CURRICULUM VITAE

MOLLY ANN LEACHMAN
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EDUCATION

UNIVERSITY OF TEXAS AT DALLAS* Richardson, TX
Postdoctoral Research Fellow, School of Behavioral and Brain Sciences Current
Advisor: Ioulia Kovelman

UNIVERSITY OF MICHIGAN* Ann Arbor, MI
Postdoctoral Research Fellow, Department of Psychology 2025-2026
Advisor: Ioulia Kovelman

UNIVERSITY OF CALIFORNIA, IRVINE Irvine, CA
Ph.D. in Education (Human Development in Context concentration) 2020–2025

- Title: Narratives, Networks, and Nuance: Exploring Text Comprehension Measurement through Scoring Approaches, Machine Learning, and Meta-Analysis
- Committee members: Young-Suk Kim (Chair), Elizabeth D. Peña, Nia Nixon
- Honors: SKLLD Training Fellow (U.S. Department of Education); Selected Doctoral Consortium Participant at LAK ’25 in Dublin, Ireland

SAM HOUSTON STATE UNIVERSITY Huntsville, TX
M. Ed in Teaching English to Speakers of Other Languages (TESOL) 2018–2019

UNIVERSITY OF TEXAS AT AUSTIN Austin, TX
Bachelor of Science in Advertising 2012–2016

- Honors: Presential Scholarship (academic excellence), Global China Scholar (studies of Chinese languages: Mandarin and Cantonese)

RESEARCH DIRECTIONS

- Oral language development (up to Grade 3)
- Early literacy development and intervention (up to Grade 5)
- Linguistic and developmental diversity (e.g., bi/multilingual populations, speakers of dialect, children with DLD, dyslexia, blind and visually impaired children)
- Developmental cognitive neuroscience
- Natural language processing, machine learning approaches, and automated assessment
- Measurement and assessment

SOFTWARES & DATA ANALYSIS

- Clean and analyze data using SPSS, Mplus, STATA, R, MATLAB, and Python
- Familiarity working in Jupyter Notebook and with libraries such as NumPy, scikit-learn, pandas, TensorFlow, PyTorch, and various packages from Hugging Face

- Analyze data using SEM, regression, HLM, fNIRS GLM, and various machine learning approaches (e.g., K-Fold, DNN, KNN, SGD)

RESEARCH EXPERIENCE

UNIVERSITY OF MICHIGAN

Language and Literacy Lab

Postdoctoral Research Fellow *May 2025 to present*

- Mentored Ph.D. students through prospectus preparation and presentation for candidacy
- Worked with teams in lab to build new and improve upon existing analytic pipelines
- Managed data collection in dual immersion school aimed at collecting brain imaging data within a school setting

UNIVERSITY OF CALIFORNIA, IRVINE

Language, Literacy, and Learning Lab (L3)

Story Detective (iMODEL) *September 2020 to May 2025*

Curriculum Development & Implementation

- Collaborated on development of an oral language intervention for kindergarten students
- Adapted curriculum for diverse classrooms, balancing fidelity with individual student needs
- Conducted teacher focus groups and co-hosted professional development sessions on oral language practices

Educational Materials & Support

- Created classroom resources tailored to teacher needs and available technologies
- Supported novice and experienced teachers (1–20+ years) during curriculum field trials

Research & Data Collection

- Led data collection teams across three years, assessing 500+ students with multiple linguistic measures
- Coordinated with schools and parents for consent, demographics, and study communication.
- Trained 30+ research assistants in administration of ~10 assessments; led scoring and transcription teams
- Developed and refined scoring rubrics (norm-referenced and experimental)

SRSD+ *Sept. 2022 to July 2023*

- Cleaned and edited master data set with student-level information
- Coded interview responses for over 300 participants
- Calculated reliability with other research assistants in coding for interview responses
- Helped edit codebook and rubric based on thematic observations and attributes of responses

HABLA (Human Abilities in Bilingual Language Acquisition) Lab

Lab Manager *(One quarter/year)* *September 2020 to May 2025*

- Supervised and matched undergraduate RAs to graduate/postdoctoral projects based on skills and interests
- Coordinated schedules, class/fieldwork credit, and tracked RA performance for grading

- Trained new RAs in lab protocol and facilitated recruitment/outreach
- Fostered lab community through end-of-quarter events

Research Assistant

- Cleaned, coded, and analyzed bilingual language data using SALT
- Trained RAs in transcription, coding, and reliability procedures

UNIVERSITY OF TEXAS AT AUSTIN

Advertising Research Group – Undergraduate Assistant *Sep. 2014 to May 2016*

- Supported doctoral students of Drs. LeeAnn Kahlor and Wei-Na Lee on topics in public health: qualitative evaluation of non-profit advertisements and information seeking practices
- Conducted qualitative coding of non-profit advertisements, literature reviews, administered surveys, and learned basics of quantitative analysis of survey results

ACCEPTED PUBLICATIONS

1. Salig, L.K., Yu, C., **Leachman, M.**, Dondati Purushotham, N., Ortiz- Villalobos, V., Flores-Gaona, Z., Vélez Negrón, V., Girardini, C., Fang, H., Baron, A., Bedore, L., Booth, J., Peña, E.D., Satterfield, T., Brennan, J.R., Kovelman, I. (2026). Neural tracking of surprisal in Spanish-English bilingual children during naturalistic heritage language listening. *Brain & Language*. https://doi.org/10.1016/j.bandl.2026.105833
2. Kim, Y.-S. G., **Leachman. M.**, & Herrera, S. (2026). Developing Listening Comprehension Through Multi-Component Instruction: Results from the Story Detective Intervention in Kindergarten. *Child Development*. https://doi.org/10.1093/chidev/aacag133
3. Choi-Tucci, A., Lam, J. H. Y., Perez, C. del C., **Leachman, M.**, Bedore, L. M., & Peña, E. D. (2026). Exposure Matters: Effects of Current Language Exposure on Item-Level Measurement of Spanish and English Morphosyntax. *Journal of Speech, Language, and Hearing Research*, 1–20. https://doi.org/10.1044/2026_jslhr-25-00776
4. **Leachman, M.**, Wolters, A., & Kim, Y.-S. G. (2025). The relation between text reading and reading comprehension varies as a function of developmental phase, orthographic depth, and measurement characteristics: Evidence from a meta-analysis. *Journal of Educational Psychology*. https://dx.doi.org/10.1037/edu0000932
5. Lam, J. H. Y., **Leachman, M. A.**, Perez, C. D. C., Pratt, A. S., Peña, E. D., Bedore, L. M., & Gillam, R. B. (2025). Factor structure and longitudinal changes in bilinguals' oral narratives production: role of language exposure, language-domain proficiency, and transfer. *Applied Psycholinguistics.* https://doi.org/10.1017/S0142716425000050
6. Wang, J., Kim, Y.-S. G., Lam, J. H. Y., & **Leachman, M. A.** (2025). A meta-analysis of relationships between syntactic features and writing performance and how the relationships vary by student characteristics and measurement features. *Assessing Writing, 63*, 100909. https://doi.org/10.1016/j.asw.2024.100909
7. Figueira, I., Cisneros, J. M., **Leachman, M.**, Peña, E. D., & Branham, S. M. (2024). Informing Accessible Design of AI Literacy Apps through Practices of Blind Parents Reading with Sighted Children. *The 26th International ACM SIGACCESS Conference on Computers and Accessibility,* 1-5. ACM. https://doi.org/10.1145/3663548.3688482

8. Lam, J. H. Y., **Leachman, M. A.**, & Pratt, A. S. (2024). A systematic review of factors that impact reading comprehension in children with developmental language disorders. *Research in developmental disabilities*, *149*, 104731. https://doi.org/10.1016/j.ridd.2024.104731
9. Bedore, L. M., Peña, E. D., Shivabasappa, P., Perez, C., Vargas, A. G., **Leachman, M**., & Wang, J. (2023). An Exploration of the Nature of Vocabulary Change Following Language and Literacy Together Intervention. *American Journal of Speech-Language Pathology*, 1–16. https://doi.org/10.1044/2023_ajslp-23-00042

SUBMITTED PUBLICATIONS

1. **Leachman, M.** & Kim, Y.-S. G. (under review). [Title redacted until accepted]. Submitted to *Language, Speech, and Hearing Services in Schools.*
2. **Leachman, M.**, Caruso, V., Salig, L., Eggleston, R., Ortiz Villalobos, V., Velez Negron, V., Flores-Gaona, Z., Girardini, C., Muniz Chams, G., Wagley, N., Peña, E. D., Bedore, L. M., Booth, J. R., Brennan, J., Satterfield, T., & Kovelman, I. (under review). [Title redacted until accepted]. Submitted to *Developmental Science*.
3. Salig, L., **Leachman, M.**, Eggleston, R., Yu, C.-L., Kovelman, I., & Brennan, J. R. (under review). [Title redacted until accepted]. Submitted to *Psychological Science*.
4. Satterfield, T., Salig, L., Vélez-Negrón, V., **Leachman, M.,** Girardini, C., Bautista, A., Solís Barroso, C., Johnson, Z., Monk, A., Caruso, V., & Ioulia Kovelman (under review). [Title redacted until accepted]. Invited Submission to *Letras Hispanas.*
5. Chen, N.*, Caruso, V., Sun, X., Lin, W.-H., **Leachman, M.**, Booth, J. R., & Kovelman, I. (under review). [Title redacted until accepted]. Submitted to *Brain & Language.*
6. Aponte, A.*, **Leachman, M.,** Hurtado, A., Gonzales Manzo, A., Flores-Gaona, Z., Peña, E. D., & Kovelman, I. (under review). [Title redacted until accepted]. Submitted to *Language and Speech*.
7. Kim, Y.-S. G., Cheung, M. W.-L., Wolters, A., & **Leachman, M.** (under review). [Title redacted until accepted]. Revise & resubmit from *Psychological Bulletin.*

* Indicates I was mentoring specified individual during the preparation of the listed manuscript.

PUBLICATIONS IN PREPARATION

1. **Leachman, M.,** Muniz Chams, G., Salig, L., Kovelman, I., & Brennan, J. (in preparation). Neural correlates of component skills underlying dyslexia during naturalistic story listening in typical, at-risk, and formally diagnosed elementary readers.
2. **Leachman, M.** & Kim, Y.-S. G. (in preparation). Using BERT to Automate Rubric-based Scoring for Oral Narrative Retell of Grade 2 Children.

PRESENTATIONS

Leachman, M., Salig, L., Yu, C.-L., Kovelman, I., & Brennan, J. (2026, September). *Hierarchical language processing: Examining three levels of word-level surprisal in children of diverse language backgrounds.* Oral presentation at the 2026 International Mind, Brain, and Education Society Conference. San Diego, California. *Symposium chair.

Leachman, M. & Kim, Y.-S. G. (2026, June). *How We Score Matters: Relations of Oral Narrative Retell Scoring Approaches to Cognitive and Language Skills in Grade 2.* Poster presentation at the Symposium for Research in Child Language Disorders 2026. Madison, Wisconsin.

Lin, W.-H., Chen, N., **Leachman, M.**, Yu, C.-L., Chou, T.-L., Brennan, J. R., & Kovelman, I. (2026, June). *Modeling Language Comprehension in Heritage Bilingualism Using Large Language Models: A Neurocomputational Approach.* Oral presentation at the Multilingual Minds and Machines Meeting 2026 (MMMM 2026). Nijmegen, the Netherlands.

Leachman, M. (2026, March). *How Language Background Shapes Children's Neurolinguistic Development: Evidence from fNIRS Sentence Processing and Naturalistic Listening Tasks*. Invited talk for the University of Michigan Developmental Psychology Brown Bag Seminar. Ann Arbor, Michigan.

Leachman, M., Lam, J. H. Y., Peña, E. D., Bedore L. M., Gillam, R., Kim, Y.-S. G. (2026, March). *Leveraging LLMs for Oral Narrative Retell Scoring Across English and Spanish in Early Elementary Children.* Invited talk for the University of Michigan Combined Education and Psychology Program. Ann Arbor, Michigan.

Leachman, M. & Kovelman, I. (2026, March). *Understanding Bilingual Children's Sentence Processing through Neuroimaging Techniques.* Oral presentation at the 2026 Association of Reading and Writing in Asia Conference. Kaohsiung, Taiwan. * Symposium coordinator.

Chen, N., **Leachman., M.**, Brennan, J., & Kovelman, I. (2026, March). *Predictive Coding in Naturalistic Story Listening.* Oral presentation at the 2026 Association of Reading and Writing in Asia Conference. Kaohsiung, Taiwan.

Kim, Y.-S. G. & **Leachman, M.** (2025, August). *A Deeper Understanding of the Relation Between Text Reading Fluency and Reading Comprehension*. Accepted to 2025 EARLI. Graz, Austria.

Leachman, M., Wolters, A., & Kim, Y.-S. G. (2025, April). *The Relation Between Text Reading and Reading Comprehension: Evidence from a Meta-Analysis.* Poster presentation at the 2025 AERA Annual Meeting. Denver, CO.

Leachman, M. & Kim, Y.-S. G. (2025, March). *Using BERT to Automate Rubric-based Scoring for Oral Narrative Retell of Grade 2 Children.* Poster presentation at the 15th International Learning Analytics & Knowledge Conference. Dublin, Ireland.

Figueira, I., Cisneros, J. M., **Leachman, M.**, Peña, E. D., & Branham, S. M. (2024, October). *Informing Accessible Design of AI Literacy Apps through Practices of Blind Parents Reading with Sighted Children*. Short paper presentation at the 26th International ACM SIGACCESS Conference on Computers and Accessibility. St. John's, Newfoundland, Canada.

Lam, J. H. Y., Wang, J., **Leachman, M**. A., Pratt, A. S., & Peña, E. D. (2023, November). *A Systematic Review on Reading Comprehension Intervention in Children with Developmental Language Disorders.* Poster presentation at the 2023 ASHA Convention. Boston, MA.

Wang, J., Kim, Y.-S., Lam, J. H. Y., & **Leachman, M. A.** (2023, November). *A Meta-Analysis of Syntactic Features in Writing and Writing Outcomes.* Poster presentation at the 2023 ASHA Convention. Boston, MA.

Perez, C., Shivabasappa, P., Granados, A., **Leachman, M.**, Wang, J.**,** Bedore, L. M., & Peña, E. D. (2023 June). *Nature of vocabulary change following Language and Literacy Together intervention.* Poster presentation at the 2023 Annual Symposium on Research in Child Language Disorders. Madison, WI.

Leachman, M., Wolters, A., & Kim, Y. S. (2022, July 13-16). *The relation between reading fluency and reading comprehension: A meta-analysis. (Preliminary)* Poster presentation at the SSSR Annual Meeting 2022, Newport Beach, CA.

BOOK CHAPTERS

Kim, Y.-S. G., & **Leachman, M.** (2025). From Ears to Eyes: Supporting Reading Comprehension Through Systematic Instruction on Listening Comprehension. *Best Practices for Supporting PK-6 Language and Reading Comprehension.* Guilford Press.

TEACHING EXPERIENCE

UNIVERSITY OF CALIFORNIA, IRVINE

Irvine, CA

Teaching Assistant – EDUC 206 Design of Learning Environments *June 2023 to July 2023*

- Led discussion sessions to clarify key concepts in classroom management, student-teacher connection, and how to write/implement lesson plans for new teachers about to graduate from UCI's MAT program
- Assessed students' progress and commented with detailed feedback
- Answered students' questions about the course content, assignments, and exams
- Supported students to complete a number of course projects which ranged from lesson planning for their first month of school, crafting an educational framework.

Teaching Assistant – EDUC 202 Outcomes of Schooling Assessment *July 2023 to Aug. 2023*

- Led discussion sessions to clarify key concepts in early reading development and led activities that allow students to apply their knowledge
- Assessed students' progress and commented with detailed feedback
- Answered students' questions about the course content, assignments, and exams
- Supported students to observe children's language, administer oral language assessment(s), and write results

Guest lecturer: Classroom Learning Analytics for EDUC 180 Learning Analytics. *Mar. '23, '24, '25*

Guest lecturer: Dual Immersion Schools for EDUC 120 Bilingual Education. *Mar. 2025*

BILINGUAL EDUCATION INSTUTITE

Houston, TX

English Instructor *June 2020 to Oct. 2020*

- Taught adult English learners of varying levels (beginnings, intermediate, and advanced)
- Prepared all lesson materials, homework assignments, and practice exams for courses
- Tailored lessons based on student interests, languages, and cultural backgrounds
- Adapted lessons regularly to meet the real-life needs of students (i.e., filling out insurance forms, job applications, interview preparation, etc.)

BLUEBONNET SCHOOL

Austin, TX

Toddler Co-teacher *Sep. 2019 to June 2020*

- Taught 18-to-24-month class using play-based and exploratory learning techniques
- Emphasized early language development through music, frequent book-reading, and make-believe play activities
- Created age-appropriate art activities to help develop gross motor skills
- Dedicated special focus towards teaching age-appropriate emotional regulation techniques such as deep breathing, touching fingers, and other mindfulness practices
- Helped other teachers regularly communicate with Mandarin-speaking students and parents

HESS EDUCATIONAL GROUP

Taipei, TW

Preschool English Teacher *Jan. 2017 to May 2018*

- Designed and implemented English lesson plans for four age groups (24–36 mo., 3–4 y.o., Pre-K, Kindergarten)
- Coordinated with parents, Mandarin co-teachers, and administrators to create play-based and out-of-class learning opportunities
- Applied culturally sustaining practices to promote authentic English use in daily life
- Adapted classroom management strategies to student interests, needs, and accommodations
- Taught foundational literacy skills, including phonological awareness, decoding, spelling, early writing, and reading comprehension

Advanced English Teacher *Sep. 2017 to May 2018*

- Designed interactive activities to engage junior high students in advanced English syntax and vocabulary
- Evaluated student work and assessments, providing individualized feedback and tailoring lessons to address learning needs

SERVICE

- Symposium Organizer, (September 2026). *Reading brains in the making: Exploring factors shaping emergent literacy skills in developing readers.* Presented at the 2026 International Mind, Brain, and Education Society Conference. San Diego, CA.
- Symposium Organizer, (March 2026). *Exploring the Neuroscience of Naturalistic Language and Reading Comprehension: Insights from EEG, fNIRS, and fMRI.* Presented at the 2026 Association of Reading and Writing in Asia Conference. Kaohsiung, Taiwan.
- Reviewer for Reading & Writing. 2025 to present.
- Reviewer for Frontiers in Human Neuroscience. 2026 to present.
- Review for Child Development. 2026 to present.

MENTORSHIP

- Annalise Aponte: University of Michigan undergraduate honors student. Graduated with High Honors. Submitted thesis manuscript for publication at *Language and Speech*.
- Gabriela Muniz Chams: University of Michigan master's thesis student.
- Zahira Gaona-Flores: University of Michigan doctoral candidate.

ADDITIONAL INFORMATION

- Language proficiency: English (Native), Mandarin Chinese (Intermediate), Spanish (Intermediate)

REFERENCES

Young-Suk Kim, Ed.D.
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