children. Poster presented at the American Speech-Language-Hearing Association Convention (Boston, MA, November 2018).
- 31. \*Sanwald, T., & **Maas, E.** (2018). Phonological versus speech motor priming in apraxia of speech and aphasia. Poster presented at the American Speech-Language-Hearing Association Convention (Boston, MA, November 2018).
- 32. Hoover, E. L., DeDe, G., & **Maas, E.** (2018). Effects of group size on conversation treatment outcomes: results of standardized testing. Poster presented at the International Aphasia Rehabilitation Conference (Aveiro, Portugal, September 2018).
- 33. \*van Zelst, A., & **Maas, E.** (2018). Is timing really everything? Absolute and relative timing of speech in children with and without speech sound disorders. Poster presented at the Biennial Conference on Motor Speech (Savannah, GA, February 2018).

- 34. Terband, H., Maassen, B., & **Maas, E.** (2018). A model of speech development and disorders for diagnosis and treatment planning. Poster presented at the Biennial Conference on Motor Speech (Savannah, GA, February 2018).
- 35. \*van Zelst, A., & **Maas, E.** (2017). Speech timing in children with and without speech sound disorders. Poster presented at the American Speech-Language-Hearing Association Convention (Los Angeles, CA, November 2017).
- 36. \*Mailend, M.-L., **Maas, E.**, & Beeson, P. (2017). Examining the articulatory buffer in apraxia of speech. Poster presented at the International Conference on Speech Motor Control (Groningen, the Netherlands, July 2017).
- 37. \*van Zelst, A., & **Maas, E.** (2017). Speech timing in children with and without speech sound disorders: Acoustic measures of absolute and relative timing accuracy. Poster presented at the International Conference on Speech Motor Control (Groningen, Netherlands, July 2017).
- 38. **Maas, E.**, & \*Mailend, M.-L. (2017). Speech motor planning in apraxia of speech and aphasia: Effects of auditory distractors on vowel acoustics. Poster presented at the Clinical Aphasiology Conference (Snowbird, UT, May-June 2017).
- 39. \*Cochran, E., \*Soghomonian, A., \*Nally, A., Goss, M., **Maas, E.**, & Garcia, F. (2016). "Chata," "Kata," or "Casa?": Assessment & treatment of childhood apraxia of speech in a dual language learner. Poster presented at the American Speech-Language-Hearing Association Convention (Philadelphia, PA, November 2016).
- 40. \*Mailend, M.-L., **Maas, E.**, & Beeson, P. M. (2016). Examining the speech motor planning buffer in apraxia of speech and aphasia. Poster presented at the Annual Eleanor M. Saffran Conference on Cognitive Neuroscience and Rehabilitation of Communication Disorders (Philadelphia, PA, September 2016).
- 41. **Maas, E.**, & \*Mailend, M.-L. (2016). Fricative contrast and coarticulation in children with and without speech sound disorders. Poster presented at the Biennial Conference on Motor Speech (Newport Beach, CA, March 2016).
- 42. \*Mailend, M.-L., **Maas, E.**, & Beeson, P. M. (2016). Phonetic similarity effects in apraxia of speech. Poster presented at the Biennial Conference on Motor Speech (Newport Beach, CA, March 2016).
- 43. Powers, C., Gildersleeve-Neumann, C. E., **Maas, E.**, Jakielski, K. J., & Stoeckel, R. (2015). Investigating amount and intensity of practice in treatment of childhood apraxia of speech. Poster presented at the American Speech-Language-Hearing Association Convention (Denver, CO, November 2015).
- 44. \*Mailend, M.-L., **Maas, E.**, & Forster, K. I. (2014). Phonetic similarity effects in masked priming. Poster presented at the International Workshop on Language Production (Geneva, Switzerland, July 2014).
- 45. McAllister Byun, T., Swartz, M. T., & **Maas, E.** (2014). Direction of attentional focus in speech-motor learning: Evidence from biofeedback intervention. Poster presented at the Biennial Conference on Motor Speech (Sarasota, FL, March 2014).
- 46. **Maas, E.**, & \*Phillips, E. (2013). Segmental or holistic phonological representations in children with and without speech sound disorders (SSD)? Evidence from a mispronunciation detection task. Poster presented at the Symposium on Research in Child Language Disorders (Madison WI, June 2013).

- 47. McAllister Byun, T., Richtsmeier, P., & **Maas, E.** (2013). Covert contrast in child phonology is not necessarily extragrammatical. Poster presented at the Annual Meeting of the Linguistic Society of America (Boston, MA, January 2013).
- 48. \*Mailend, M.-L., & **Maas, E.** (2012). Speech motor planning in the face of distraction: Evidence from apraxia of speech. Poster presented at the International Workshop on Language Production (New York, NY, July 2012).
- 49. **Maas, E.**, \*Tellez, A.-A., & \*Mailend, M.-L. (2012). Phonological planning in children with and without speech sound disorders. Poster presented at the Symposium on Research in Child Language Disorders (Madison WI, June 2012).
- 50. \*Mailend, M.-L., & **Maas, E.** (2012). Apraxia of speech: Impaired access to motor programs or impaired motor programs? Poster presented at the Clinical Aphasiology Conference (Lake Tahoe, CA, May 2012). (NIDCD Research Symposium in Clinical Aphasiology Student Fellowship to 1<sup>st</sup> author)
- 51. **Maas, E.**, \*Mailend, M.-L., & \*Swanson, L. T. (2012). Anticipatory coarticulation in typically developing children and in children with speech disorders. Poster presented at the Biennial Conference on Motor Speech (Santa Rosa, CA, March 2012).
- 52. \*Gutiérrez, K., **Maas, E.**, & Ballard, K. J. (2011). Phonological priming in apraxia of speech and aphasia. Poster presented at the Clinical Aphasiology Conference (Ft. Lauderdale, FL, May-June, 2011). (NIDCD Research Symposium in Clinical Aphasiology Student Fellowship award to 1<sup>st</sup> author)
- 53. \*Lopez, A. A., & **Maas, E.** (2011). Vowel errors and their treatment in childhood apraxia of speech. Poster presented at the Annual Convention of the Arizona Speech-Language-Hearing Association (Phoenix, AZ, April 2011).
- 54. \*Tellez, A.-A., & **Maas, E.** (2011). Phonological representations in speech planning in children with speech disorders. Poster presented at the Annual Convention of the Arizona Speech-Language-Hearing Association (Phoenix, AZ, April 2011).
- 55. \*Butalla, C. E., Farinella, K. A., & **Maas, E.** (2011). Feedback frequency effects in treatment for childhood apraxia of speech. Poster presented at the Annual Convention of the Arizona Speech-Language-Hearing Association (Phoenix, AZ, April 2011).
- 56. **Maas, E.**, & Farinella, K. A. (2010). Random versus blocked practice in treatment for childhood apraxia of speech. Poster presented at the Conference on Motor Speech (Savannah, GA, 3/2010).
- 57. **Maas, E.**, Robin, D. A., Steinhauer, V., Ballard, K. J., Magnuson, C. E., & Wright, D. L. (2006). Motor programming in apraxia of speech: A reaction time approach. Poster presented at the International Conference on Speech Motor Control (Nijmegen, the Netherlands, June 2006).
- 58. **Maas, E.**, Robin, D. A., Steinhauer, V., Magnuson, C. E., Wright, D. L, & Ballard, K. J. (2006). Apraxia of speech as an impairment of preprogramming. Poster presented at the Clinical Aphasiology Conference (Ghent, Belgium, June 2006).
- 59. Rhee, J. H., Robin, D. A., **Maas, E.**, & Wright, D. L. (2006). Motor programming during speech articulation: An application of Klapp's two-process model. Poster presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity (Denver, CO, June, 2006).

- 60. Wright, D. L., Robin, D. A., **Maas, E.**, & Magnuson, C. E. (2006). A general motor programming deficit contributes to apraxia of speech. Poster presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity (Denver, CO, June, 2006).
- 61. Ballard, K. J., **Maas, E.**, & Robin, D. A. (2006). Treating control of voicing in apraxia of speech with variable practice. Poster presented at the Western Australia 2006 Speech Pathology Australia National Conference, Frontiers (Fremantle, Australia, May 2006).
- 62. **Maas, E.**, Robin, D. A., Ballard, K. J., Magnuson, C. E., & Wright, D. L. (2006). Speech motor programming in apraxia of speech: A reaction time approach. Poster presented at the Biennial Conference on Motor Speech (Austin, TX, March 2006).
- 63. Austermann, S. N., Robin, D. A., **Maas, E.**, Ballard, K. J., & Schmidt, R. A. (2006). Principles of motor learning applied to the treatment of acquired apraxia of speech: Feedback frequency and timing. Poster presented at the Biennial Conference on Motor Speech (Austin, TX, March 2006).
- 64. Freedman, S. E., **Maas, E.**, Caligiuri, M. P., Wulf, G., & Robin, D. A. (2006). Oral-motor learning, retention, and transfer as a function of attentional focus. Poster presented at the Biennial Conference on Motor Speech (Austin, TX, March 2006).
- 65. Freedman, S. **Maas, E.**, Wulf, G., Caligiuri, M., & Robin, D. (2005). Effects of attentional focus on oral motor control and learning. Poster presented at the American Speech-Language-Hearing Association Convention (San Diego, CA, November 2005).
- 66. **Maas, E.**, Robin, D. A., Magnuson, C. E., Wright, D. L., & Ballard, K. (2005). Motor programming in apraxia of speech and aphasia. Poster presented at the Clinical Aphasiology Conference (Sanibel Island, FL, June 2005). (*NIDCD Research Symposium in Clinical Aphasiology Student Fellowship* award to 1<sup>st</sup> author.)
- 67. Austermann, S., Robin, D. A., **Maas, E.**, Ballard, K., & Schmidt, R. (2005). The effect of feedback delay on the treatment of acquired apraxia of speech. Poster presented at the Clinical Aphasiology Conference (Sanibel Island, FL, June 2005).
- 68. Freedman, S., **Maas, E.**, Wulf, G., Caligiuri, & Robin, D. A. (2005). Effects of attentional focus on oral-motor control and learning. Poster presented at the Clinical Aphasiology Conference (Sanibel Island, FL, June 2005).
- 69. Austermann, S., **Maas, E.**, Robin, D., Ballard, K., & Schmidt, R. (2004). The role of feedback frequency in the treatment of acquired apraxia of speech. Poster presented at the Clinical Aphasiology Conference (Park City, UT, May 2004). (*NIDCD Research Symposium in Clinical Aphasiology Student Fellowship* award to 1<sup>st</sup> and 2<sup>nd</sup> author.)
- 70. de Goede, D., Wester, F., Bastiaanse, R., Maas, E., den Ouden, D. B., Shapiro, L., & Swinney, D. (2003). Verb movement and gap-filling in Dutch sentence processing. Poster presented at the Verb and Sentence Processing in Aphasia Group conference on Verbs: Properties, Processes and Problems (London, UK, April 2003).
- 71. Wester, F., de Goede, D., Bastiaanse, R., Maas, E., den Ouden, D. B., Shapiro, L., & Swinney, D. (2003). Verb activation in on-line sentence processing. Poster presented at the Annual CUNY Conference on Human Sentence Processing (Cambridge, MA, March 2003).
- 72. **Maas, E.**, Shapiro, L., & Swinney, D. (2003). The nature of gap-filling: syntactic or semantic order? Poster presented at the Annual CUNY Conference on Human Sentence Processing (Cambridge, MA, March 2003).

73. Bastiaanse, R. & **Maas, E.** (1998). Verb movement in agrammatic production. Poster presented at the Annual Academy of Aphasia (Santa Fe, NM, November 1998).

## Professional Education & Outreach Presentations, Workshops, and Colloquia

- a. **Maas, E.**, Cler, G., Chang, S.-E., Grillo, E., & Pham, G. (accepted). Successful research grant writing in Communication Sciences and Disorders: Advice from experts. Oral seminar as part of ASHA's Research and Scientific Affairs Committee series on professional development, accepted to the American Speech-Language-Hearing Association Convention (Boston, MA, November 2023).
- 1. **Maas, E.** (2023). Dragons, banoonos, wobbegongs, and baymo miggets: A randomized controlled trial of ASSIST for childhood apraxia of speech (CAS). Presentation at the Temple University Communication Sciences and Disorders Research Blitz (Philadelphia, PA, August 2023)
- 2. **Maas, E.** (2022). Of castles and dragons: Functional outcomes of treatment for childhood apraxia of speech. Presentation at the Temple University Communication Sciences and Disorders proseminar (Philadelphia, PA, October 2022).
- 3. **Maas, E.** (2022). How to ASSIST your dragon 2: A clinical trial of treatment for childhood apraxia of speech (CAS). Presentation at the Temple University Communication Sciences and Disorders Research Blitz (Philadelphia, PA, August 2022).
- 4. **Maas, E.** (2022). Studying speech disorders: Research in the SLAB Lab and advice for new scientists. Invited presentation at the Diamond Research Scholarship program 2022 Kick-off (Philadelphia, PA, May 2022).
- 5. \*Keller, S., & **Maas, E.** (2022). Understanding the communication attitudes of children with childhood apraxia of speech. Poster presented virtually at Temple University's College of Public Health Research and Evidence Based Practice Day (Philadelphia, PA, April 2022).
- 6. \*Keller, S., & **Maas, E.** (2022). Self-reported communication attitudes of children with childhood apraxia of speech. Oral presentation at Temple University's Symposium for Undergraduate Research and Creativity (Philadelphia, PA, April 2022).
- 7. **Maas, E.** (2021). An epic tale of castles, dragons, and magic: A phase 1 randomized clinical trial of ASSIST for childhood apraxia of speech. Invited presentation at the University of Wisconsin-Madison Department of Communication Sciences and Disorders seminar (virtual, October 2021).
- 8. **Maas, E.**, Simon-Cereijido, G., Sharma, A., & Grasso, S. (2021). Thinking about a PhD? Information for prospective doctoral students. Oral session as part of ASHA's Research and Scientific Affairs Committee series on professional development, presented at the American Speech-Language-Hearing Association Convention (Washington, DC, November 2021).
- 9. **Maas, E.** (2021). 2021: A Space camp Odyssey for children with childhood apraxia of speech (CAS). Presentation at the Temple University Communication Sciences and Disorders Research Blitz (Philadelphia, PA, August 2021)
- 10. **Maas, E.** (2021). How to ASSIST your dragon: Parent-rated outcomes of an intensive treatment for childhood apraxia of speech. Presentation at the Temple University Communication Sciences and Disorders proseminar (virtual, March 2021).

- 11. **Maas, E.** (2021). Speech disorders: What's psycholinguistics got to do with it? Invited presentation at the Temple University Linguistics Club (virtual, March 2021).
- 12. **Maas, E.**, & \*Beiting, M. (2021). What's brewing at the SLAB Lab? Recent and ongoing research on childhood apraxia of speech. Invited presentation at the Greater Philadelphia Apraxia Support Group (virtual, February 2021).
- 13. **Maas, E.** (2020). Using psycholinguistic reaction time methods to understand speech disorders. Invited presentation at the Integrated Language Science and Technology Seminar, University of Pennsylvania (October 2020).
- 14. **Maas, E.** (2020). Of castles and dragons: A phase 1 randomized controlled trial of ASSIST, a treatment program for childhood apraxia of speech (CAS). Invited presentation at the Language Neurobiology Laboratory, UCSF Memory and Aging Center and UCSF Dyslexia Center (Sept. 2020).
- 15. **Maas, E.** (2020). ASSISTing communicative participation in children with childhood apraxia of speech (CAS). Presentation at the Temple University Communication Sciences and Disorders Research Blitz (Philadelphia, PA, August 2020).
- 16. **Maas, E.** (2020). Principles of motor learning and childhood apraxia of speech: A (hopefully) gentle introduction. Invited webinar for Apraxia Kids (June, 2020).
- 17. Caspari, S., \*Beiting, M., & **Maas, E.** (2020 accepted). "ASSIST"ing graduate students: Fostering success in a research practicum. Paper accepted for the 2020 National Conference on Childhood Apraxia of Speech (Plano, TX, July 2020). CANCELED due to COVID-19.
- 18. **Maas, E.** (2019). Apraxia of speech: Recent developments in diagnosis and treatment. Invited presentation at Cooper University Hospital (Camden, NJ, November 2019).
- 19. **Maas, E.** (2019). How to ASSIST your dragon: A clinical trial of treatment for childhood apraxia of speech (CAS). Presentation at the Temple University Communication Sciences and Disorders Research Blitz (Philadelphia, PA, August 2019).
- 20. **Maas, E.** (2019). Principles of motor learning in treatment for CAS: Updates, new findings, and future directions. Paper presented at the National Conference on Childhood Apraxia of Speech (Pittsburgh, PA, July 2019).
- 21. **Maas, E.** (2019). Interpreting the evidence in evidence-based practice: A tutorial on single-case experimental design treatment research. Paper presented at the National Conference on Childhood Apraxia of Speech (Pittsburgh, PA, July 2019).
- 22. \*van Zelst, A., & **Maas, E.** (2018). Is timing really everything? Absolute and relative timing of speech in children with and without speech sound disorders. Poster presented at the College of Public Health Research Day (Philadelphia, PA, April 2018)
- 23. **Maas, E.** (2018). More BANG for your buck: Amount and intensity of treatment for childhood apraxia of speech. Presentation at the Communication Sciences and Disorders Proseminar, Temple University (Philadelphia, PA, March 2018).
- 24. **Maas, E.** (2018). Apraxia of Speech (AOS): A problem in speech motor planning. Presentation at the Philadelphia Aphasia Community at Temple (PACT) Second Saturday Community Group (Philadelphia, PA, February 2018).

- 25. \*van Zelst, A., & **Maas, E.** (2017). Speech timing as a potential measure for differential diagnosis of speech disorders in children. Poster presented at the College of Public Health Research Day (Philadelphia, PA, April 2017).
- 26. **Maas, E.** (2017). Speech planning in apraxia of speech (AOS): Evidence from acoustic and reaction time studies. Invited presentation at New York University's Department of Communicative Sciences and Disorders colloquium (New York City, NY, February 2017).
- 27. **Maas, E.** (2016). Current research and clinical applications for childhood apraxia of speech. Invited in-service presentation at Children's Hospital of Philadelphia (Philadelphia, PA, December 2016).
- 28. **Maas, E.** (2016). Current research in the treatment of childhood apraxia of speech. Invited inservice presentation at AGSpeech Language Potential, LLC (Media, PA, September 2016).
- 29. **Maas, E.** (2016). Evidence-based diagnosis and treatment of childhood apraxia of speech. Invited in-service presentation at School District of Philadelphia (Philadelphia, PA, September 2016).
- 30. **Maas, E.** (2016). Diagnosis and treatment of childhood apraxia of speech. Invited in-service presentation at Montgomery County Intermediate Unit (Norristown, PA, August 2016).
- 31. **Maas, E.** (2016). Treatment for apraxia of speech in adults and children. Invited in-service presentation at Jefferson Hospital Outpatient Rehabilitation (Philadelphia, PA, June 2016).
- 32. **Maas, E.** (2016). Diagnosis and treatment of childhood apraxia of speech. Invited in-service presentation at St. Christopher's Pediatric Therapy (Jenkintown, PA, May 2016).
- 33. **Maas, E.** (2016). Bang for your buck: Optimizing treatment for childhood apraxia of speech. Presentation at the Communication Sciences and Disorders Proseminar, Temple University (Philadelphia, PA, April 2016).
- 34. **Maas, E.** (2016). Apraxia of speech: Assessment, diagnosis, and treatment. Invited in-service at the Rehabilitation Institute of Chicago (Chicago, IL, February 2016).
- 35. **Maas, E.** (2015). Speech planning in apraxia of speech (AOS): Some recent evidence from acoustic and reaction time studies. Invited presentation at Moss Rehabilitation Research Institute (Elkins Park, PA, November 2015)
- 36. **Maas, E.** (2015). Understanding speech sound disorders in children. Invited in-service presentation at Tucson Unified School District (Tucson, AZ, April 2015).
- 37. \*Fisk, D., & **Maas, E.** (2015). The size of phonological units in children with speech sound disorders (SSD): Evidence from preparation priming. Poster presented at the University of Arizona Undergraduate Biology Research Program Conference (Tucson, AZ, January 2015).
- 38. **Maas, E.,** & \*Mailend, M.-L. (2014). Diagnosis of apraxia of speech in children and adults: Current state of the art and considerations for the future. Invited presentation at the University of Arizona's NSSLHA Educational Forum (Tucson, AZ, September 2014).
- 39. **Maas, E.** (2014). Randomized controlled trials for behavioral interventions: Application to communication disorders. Presentation at the Speech, Language, and Hearing Sciences colloquium, University of Arizona (Tucson, AZ, October 2014).
- 40. **Maas, E.** (2013). A whirlwind tour of principles of motor learning and their relevance for speech and voice. Presentation for forum organized by graduate students, Department of Speech, Language, and Hearing Sciences, University of Arizona (Tucson, AZ, December 2013).

- 41. **Maas, E.** (2013). Treatment for childhood apraxia of speech: Some recent evidence. Presentation at the Department of Speech, Language, and Hearing Sciences Open House Homecoming (Tucson, AZ, November, 2013)
- 42. **Maas, E.**, & \*Phillips, E. (2013). Mispronunciation detection as a window into phonological knowledge. Presentation at the Speech, Language, and Hearing Sciences colloquium, University of Arizona (Tucson, AZ, October 2013).
- 43. **Maas, E.** (2013). Demystifying the principles of motor learning in speech therapy. Invited presentation, Childhood Apraxia of Speech Association of North America webinar (Sept. 2013).
- 44. **Maas, E.** (2013). Principles of motor learning in Childhood Apraxia of Speech. Invited presentation, SpeechPathology.com webinar (March 2013).
- 45. **Maas, E.** (2013). Feedback and feedforward control in apraxia of speech. Presentation at Speech, Language, and Hearing Sciences colloquium, University of Arizona (Tucson, AZ, January 2013).
- 46. **Maas, E.** (2012). Phonological planning in children with and without speech disorders. Presentation at the Speech, Language, and Hearing Sciences colloquium, University of Arizona (Tucson, AZ, October 2012).
- 47. **Maas, E.** (2012). Phonological planning in typical development and in children with speech sound disorders. Invited presentation at the Speech Research Laboratory colloquium, Indiana University (Bloomington, IN, June 2012).
- 48. **Maas, E.** (2012). Speech planning in children with and without speech disorders. Invited presentation at the Speech, Language, and Hearing Sciences colloquium, Purdue University (West Lafayette, IN, June 2012).
- 49. **Maas, E.**, & \*Gutiérrez, K. (2012). Phonological representations in bilingual speakers. Presentation at Sound Minds, Department of Linguistics, University of Arizona (Tucson AZ, March 2012).
- 50. **Maas, E.** (2011). Apraxia of speech: Current views on diagnosis and treatment. Invited presentation, SpeechPathology.com webinar (November 2011).
- 51. **Maas, E.** (2010). It's not what you say, it's how you say it: Studies of speech production. Invited presentation at the Minority Access to Research Careers colloquium (Tucson, AZ, Nov. 2010).
- 52. \*Lopez, A. A., & **Maas, E.** (2010). Insight into vowel errors and their treatment in childhood apraxia of speech. Poster presented at the University of Arizona Undergraduate Biology Research Program / Summer Research Institute Program (Tucson, AZ, August 2010).
- 53. \*Tellez, A.-A., & **Maas, E.** (2010). Speech output planning in children: Bigger or smaller units? Poster presented at the University of Arizona Undergraduate Biology Research Program / Minority Health Disparity Program (Tucson, AZ, August 2010).
- 54. **Maas, E.** (2010). Treating speech production deficits in childhood apraxia of speech. Invited presentation at the Minority Health Disparities colloquium (Tucson, AZ, July 2010).
- 55. **Maas, E.** (2010). Treating speech production deficits in childhood apraxia of speech: Practice schedules and generalization patterns. Invited presentation at the University of Arizona Linguistics Colloquium (Tucson, AZ, April 2010).
- 56. **Maas, E.** (2009). Severe articulation disorders. Invited presentation at the L4 Forum, University of Arizona (Tucson, AZ, October 2009).

- 57. **Maas, E.**, & Farinella, K. A. (2009). Childhood Apraxia of Speech: Diagnosis and treatment. Invited in-service presentation, STARS Student Therapy (Tucson, AZ, October 2009).
- 58. \*Gutiérrez, K., & **Maas, E.** (2009). Insight on segmental and holistic speech planning in children via auditory priming. Poster presented at the University of Arizona Undergraduate Biology Research Program / Minority Health Disparity Program (Tucson, AZ, August 2009).
- 59. **Maas, E.** (2009). Conditions of practice in treatment for motor speech disorders. Invited presentation at University of Arizona's NSSLHA Educational Forum (Tucson, AZ, March 2009).
- 60. **Maas, E.** (2008). Principles of motor learning applied to speech motor learning. Presentation at Speech, Language, and Hearing Sciences colloquium, Univ. of Arizona (Tucson, AZ, Jan. 2008).
- 61. Ballard, K. J., **Maas, E.**, & Robin, D. A. (2007). Principles of motor learning in treatment of motor speech disorders. Workshop presented at the Speech Pathology Australia National Conference (Sydney, Australia, May 2007).
- 62. **Maas, E.** (2004). Speech motor programming in apraxia of speech. Invited presentation at the Human Performance Laboratory, Texas A & M University (College Station, TX, March 2004).
- 63. **Maas, E.** (2003). Factors influencing the efficacy of treatment for acquired language disorders. Invited in-service at Braintree Rehabilitation Hospital (Braintree, MA, March 2003).
- 64. **Maas, E.** (2002). Psycho gap-filling. Paper presented at the annual Joint Doctoral Program Colloquium, UCSD (San Diego, CA, September 2002).
- 65. **Maas, E.** (2001). Treatment of sound production errors in aphasia and apraxia of speech: effects of phonological complexity. Paper presented at the annual Joint Doctoral Program Colloquium, SDSU (San Diego, CA, October 2001).
- 66. **Maas, E.** (2000). Processing recalcitrant pronouns. Paper presented at the annual Joint Doctoral Program Colloquium, UCSD (San Diego, CA, September 2000).
- 67. **Maas, E.** (1998). Zinsbegrip en zinsanagrammen in Broca-patiënten en Wernicke-patiënten. Paper presented at the TABU-day, Lectures in Linguistics (Groningen, Netherlands, June 1998).

## **TEACHING EXPERIENCE**

## **Instructor**

## Graduate Courses

2023 2019	Research Methods in Communication Sciences and Disorders ( <i>Temple U.</i> ) Topics in Speech, Language, and Hearing Science (doctoral seminar) ( <i>Temple U.</i> )
2016-2023	Foundations and Management of Motor Speech Disorders ( <i>Temple U.</i> )
2012-2013	Introduction to Research Methods in Speech and Hearing Sciences (U. of Arizona)
2010	Software Applications in SLHS – E-Prime (U. of Arizona)
2010	Speech Perception (combined with undergraduate section) (U. of Arizona)
2007	Neuromotor Speech Disorders (MGH Institute of Health Professions)
2007	Research Design (MGH Institute of Health Professions)
2006	Language Disorders in Children (Northeastern University)

## Undergraduate Courses

2017-2021	Introduction to Research Methods in Communication Sciences (Temple U.)
2017	Topics in Communication Sciences & Disorders – Clinical Phonetics (Temple U.)
2010-2011	Speech Perception (combined with graduate section 2010) (U. of Arizona)
2008-2015	Phonetics (U. of Arizona)
2003-2004	Phonetics (San Diego State University)

# **Teaching Assistant**

2006	Language as a Cognitive System (University of California, San Diego)
2004	Speech Instrumentation (San Diego State University)
2002	Introduction to Cognitive Science (University of California, San Diego)
2000-2002	Phonetics (San Diego State University)

## **Guest Lectures**

2023	Speech and Language Disorders: Adults – WHO ICF framework (Temple U.)
2022	Foundations in Speech Science – Speech Perception, Coarticulation (Temple U.)
2022, 2023	Speech and Language Disorders: Adults – Principles of Motor Learning (Temple U.)
2016-2022	Topics in Communication Sciences & Disorders – Apraxia of Speech (Temple U.)
2017-2018	Topics in Speech, Language, & Hearing – Childhood Apraxia of Speech (Temple U.)
2015	Foundations and Management of Motor Speech Disorders (Temple U.)
2015-2016	Foundations and Management in Phonological Disorders (Temple U.)
2012	Evaluation Process in Speech-Language Pathology (U. of Arizona)
2010-2011	Introduction to Research Methods in Speech and Hearing Sciences (U. of Arizona)
2010, 2016-'17	Normal Bases of Speech Production (U. of South Carolina; on-line)
2008-2016	Neuromotor Speech Disorders (U. of Arizona)
2008-2011	Scientific Thinking (U. of Arizona)
2005-2006	Motor Speech Disorders (San Diego State University)
2005	Communication Processes & Aging (San Diego State University)
2004-2005	Neurological Foundations of Cognition (University of California, San Diego)
2004	Speech and Language Neuroscience (San Diego State University)

**Temple University** 

University of Arizona

2003-2004Research Methods (San Diego State University)2002Language Acquisition (San Diego State University)

#### **MENTORING EXPERIENCE**

#### Ph.D. Dissertation Committees

<u>Chair</u>

2021- Meghan Littlejohn Temple University
 2022 Molly Beiting Temple University
 The Impact of Individual-Level Factors on Progress in Speech Therapy for Children with Childhood Apraxia of Speech (CAS) (funded by NIH F31 DC018723)

2016-'18 Anne van Zelst (withdrawn)

## 2017 **Marja-Liisa Mailend** Speech Motor Planning in Apraxia of Speech and Aphasia (funded by NIH F31 DC014375)

#### Committee Member

2021	<b>Caroline Spencer</b> Chair: Suzanne Boyce	University of Cincinnati
	Neural Mechanisms of Speech Production in Intervent (funded by NIH F31 DC017654)	tion for Residual Speech Sound Disorders
2016	<b>Salomé Geertsema</b> Chair: Anita van der Merwe	University of Pretoria (South Africa)
	Application of Principles of Motor Learning in the Tre	atment of Speech Sound Disorders
2015	<b>Christina Meyers</b> Chair: Elena Plante	University of Arizona
	Investigation of Treatment Dose Schedule for Childre	n with Specific Language Impairment
2015	<b>Ka Yu</b> (Kelvin) <b>Chong</b> Chair: Tom Bever	University of Arizona
	The Role of Cognitive Complexity, Task Sequencing ar	nd Modality in Picture Difference Tasks
2011	<b>Jessamyn Schertz</b> Chair: Diana Archangeli	University of Arizona
	More or Less Voiced: Exaggerating Featural Contrasts	in English Stops and Vowels

External Examiner

2022	<b>Monica Lancheros</b> Chair: Marina Laganaro Relationship between Speech and other Oromotor Gestures	University of Geneva (Switzerland)
2021	<b>Cassidy Fleming</b> Co-Chairs: Teresa Paslawski & Jacqueline Cummine Elevating Childhood Apraxia of Speech: Integrating Theory, Res	<b>University of Alberta (Canada)</b> search, and Practice
2020	Siu Chung (Eric) LoCiChair: Wing Kuen (Andus) WongDevelopment of Speech Specific Reinvestment Scale	ty University of Hong Kong (China)
2018	<b>Anne Marie Lewis</b> Chair: Neville Hennessey Phonological and Speech Motor Abilities in Children with Childh Phonological Disorder	<b>Curtin University (Australia)</b> nood Apraxia of Speech and
2017	Stacie ParkUChair: Deborah TheodorosBe Clear: A Novel Treatment for Non-progressive Dysarthria	Iniversity of Queensland (Australia)
2013	<b>Elizabeth Murray</b> Chair: Patricia McCabe Treatment Efficacy for Children with Childhood Apraxia of Spee	<b>University of Sydney (Australia)</b> ech
	er's Thesis Committees	
<u>Ch</u>	air	
2022-	<b>Elise Swain</b> The Role of Autonomy in Treatment for Children with Childhoo	<b>Temple University</b> d Apraxia of Speech (CAS)
2022	<b>Shina Cook</b> The Role of Frustration in Intensive Treatment of Childhood Ap	<b>Temple University</b> praxia of Speech
2020	<b>Alison Miler</b> Effects of Childhood Apraxia of Speech Treatment on Intelligib	<b>Temple University</b> ility
2020	<b>Lauren Condoluci</b> The Active Ingredients of Integral Stimulation Treatment: The I Auditory-Visual Cues for Treatment of Childhood Apraxia of Sp	
2020	<b>Tori Tone</b> The Test of Time: Using Motor-Speech Timing Errors to Differer Speech Sound Disorders	<b>Temple University</b> ntiate Children With and Without

2020	<b>Grace Potkovac</b> Feedback Control in Treatment for Apraxia of Speech	Temple University
2019	<b>Phillip Mahoney</b> Script Training and Feedback Type in the Treatment of Apraxia of Speech	Temple University
2017	<b>Mackenzie Welsh (Frees)</b> A Systematic Examination of Practice Amount in Childhood Apraxia of Speecl using an Integral Stimulation Approach	<b>Temple University</b> n (CAS) Treatment
2017	<b>Nicolette Kovacs</b> Treatment of Childhood Apraxia of Speech: A Single-Case Experimental Desig of Treatment	<b>Temple University</b> n Study of Intensity
2011	<b>Jenna Beltrami</b> Changes in Vowel Space after Treatment in Childhood Apraxia of Speech	University of Arizona
2011	<b>Christine Butalla</b> The Effects of Feedback Frequency in Childhood Apraxia of Speech: Retention	<b>University of Arizona</b> and Transfer
<u>Co</u>	<u>mmittee Member / External Examiner</u>	
2023	<b>Student</b> Chair: Sarah Masso Polysyllabic Production in Children with Speech Sound Disorders: Dynamic As Intervention	<b>University of Sydney</b> sessment and
2023-	Rachel CourterUniversiChair: Jill ThorsonHelody of Speech Assessment in Children (MoSAiC)	ty of New Hampshire
2022-	<b>Caitlin Sharkey</b> Chair: Gayle DeDe The Quantification and Effects of Group Dynamics in Conversation Treatment	<b>Temple University</b> for Aphasia
2023	Madison SmithUniversitChair: Donald RobinInvestigation of Motor Programming in Childhood Apraxia of Speech	y of New Hampshire
2022	<b>Lauren Colletti</b> Chair: Elizabeth Heller Murray Voice Onset Time in Children with and without Vocal Fold Nodules	Temple University
2019	<b>Corinne Leach</b> Chair: Nadine Martin Manipulating Temporal Components during Single-Word Processing to Facilit Orthographic Representations in Letter-By-Letter Readers	<b>Temple University</b> ate Access to Stored

2018	<b>Rebecca Goldenberg</b> Chair: Gayle DeDe Effects of Conversational Group Treatment on Patient-Reported Outcome Mea	<b>Temple University</b> sures of
2017	Communication and Social Isolation <b>Bridget Parkes</b> Chair: Gayle DeDe Is Verb Network Strengthening Treatment (VNeST) Effective at a Lower Dosage	Temple University
2016	<b>Elizabeth Brophy</b> Chair: Gayle DeDe Generalization across Verb Types after Verb Network Strengthening Treatment Treatment Study	Temple University
2014	<b>Kimberly Neely</b> Chair: Brad Story Variation in F2 Trajectories as Evidence for Articulatory Gesture Overlap: A Mod	n <b>iversity of Arizona</b> deling Study
<u>Under</u>	graduate Honors Theses / Capstone Projects	
2022	<b>Lily Rossi</b> Acoustic Measures of Lexical Stress Patterns in Childhood Apraxia of Speech	Temple University
2022	<b>Sydney Jones</b> Demographic Representation in the Childhood Apraxia of Speech Literature	Temple University
2021	<b>Sydney Keller</b> Self-Reported Communication Attitudes of Children with Childhood Apraxia of	<b>Temple University</b> Speech
2020	<b>Brianna Kaplan</b> A Review of the Effectiveness of Phonological Awareness Treatment Approach Apraxia of Speech	<b>Temple University</b> es for Childhood
2020	<b>Hannah Braid</b> A Systematic Approach to Outcome Measures in Treatment of Childhood Aprax	<b>Temple University</b> xia of Speech
2020	<b>Kyra Skoog</b> Predicting Intelligibility: An Investigation of Speech Sound Accuracy in Childhoo Speech	<b>Temple University</b> od Apraxia of
2017	<b>Helen Vradelis</b> Intelligibility Measures for Children with Childhood Apraxia of Speech: A Reviev	<b>Temple University</b> v
2012	Leah Swanson (Gross) Ur Anticipatory Coarticulation in Typically Developing Children and in Children wit	<b>niversity of Arizona</b> h Speech Disorders
2011	<b>Erin Chute (Phillips)</b> Un The Nature of Phonological Representations in Adults and Children: Evidence of Detection	<b>niversity of Arizona</b> f Mispronunciation

McNair Achievement program

### **Undergraduate Student Mentoring** (only formal mentorship programs listed)

**Temple University** 

2022	Lily Rossi		Diamond Research Scholars (DRS) program
2021	Sydney Keller		Diamond Research Scholars (DRS) program
2021	Steven Burchett		Diamond Peer Teacher program (CSCD-2201)
2019	Kyra Skoog		Diamond Research Scholars (DRS) program
2018	Talia Irgangladen		Diamond Research Scholars (DRS) program
2018	Julia Cogdell (student declined a	award)	Diamond Research Scholars (DRS) program
<u>An</u>	nerican Speech-Language-Hearing	<u>Association (ASHA)</u>	
2019	Kyra Skoog Stu	dents Preparing for	Academic & Research Careers (SPARC) award
2017	Taryn Sanwald Stu	dents Preparing for	Academic & Research Careers (SPARC) award
2011	Anna-Alyse Tellez Students Pr	reparing for Academ	ic & Research Careers (SPARC) – not awarded
<u>Un</u>	<u>iversity of Arizona</u>		
2011-	Jessie Hogan, Monica Martinez,	, Dasha McKinney	Arizona Assurance Scholars (AZA) program
2015	Kevin Mollica, Pauline Muñoz	•	
2015	Danielle Fisk	Undergraduat	e Biology Research Program (UBRP) program
2014	Leah Swanson	č	
2011	Anna-Alyse Tellez		
2013	Lizbeth Alvarez, Fernanda Buen	0	Minority Health Disparities (MHD) program

- **Anna-Alyse Tellez** 2011 **Amie Wolter**
- Arizona Science, Engineering, & Math Scholars (ASEMS) program 2012 Mun Aw 2011
- **Lizbeth Alvarez** 2012
- Student Affairs Research (STARS) program Keila Gutiérrez Biomedical Research Abroad: Vistas Open! (BRAVO) program 2010
- Amanda Lopez Summer Research Institute (SRI) program 2010 Minority Access to Research Careers (MARC) program
- Anna-Alyse Tellez 2010
- **Keila Gutiérrez** 2009

# **High School Student Mentoring**

University High School / University of Arizona

**Emily Tran** Southern Arizona Regional Science & Engineering Fair (SARSEF) 2012

# **External Mentoring**

2021-2022	<b>Jill Thorson</b> (Assistant Professor) Up-2-NIH program	University of New Hampshire
2020-2022	<b>Charlotte Purcell (King)</b> (SLPD student) Capstone Research Chair	Rocky Mountain University of Health Professions
	A Comparison of Sound Production Treatment and Metrical Pacing Technique for Apraxia of Speech	

## ASHA Mentoring Academic Research Careers (MARC) program

2023-2024	Allison Aaron (Ph.D. student)	Boston University
2023-2024	Hasini Weerathunge (Ph.D. student)	Boston University
2021-2022	Qiang Li (Assistant Professor)	Fort Hays State University
2021-2022	<b>Claudia Abbiati</b> (Ph.D. student)	University of Vermont
2020-2021	<b>Victoria Scharp</b> (Assistant Professor)	Idaho State University
2019-2020	<b>Jisook Park</b> (Postdoctoral Fellow)	University of Toronto
2019-2020	<b>Lynsey Keator</b> (Ph.D. student)	University of South Carolina
2018-2019	<b>Suzanne King</b> (Assistant Professor)	University of Louisville
2018-2019	<b>Elgustus Polite</b> (Assistant Professor)	Xavier University of Louisiana

ASHA Advancing Academic Research Careers (AARC) program

2017-2018	Ramesh Kaipa (Assistant Professor)	Oklahoma State University
2016-2017	Alison Scheer-Cohen (Assistant Professor)	California State University, San Marcos

ASHA Lessons for Success program

2023	Hannah Rowe (Postdoctoral Fellow)	Boston University
	Seth Tichenor (Assistant Professor)	Duquesne University
2022	Robyn Croft (Ph.D. Candidate)	University of Texas, Austin
	Heather Kabakoff (Postdoctoral Fellow)	New York University
2021	Nicole Etter (Assistant Professor)	Pennsylvania State University
	<b>Megan Willi</b> (Assistant Professor)	California State University, Chico

ASHA Pathways program

2018	Ramesh Kaipa (Assistant Professor)	Oklahoma State University

### ASHA Students to Empowered Professionals (STEP) program

2021	Meng McLendon (Master's student)	Howard University
2018	Shawna Moreland (Undergraduate student)	Texas Women's University

## ASHA PROmoting the next GENeration of Researchers (PROGENY) program

2018	<b>Elaina Eskins</b> (Undergraduate student) <b>Deborah Hong</b> (Undergraduate student) <b>Kathrin Roberts</b> (Undergraduate student)	Bowling Green State University California State University, Fullerton University of Nebraska, Kearney
2017 2016	Keziah St. Louis (Undergraduate student) Taylor Robbins (Undergraduate student)	New York University University of Toledo
Confere	nce on Motor Speech mentorship program	
2022	Kristen Allison (Assistant Professor)	Northeastern University

22Kristen Allison (Assistant Professor)Northeastern UniversityMatthias Heyne (Postdoctoral Fellow)University of Pittsburgh

### **REVIEWING and EDITORIAL EXPERIENCE**

#### Grant review

<u>Review panel chair</u> Childhood Apraxia of Speech Association of North America (CASANA) (2012)

<u>Ad hoc review</u>

American Speech-Language-Hearing Foundation (ASHF) Apraxia Kids / Childhood Apraxia of Speech Association of North America (AK / CASANA) Fonds Wetenschappelijk Onderzoek – Vlaanderen (Research Foundation Flanders) Lee Silverman Voice Treatment Foundation (LSVT Foundation) NIH – Center for Scientific Review (CSR), Motor Function, Speech & Rehabilitation (MFSR) Study Section NIH – National Institute of Neurological Disorders and Stroke (NINDS) Stroke Special Emphasis Panel NIH – National Institute of Deafness and Other Communication Disorders (NIDCD) Language and Communication (LCOM) Voice, Speech, and Language Fellowships Special Emphasis Panel National Science Foundation (NSF) Neurological Foundation of New Zealand (NFNZ) PROMPT Institute Technologiestichting STW (Dutch Technology Foundation) Veterans Health Administration Rehabilitation Research & Development – Sensory Systems panel (VA)

#### **Editorial Service**

<u>Associate Editor</u> International Journal of Speech-Language Pathology (2018-present) Guest Editor

Journal of Speech, Language, and Hearing Research (2018-2019) American Journal of Speech-Language Pathology (2018-2020, 2022-2023)

Guest Associate Editor

American Journal of Speech-Language Pathology (2013, 2015, 2018)

Editorial Board Member

CommonHealth (2020-present)

International Journal of Speech-Language Pathology (2015-2017)

#### Ad hoc journal reviewer

American Journal of Speech-Language Pathology	J. American Medical Assoc. (JAMA) Pediatrics
Applied Psycholinguistics	Journal of Communication Disorders
Archives of Physical Medicine and Rehabilitation	J. Developmental & Behavioral Pediatrics
Aphasiology	Journal of Phonetics
Behavior Research Methods	Journal of Medical Speech-Language Pathology
BioMed Research International	Journal of Motor Behavior
Brain and Language	Journal of Motor Learning and Development
Brain Sciences	Journal of the Neurological Sciences
Cerebral Cortex	Journal of Neuroscience
Clinical Linguistics & Phonetics	Journal of Pediatric Rehabilitation Medicine

Cognitive Neuropsychology	J. Speech, Language, & Hearing Research
Contemp. Issues in Communication Sciences and Disorders	Language and Cognitive Processes
Cortex	Language and Speech
Current Biology	Language, Learning, and Development
Developmental Neuropsychology	Language, Speech, & Hearing Services in Schools
Folia Phoniatrica et Logopaedica	Motor Control
Frontiers in Neurology	NeuroImage
Human Brain Mapping	Perceptual & Motor Skills
International J. Language and Communication Disorders	PLOS ONE
International Journal of Speech-Language Pathology	South African J. of Communication Disorders
Journal of the Acoustical Society of America	Speech, Language, and Hearing

## **SERVICE and LEADERSHIP**

## National & International Service

	Member Dregrom Committee for the 2024 Clinical Anhacieles Conference
2023-2024	Member, Program Committee for the 2024 Clinical Aphasiology Conference Member, ASHA Grant Review and Reviewer Training (GRRT) panel
2023	
2021-2023	Faculty mentor, ASHA Lessons for Success professional development conference
2021-2023	Member, ASHA Research and Scientific Affairs Committee (RSAC)
2023-present	Member, ANCDS Evidence-Based Clinical Research group, Pediatric Motor Speech Disorders
2021-2023	Chair, ANCDS Evidence-Based Clinical Research group, Pediatric Motor Speech Disorders
2021-2022	Program Chair, Motor Speech Disorders track, 2022 Conference on Motor Speech
2021-2022	Member, program committee for the 2022 Apraxia Kids Research Symposium
2020-2022	Member, program committee for 8 <sup>th</sup> International Conference on Speech Motor Control
2020-2023	Professional Advisory Council Liaison to Board of Directors, Apraxia Kids
2019-present	Promotion & Tenure Reviewer (external)
2019-2021	Member, Program Committee for the 2021 Clinical Aphasiology Conference
2018-2020	Chair, ANCDS Writing Committee on Acquired and Childhood Apraxia of Speech
2018-2020	Member, ASHA Pathways Advisory Committee
2018-2019	Reviewer, ASHA Practice Portal web content on Childhood Apraxia of Speech
2018	Invited host of roundtable discussion Undergraduates in Your Lab: A Win-Win, at ASHA
	Convention (Boston, November 2018)
2017-2018	Member, review committee, 2018 Conference on Motor Speech
2017-present	Member, Research Advisory Board, PROMPT Institute
2017-present	Member, Advisory Board for the E. M. Saffran Conference on Cognitive Neuroscience and
	Rehabilitation of Communication Disorders
2017	Consultant, ASHA Clinical Practice Research Institute (PIs: Preston, McAllister)
2016-2018	Member, ASHA Pathways program leadership team
2016-2020	Member, ANCDS Committee on Childhood Apraxia of Speech
2016-2017	Member, program committee for 7 <sup>th</sup> International Conference on Speech Motor Control
2016	Reviewer, ASHA Students Preparing for Academic Research Careers (SPARC) program
2016	Member, Motor Speech in Adults and Children subcommittee for ASHA Convention
2016	Member, Speech Sound Disorders subcommittee for ASHA Convention
2015-2016	Reviewer, 2016 Conference on Motor Speech (Motor Speech Disorders track)
2015	Reviewer, ASHA Practice Portal content (Acquired Apraxia of Speech topic)
2013	Member, Local Arrangements Committee, 2013 Clinical Aphasiology Conference
2012-present	Member, Professional Advisory Council, Apraxia Kids
2012-2014	Member, Motor Speech in Adults and Children subcommittee for ASHA Convention
2012-2013	Member, Steering Committee for 2013 Childhood Apraxia of Speech Association of North
	America (CASANA) Research Symposium
2011	Reviewer and session moderator, 6 <sup>th</sup> International Conference on Speech Motor Control
2011-2021	Member, ANCDS Practice Guidelines Comm. on Treatment for Acquired Apraxia of Speech
2010, 2012, 2018	Reviewer, American Speech-Language-Hearing Foundation scholarships
2010	Member, Language Disorders in Adults subcommittee for ASHA Convention
2005	Member, Motor Speech in Adults and Children subcommittee for ASHA Convention
2001	Student Reviewer, 2001 Clinical Aphasiology Conference
1999-2009	Contributor, Afasiologie (research summaries for speech-language pathologists)

## University Service

2023 2022-2023 2022-2023 2020 2019-2020 2019-present 2019-present 2019-present 2019 2018-present 2018 2016 2015-present 2015 2013-2015 2013-2015 2010-2012 2005 2002-2003 2002-2003 2001-2005 2001-2005	Chair, Departmental Promotion & Tenure Review Committee (CSD, <i>Temple University</i> ) Member, Master's Program Admissions Committee (CSD, <i>Temple University</i> ) Member, Research 101 for CPH Students Committee (College of Public Health, <i>Temple</i> ) Poster judge, Research & Evidence-Based Practice Day (College of Public Health, <i>Temple</i> ) Member, Research Operations Committee (College of Public Health, <i>Temple</i> ) Member, TT Search Committee (Dep. of Epidemiology & Biostatistics, <i>Temple University</i> ) Tenure reviewer (various institutions) Faculty Mentor (CSD, <i>Temple University</i> ) Member, Departmental Promotion & Tenure Review Committee (CSD, <i>Temple Univ.</i> ) Chair, Tenured/Tenure-Track Search Committee (CSD, <i>Temple University</i> ) Member, Academic Misconduct Committee (CSD, <i>Temple University</i> ) Member, College of Public Health Building Steering Committee (Temple University) Member, Master's program Admissions Committee (SLHS, <i>University of Arizona</i> ) Chair, Colloquium Committee (SLHS, <i>University of Arizona</i> ) Chair, Undergraduate Committee (SLHS, <i>University of Arizona</i> ) Doctoral student representative, Speech Science Search Committee (SDSU) Graduate Seminar Series Coordinator ( <i>SDSU/UCSD</i> ) Graduate student representative, <i>UCSD Student Regulations and Revisions Committee</i> Committee Member, <i>UCSD Office for Students with Disabilities Advisory Committee</i> Graduate student representative, <i>UCSD Academic Diskonesty Hearing Board</i>
2001-2005	Graduate student representative, UCSD Academic Dishonesty Hearing Board
2001 2000-2005	Member, UCSD Graduate Student Association, Finance Reform Committee Program representative, UCSD Graduate Student Association

## PROFESSIONAL MEMBERSHIPS

2017-present	Academy of Neurologic Communication Disorders and Sciences (ANCDS)
2016-present	ASHA Special Interest Division 19: Speech Science
2008-present	ASHA Special Interest Division 2: Neurogenic Communication Disorders
2008-present	American Speech-Language-Hearing Association (ASHA)
1998-2021	Vereniging voor Klinische Linguïstiek (Clinical Linguistics Association)