

Ö. Ece Demir-Lira

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PROFESSIONAL APPOINTMENTS

2026 – present	F. Wendell Miller Associate Professor Dean's Scholar University of Iowa Department of Psychological & Brain Sciences
2018 – 2026	Assistant Professor Department of Psychological & Brain Sciences University of Iowa
2014 – 2017	Research Scientist Department of Psychology and Committee on Education University of Chicago

EDUCATION

2012 – 2014	Northwestern University Postdoctoral Research Associate / Department of Communication Sciences and Disorders
2009 – 2012	University of Chicago Postdoctoral Scholar / Department of Psychology
2009	University of Chicago Ph.D., Cognition (Minor Area: Linguistics) / Department of Psychology
2004	Koç University B.A., Psychology / Department of Psychology (Class of 2004 Rank: 2/269)

OTHER APPOINTMENTS

2026 – present	Secondary appointment , Department of Psychological and Quantitative Foundations, College of Education
2024 – present	Affiliate , Center for Social Science Innovation (CSSI), University of Iowa
2026 – present	Secondary appointment , Stead Family Department of Pediatrics, Carver College of Medicine
2024 – present	Co-director , fNIRS Neuroimaging, Neuroimaging Division, Iowa's Hawkeye Intellectual and Developmental Disabilities Research Center, University of Iowa
2019 – present	Member , Iowa Neuroscience Institute, University of Iowa
2018 – present	Member , DeLTA Center (Development & Learning from Theory to Application), University of Iowa

HONORS AND AWARDS

2026 – 2029	F. Wendell Miller Associate Professor , College of Liberal Arts and Sciences, University of Iowa
2026 – 2028	Dean's Scholar Award , College of Liberal Arts and Sciences, University of Iowa
2024	Jacobs Foundation Science of Learning Symposium Award , Flux Society <i>Award highlighting early career scientists who are identified based on merit and overall fit with the Flux mission. Sponsored by the Jacobs Foundation.</i>
2023	OVPR Early Career Scholars Program Award , University of Iowa
2016	Society of Postdoctoral Scholars Travel Award , 6th Annual Beckman Institute Postdoctoral Research Symposium, University of Illinois Urbana-Champaign
2015	Fellow , Committee on Education, University of Chicago
2013	Fellow , Maryland Neuroimaging Center Summer Institute, University of Maryland <i>Session: Developmental Neuroscience</i>
2011	Fellow , Training Course in fMRI, University of Michigan
2009	Starkey Duncan Graduate Student Award for Excellence in Undergraduate Teaching , University of Chicago <i>Awarded annually to a graduate student teaching assistant or instructor who has made significant contributions to their undergraduate students' learning and engagement in psychological science</i>
2008	John Dewey Prize Lectureship Award , University of Chicago <i>Awarded annually to up to four graduate students in the Department of Psychology to support development and presentation of a one-quarter undergraduate course</i>
2007	Fellow , Symposium on Early Education and Human Brain Development, University of Chile
2006, 2009	Psychology Graduate Student Organization Research Award , University of Chicago
2004	College of Arts and Sciences College Achievement Award , Koç University
2004	Top Ranking Student of the Psychology Class of 2004 , Koç University

RESEARCH SUPPORT

Pending Extramural Funding

NIH/NIMH R01

Dynamic psychiatric and neural changes across pregnancy and early postpartum: Identifying risk and protective factors of longitudinal trajectories

Role: Co- Investigator (Principal Investigator: Emily Thomas)

NIH / NICHD NMBH R01 HD118042-01

Longitudinal Relations of Caregiver Stress and Caregiver-Infant Interactions to Neurodevelopmental Outcomes in Very Preterm Infants (Impact Score:43 Percentile:29)

Role: Principal Investigator, \$2,545,125

Awarded Extramural Funding

NIH / NICHD CPDD R01 HD116831-01

07/01/2025 – 06/30/2030

Identifying Relations between Premature Birth, Parental Factors, and the Neural Basis of Numerical Development

Role: Principal Investigator, \$1,779,256

NIH / NICHD P50 HD103556-01

04/01/2021 – 03/31/2026

University of Iowa Hawkeye Intellectual and Developmental Disabilities Research Center (Haw-IDDRC)

Role: Co-Investigator (Principal Investigator: Lane Strathearn), \$6,159,147

NSF 2202468

09/01/2022 – 08/31/2025

Collaborative Research: Haptic Technology Innovations to Guide Student Gesturing with Dynamic STEM Visualizations

Role: Co-Principal Investigator, \$549,997

NIH / NICHD R03 HD102449-01

09/01/2021 – 08/30/2024

Identifying Relationships between Late Premature Birth, Parental Factors, and Early Numerical and Spatial Development

Role: Principal Investigator, \$154,500

Research Supplement, awarded to PhD Student Francesca Scheiber, \$57,403

NIH / NIDCD R01 DC008089

07/01/2020 – 11/30/2025

Development of Real-Time Spoken and Written Word Recognition: Neural Bases

Role: Co-Investigator (Principal Investigator: Bob McMurray), \$661,424

Awarded Intramural Funding**University of Iowa**

2025 – 2026

DeLTA Center Interdisciplinary Research Grant

Do You See What I Mean? fNIRS-Based Hyperscanning During Face-to-face Visual Imagery Communication

Role: Co-Mentor/Co-Principal Investigator (Student PI Hyoji Ha), \$1,430

University of Iowa

2025

Strategic Priorities (ISP) Award

Role: Principal Investigator, \$3600

University of Iowa**College of Education Scanlan Center for School Mental Health**

2024

Dynamic Relations Between Parent-Child Neural Synchrony and Child Behavioral Profiles

Role: Principal Investigator, \$7,000

University of Iowa

09/01/2023 – 6/30/2024

Stead Family Children's Hospital Discretionary Funds (Walmart Children's Miracle Network Fund)

Neurological Perturbations and Language Impairments in Very Preterm Infants

Role: Principal Investigator, \$49,841

University of Iowa

01/14/2023 – 01/14/2024

OVPR Early Career Scholars Program

Caregiver Stress, Caregiver-Infant Interactions, and Neurodevelopment in Preterm Infants

Role: Principal Investigator, \$30,000

University of Iowa 07/01/2022 – 06/30/2023
Stead Family Children's Hospital and the Stead Family Department of Pediatrics Research Grant Program

Caregiver stress, caregiver-infant interactions and neurodevelopment in preterm infants

Role: Principal Investigator, \$200,000

University of Iowa 05/02/2022 – 05/01/2023
Ideas Lab Program Award, Office of the Vice President for Research

Connecting the Ontogeny of Neural Networks to Parent-Child Interactions: The Iowa Origins of Networks and Synchrony Study

Role: Principal Investigator, \$10,000

University of Iowa 05/27/2020 – 05/27/2021
Prevention Research Center for Rural Health (PRC-RH) Pilot Project Program Grant

Identifying Relationships between Premature Birth, Parental Mental Health, Socioeconomic Status and Language Development in Children from Rural Iowa

Role: Principal Investigator, \$14,800

University of Iowa 2020 – 2021
DeLTA Center Interdisciplinary Research Grant

Neural Correlates for Successful Spatial Problem Solving in Chemistry Education: A Comparison Between Gesture-Based and Model-Based Learning Strategy

Role: Co-Mentor/Co-Principal Investigator (Student PI Sam Clingan-Siverly), \$1,000

University of Iowa
Old Gold Summer Grant 2019

Like Parent, Like Child: Intergenerational Transmission of Mathematical Proficiency

Role: Principal Investigator, \$6,000

SCHOLARSHIP

* senior author, major contribution, ** secondary contribution, *** equal contribution, **** minor contribution

Mentee Roles: §Post-Bac, §§Graduate Student, §§§Other Mentee (including Undergraduate Student)

PEER-REVIEWED JOURNAL ARTICLES

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- [66] Thomas, E. B., Williams, M. A., Breheny, P., §§Miskolczi, A., & **Demir-Lira, Ö. E.** (2026). Examining dynamic changes in prefrontal connectivity and internalizing symptoms during the first and third trimesters of pregnancy. *Journal of Neuroendocrinology*, 38(9), e70252.
 - [65] §§Miskolczi, A., §§Li, Y., & **Demir-Lira, Ö. E.** (in press). It takes two to regulate: Neural and behavioral synchrony relate to child externalizing and internalizing profiles. *Developmental Psychobiology*. *
 - [64] §§Li, Y., & **Demir-Lira, Ö. E.** (2026). Parental speech and gesture scaffolding moderate the neural dynamics of parent-child synchrony. *Developmental Cognitive Neuroscience*, 101771. *
 - [63] Yu, Y., Barner, D., Mejia, M., Jung, S., Maheshwari, U., Gunderson, E. A., ... & Weaver, J. (2026). ManyNumbers 3: A Multi-Lab Study of Demographic Correlates of Early Number Knowledge. *Developmental Science*, 29(3), e70184. ****

- [62] Yılmaz, B., Akkan, I., **Demir-Lira, Ö. E.** & Göksun, T. Preterm children's early language development: Language-specific and domain-general child-related precursors. *Advances in Child Development and Behavior. Volume 71**
- [61] ^{§§§}Clingan-Silvey, S., **Demir-Lira, Ö. E.**, Steiff, M. & Lira, M. (in press). Differential motor system activation in chemistry problem solving: Gesture-based vs. model-based instruction. *Mind, Brain and Education.* *
- [60] Yılmaz, B., Karadöller, B., Göksun, T. & **Demir-Lira, Ö. E.** (accepted). Parental gestural math input and children's math skills: An intervention study. *Journal of Applied Developmental Psychology.* *
- [59] Yılmaz, B., Göksun, T. & **Demir-Lira, Ö. E.** (in press). The links between spatial and math skills in preterm and full-term children. *Journal of Cognition and Development.* *
- [58] Doğan, I., Kobaş, M., Kızıldere, E., Aktan-Erciyes, A., **Demir-Lira, Ö. E.**, & Göksun, T. (2025). Early parental multimodal input is differentially associated with later vocabulary knowledge for preterm and full-term infants. *Language Learning and Development*, 1-17.**
- [57] Kobaş, M., **Demir-Lira, Ö. E.**, Akman, I., & Göksun, T. (2025). Spatial language development in preterm and full-term infants: The role of object exploration and parents' spatial input. *Journal of Experimental Child Psychology*, 256, 106264.**
- [56] **Demir-Lira, Ö. E.**, & Göksun, T. (2025). Promoting a multimodal first language acquisition framework: A commentary on Karadöller, Sümer, and Özyürek (2024). *First Language.* *
- [55] Akkan, I., Esmer, Ş. C., Doğan, I., Aktan-Erciyes, A., **Demir-Lira, Ö. E.**, & Göksun, T. (2025). Narratives of preterm and full-term preschool-aged children: Analyses of different narrative dimensions. *British Journal of Developmental Psychology*, 1-17.**
- [54] Karadöller, D. Z., **Demir-Lira, Ö. E.**, & Göksun, T. (2025). Full-term children with lower vocabulary scores receive more math input multimodally than preterm children. *Journal of Cognition and Development*, 26(4), 630-650.*
- [53] Pinzon-Henao, P., **Demir-Lira, Ö. E.**, & Gamez, P. (2025). Gesture production selectively predicts language outcomes in Spanish-English bilingual children. *Child Development*, 96, 1443–1457.**
- [52] Yılmaz, B., Doğan, I., Karadöller, D. Z., **Demir-Lira, Ö. E.**, & Göksun, T. (2025) Parental attitudes and beliefs about mathematics and the use of gestures in children's math development. *Cognitive Development*, 73, 101531.*
- [51] ^{§§§}Farmer, I., ^{§§}Nelson, P.M., Göksun, T., & **Demir-Lira, Ö.E.** (2025). The relation of verbal and nonverbal skills to basic numerical processing of preterm versus term-born preschoolers. *Journal of Experimental Child Psychology*, 251, 106128.*
- [50] ^{§§}Nelson, P.M., ^{§§}Scheiber, F., **Demir-Lira, Ö. E.**, & Harmon, H. (2025). Early medical risks to language development in extremely preterm infants. *Journal of Perinatology*, 45(3), 378-385.*
- [49] Doğan, I., Özer, D., Erciyes, A., Furman, R., **Demir-Lira, Ö.E.**, Özcaliskan, S., & Göksun, T. (2024). The link between early iconic gesture comprehension and receptive language. *Infant and Child Development*, 33(6), e2552.**
- [48] ^{§§}Nelson, P. M., ^{§§}Scheiber, F., [§]Laughlin, H. M., & **Demir-Lira, Ö.** (2024). Playful activities mitigate relations between parental mental health difficulties and child verbal outcomes. *Child Development*, 96(2), 562-576.*
- [47] Nolte, C., & Michalska, K., ^{§§}Nelson, P. M., **Demir-Lira, Ö. E.**, (2024). Interactive roles of preterm-birth and socioeconomic status in cortical thickness of language-related brain structures: Findings from the Adolescent Brain Cognitive Development (ABCD) study. *Cortex*, 180, 1-17.*
- [46] ^{§§}Li, Y., ^{§§§}Halleck, T. Q., [§]Evans, L., ^{§§§}Bassuk, P.B., ^{§§§}de la Paz, L. & **Demir-Lira, Ö. E.** (2024). Eye of the beholder: Neural synchrony of dynamically-changing relations between parent praise and child affect. *Developmental Science*, 27(6), e13541.*
- [45] Göksun, T., Aktan-Erciyes, A., Karadöller, D. Z., & **Demir-Lira, Ö. E.** (2024). Multifaceted nature of early vocabulary development: Connecting child characteristics with parental input

types. *Child Development Perspectives*. *

- Top 10 most-cited papers published by the journal in 2024.

- [44] **Demir-Lira, Ö. E.** & Göksun, T. (2024). Through thick and thin: Gesture and speech remains as an integrated system in atypical development. *Topics in Cognitive Science*, 17, 508–526.*
- Top 10 most-cited papers published by the journal in 2024.
- [43] Suárez-Pellicioni, M., **Demir-Lira, Ö. E.**, & Booth, J. (2024). Positive math attitudes are associated with greater frontal activation among children from higher socio-economic status families. *Neuropsychologia*, 94, 108788. **
- [42] §§Nelson, P.M. & **Demir-Lira, Ö. E.** (2023). Parental cognitive stimulation in preterm-born children's neurocognitive functioning during the preschool years: A systematic review. *Pediatric Research*, 94(4), 1284-1296..*
- [41] §§Scheiber, F., §§Nelson, P. M., §§§Momany, A., Ryckman, K. K., & **Demir-Lira, Ö. E.** (2023). Parent mental health and child behavior during the COVID-19 pandemic. *Children and Youth Services Review*, 148, 106888.*
- [40] Saragosa-Harris, N., Chaku, N., MacSweeney, N., Williamson, V. G., Scheuplein, M., Feola, B., **Demir-Lira, Ö. E.**, ... & Mills, K. L. (2022). A practical guide for researchers and reviewers using the ABCD Study and other large longitudinal datasets. *Developmental Cognitive Neuroscience*, 55, 101115.**
- [39] §§§Sullivan, A., Bowren, M., Bruss, J., Tranel, D., & **Demir-Lira, Ö. E.** (2022). Academic skills after brain injury: A lifetime perspective. *Neuropsychology*, 36(5), 419–432.*
- [38] Kobaş, M., Kızıldere, E., Doğan, I., Aktan-Erciyes, A., **Demir-Lira, Ö. E.**, & Göksun, T. (2022). Motor skills, language development, and visual processing in preterm and full-term infants. *Current Psychology*, 42(15), 12463-12475.**
- [37] §§Scheiber, F., Momany, A., Ryckman, K., & **Demir-Lira, Ö. E.** (2022). Maternal depressive symptoms and maternal child-directed speech: A systematic review. *Journal of Affective Disorders*, 297(15), 194-207.*
- [36] Saatçi Yurtsever, S., Öztop Çakmak, Ö., Yapıcı Eser, H., Ertan, S., **Demir-Lira, Ö. E.**, & Göksun, T. (2021). Production and comprehension of co-speech gestures in Parkinson's Disease. *Neuropsychologia*, 163, 108061.**
- [35] §§Nelson, P., §§Scheiber, F., §Laughlin, H., Ryckman, K., & **Demir-Lira, Ö. E.** (2021). Comparing face-to-face and online data collection methods in preterm and full-term children: An exploratory study. *Frontiers in Psychology*, 12, 733192.*
- [34] **Demir-Lira, Ö. E.**, Prado, J., & Booth, J. (2021). The neurocognitive basis of transitive reasoning varies as a function of parental socioeconomic status: Differential contributions of spatial and verbal systems. *Human Brain Mapping*, 42, 3396–3410.*
- [33] **Demir-Lira, Ö. E.**, Asaridou, S. S., Goldin-Meadow, S., & Small, S. (2021). Parent language input prior to school forecasts change in children's language-related cortical structures during mid-adolescence. Invited paper for *Frontiers in Human Neuroscience, section Speech and Language*, 15, 650152.*
- [32] Vilà-Giménez, I., Dowling, N., **Demir-Lira, Ö. E.**, Prieto, P., & Goldin-Meadow, S. (2021). The predictive value of non-referential beat gestures: Early use in parent-child interactions predicts narrative abilities at 5 years of age. *Child Development*, 92(6), 2335-2355.**
- [31] Suárez-Pellicioni, M., **Demir-Lira, Ö. E.**, & Booth, J. R. (2021). Neurocognitive mechanisms explaining the role of math attitudes in predicting children's improvement in multiplication skill. *Journal of Cognitive, Affective, and Behavioral Neuroscience*, 21, 917-935.**
- [30] §§§Clingan-Siverly S., §§Nelson, P. M., Göksun, T., & **Demir-Lira, Ö. E.** (2021). Spatial thinking in term and preterm-born preschoolers: Relations to parent-child speech and gesture. *Frontiers in Psychology, section Developmental Psychology*, 12, 651678.*
- [29] Silvey, C., **Demir-Lira, Ö. E.**, Goldin-Meadow, S., & Raudenbush, S. (2021). Effects of time-varying

- parent input on child language outcomes differ for vocabulary and syntax. *Psychological Science*, 2(4), 536-548.**
- [28] **Demir-Lira, Ö. E.**, Kanero, J., Oranç, C., Koşkulu, S., Franko, I., Kuntay, A., & Göksun, T. (2020). L2 vocabulary teaching by social robots: The role of gestures and on-screen cues as scaffolds. *Frontiers in Education*, 5, 599636.*
- [27] Asaridou, S. S., **Demir-Lira, Ö. E.**, Goldin-Meadow, S., & Small, S. (2020). Language development and brain reorganization in a child born without the left hemisphere. *Cortex*, 127, 290-312.**
- [26] **Demir-Lira, Ö. E.**, Suárez-Pellicioni, M., Binzak, J. V., & Booth, J. R. (2020). Attitudes toward math are differentially related to the neural basis of multiplication depending on math skill. *Learning Disability Quarterly*, 43(3), 179-191.*
- [25] **Demir-Lira, Ö. E.**, Aktan-Erciyes, A., & Göksun, T. (2019). New insights from children with early focal brain injury: Lessons to be learned from examining STEM-related skills. *Developmental Psychobiology*, 61(3), 477-490.*
- [24] Younger, J. W., Lee, K. W., **Demir-Lira, Ö. E.**, & Booth, J. R. (2019). Brain lateralization of phonological awareness varies by maternal education. *Developmental Science*, 22(6), e12807.***
- [23] **Demir-Lira, Ö. E.**, Applebaum, L., & Levine, S. (2019). Parents' early book-reading to children: A new look at the relation to later language and literacy outcomes. *Developmental Science*, 22(3), e12764.*
- [22] Parrill, F., Lavanty, B., Bennett, A., Klco, A., & **Demir-Lira, Ö. E.** (2018). The relationship between character viewpoint gesture and narrative structure in children. *Language and Cognition*, 1-27. **
- [21] **Demir-Lira, Ö. E.**, Asaridou, S. S., Raja Beharelle, A., Holt, A. E., Goldin-Meadow, S., & Small, S. L. (2018). Functional neuroanatomy of gesture-speech integration in children varies with individual differences in gesture processing. *Developmental Science*, 21(5), e12648.*
- [20] Uccelli, P., **Demir-Lira, Ö. E.**, Rowe, M. L., Levine, S. C., & Goldin-Meadow, S. (2019). Children's early decontextualized talk predicts academic language proficiency in midadolescence. *Child Development*, 90(5), 1650-1663.**
- [19] §Glenn, D., §**Demir-Lira, Ö. E.**, Congdon, E., Gibson, D., & Levine, S. C. (2018). Resilience in mathematics after early brain injury: The role of parental input and brain plasticity. *Developmental Cognitive Neuroscience*, 30, 304-313. §shared first authorship*
- [18] Asaridou, S. S., **Demir-Lira, Ö. E.**, Goldin-Meadow, S., & Small, S. (2017). The pace of vocabulary growth during preschool predicts cortical structure at school age. *Neuropsychologia*, 98, 13-23. **
- [17] **Demir-Lira, Ö. E.** & Levine, S.C. (2016). Reading development in typically developing children and children with early brain injury: Differential patterns of school year and summer growth. *Journal of Cognition and Development*, 4(17), 596-619.*
- [16] **Demir-Lira, Ö. E.**, Prado, J., & Booth, J. R. (2016). Neural predictors of math gains vary depending on parental socioeconomic status (SES). *Frontiers in Psychology, section Cognition*, 7:892. *
- [15] **Demir-Lira, Ö. E.**, Voss, J. T., O'Neil, J., Ewing-Cobbs, M., Wakschlag, L., & Booth, J. R. (2016). Early-life stress exposure associated with altered prefrontal resting-state fMRI connectivity in young children. *Developmental Cognitive Neuroscience*, 19, 107-114.*
- [14] Gullick, M., **Demir-Lira, Ö. E.**, & Booth, J. R. (2016). Socio-economic status predicts divergent reading skill-fractional anisotropy relationships in visuospatial tracts. *Developmental Science*, 19(4), 673-685.**
- [13] **Demir, Ö. E.**, Prado, J., & Booth, J. R. (2015). The effect of socioeconomic status on the neural basis of arithmetic: Differential relations to verbal and spatial representations. *Developmental Science*, 18(5), 799-814.*
- [12] Treiman, R., Schmidt, J., Decker, K., Robins, S., Levine, S. C., & **Demir, Ö. E.** (2015). Parent letter talk and the home literacy environment. *Child Development*, 86(5), 1406-1418.**

- [11] **Demir, Ö. E.**, Rowe, M., Heller, G., Goldin-Meadow, S., & Levine, S. C. (2015). Vocabulary, syntax and narrative development in children with and without early unilateral brain injury: Early parental talk about the there-and-then matters. *Developmental Psychology*, 51(2), 161-175.*
- [10] **Demir, Ö. E.**, Levine, S. C., & Goldin-Meadow, S. (2015). A tale of two hands: Children's early gesture use in narrative production predicts later narrative structure in speech. *Journal of Child Language*, 42(03), 662-681.*
- [9] **Demir, Ö. E.**, Prado, J., & Booth, J. R. (2014). The differential role of spatial and verbal working memory in the neural basis of arithmetic. *Developmental Neuropsychology*, 39(6), 440-458.*
- [8] **Demir, Ö. E.** & Küntay, A. (2014). Cognitive and neural mechanisms underlying socioeconomic gradients in language development: New answers to old questions. *Child Development Perspectives*, 8(2), 113-118.*
- [7] **Demir, Ö. E.**, Fisher, J. A., Levine, S. C., & Goldin-Meadow, S. (2014). Narrative structure in typically developing children and children with early unilateral brain injury: Seeing gesture matters. *Developmental Psychology*, 50(3), 815-828.*
- [6] Colletta, J. M., Kunene, R., Capirci, O., Cristilli, C., **Demir, Ö. E.**, Guidetti, M., & Levine, S. C. (2014). The effect of language, culture, and age on co-speech gesture production: An investigation of American, French, and Italian children's narratives. *Journal of Child Language*, 42(1), 122-145.**
- [5] **Demir, Ö. E.**, So, W. C., Goldin-Meadow, S., & Özyürek, A. (2012). Turkish- and English-speaking children display sensitivity to perceptual context in the referring expressions they produce in speech and gesture. *Language and Cognitive Processes*, 27(6), 844-867.*
- [4] Vaish, A., **Demir, Ö. E.**, & Baldwin, D. (2011). Twelve- and 18-month-old infants recognize when they need referential information. *Social Development*, 20(3), 431-449.**
- [3] Capirci, O., Colletta, J.M., Cristilli, C., **Demir, Ö. E.**, Guidetti, M., & Levine, S. C. (2010). L'incidence de la culture et de la langue dans les récits parlés et les gestes d'enfants français, italiens et américains âgés de 6 et 10 ans. [The effect of culture and language on the spoken narratives and gestures of 6 to 10 years-old French, Italian and American children]. *Lidil*, 42, 139-158.**
- [2] **Demir, Ö. E.**, Levine, S. C., & Goldin-Meadow, S. (2010). Narrative skill in children with early unilateral brain injury: A possible limit to functional plasticity. *Developmental Science*, 13(4), 636-647. - Media coverage: Science daily, Medical news today, eScienceNews *
- [1] So, W. C., **Demir, Ö. E.**, & Goldin-Meadow, S. (2010). When speech is ambiguous gesture steps in: Sensitivity to discourse-pragmatic principles in early childhood. *Applied Psycholinguistics*, 31, 209-224. - Top 10 most read articles in 2010.**

REGISTERED REPORTS / PREPRINTS

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- Demir-Lira, Ö. E.**, Nelson, P., Klein-Packard, J., Fell, A., Homan, N., Fergus, A., Kelly, E., Madero, B., Tomblin, B., & McMurray, B. (2025). *Relations between real-time language processing, cortical thickness, and language outcomes in school-aged children* [Preprint]. OSF Preprints.
<https://doi.org/10.31234/osf.io/fdhpt>
- Demir-Lira, Ö. E.** (2024, February 13). Interactive Roles of Prematurity and Socioeconomic Status in Cortical Thickness of Language-Related Brain Structures: Findings from the Adolescent Brain Cognitive Development (ABCD) Study. Retrieved from osf.io/x2rq6
- Thomas, E. K., Stegall, M., & **Demir-Lira, Ö. E.** (2023, March 31). The HAPPY Brain Study.
<https://doi.org/10.17605/OSF.IO/2SFEC>
- Suárez Pellicioni, M., **Demir-Lira, Ö. E.**, Lytle, M. N., & Booth, J. R. (2020, January 8). Neurocognitive mechanisms of the role of math attitudes in predicting gains in subtraction skill in children. Retrieved from osf.io/d5rc9

BOOK CHAPTERS, CONFERENCE PROCEEDINGS, AND TECHNICAL REPORTS

- Clingan-Siverly, S., **Demir-Lira, Ö. E.**, Stieff, M., & Lira, M. (2024). How gesture protects against failures in spatial problem-solving. In *Proceedings of the 18th International Conference of the Learning Sciences-ICLS 2024*, pp. 1343-1346. International Society of the Learning Sciences.* [One of five Outstanding Paper Nominations]
- Vilà-Giménez, I., **Demir-Lira, Ö. E.**, & Prieto, P. (2020). The role of referential iconic and non-referential beat gestures in children's narrative production: Iconics signal oncoming changes in speech. *Proceedings of the 7th Gesture and Speech in Interaction (GESPIN)*. KTH Speech, Music & Hearing and Språkbanken Tal. Stockholm, Sweden.**
- Demir-Lira, Ö. E.** (2020). Academic resilience: Relations between early parental input and the behavioral and neurocognitive basis of children's academic performance. In S.J. Lipina, M.S. Segretin (Eds.), *Exploraciones Neurocientíficas de la Pobreza*. *
- Demir-Lira, Ö. E.**, Asaridou, S. S., Levine, S. C., Goldin-Meadow, S., & Small, S. L. (2018). Parents' decontextualized talk during early childhood predicts the neural basis of narrative processing in later childhood. In Kay, J. and Luckin, R. (Eds.) *Rethinking Learning in the Digital Age: Making the Learning Sciences Count, 13th International Conference of the Learning Sciences (ICLS) 2018*, Volume 3. London, UK: International Society of the Learning Sciences.*
- Demir, Ö. E.** (2016). Okul oncesi ve okul cagi donemlerinde okuma-yazma ve matematik gelismisi [Development of reading and mathematical skills in preschool and early school years]. In Ç. Aydın, T. Göksun, A. Küntay, and D. Tahiroğlu (Eds.), *Akılın Çocuk Hali*. Istanbul, Turkey: Koc University Press.*
- Ates-Sen, B., **Demir, Ö. E.**, & Küntay, A. (2016). Children's referential choices in Turkish: Experimentally elicited and conversationally occasioned determinants. In L. Serratrice and S. Allen (Eds.), *Trends in Language Acquisition Series – The Acquisition of Reference* (pp. 105-122). Amsterdam, Netherlands: John Benjamins Publishing Company.**
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MANUSCRIPTS UNDER REVIEW/IN REVISION

-
- Erdogan, S. B., Yükselen, G., Nelson, P., Li, Y., Busick, E. & **Demir-Lira, Ö. E.** (under review). Relations between neural basis of symbolic and nonsymbolic numerical processing and home math environment in 4- to 6-year-old children.*
- Demir-Lira, Ö. E.**, Nelson, P. M., Klein-Packard, J., Fell, A.; Homan, N., Fergus, A., Kelly, E., Madero, B., Tomblin, J. B. & McMurray, B. (under review). Relations between real-time language processing, cortical thickness and language outcomes in school-aged children.*
- Abreu-Mendoza, R. A., ..., **Demir-Lira, Ö. E.**, ... (under revision). ManyNumbers 1: A multi-lab international study of early number knowledge.****
- Karakaş, S., Yılmaz, B., Göksun, T. & **Demir-Lira, Ö. E.** (in preparation). Relationship between children's neonatal status, parental math anxiety, and early math skills.*

MANUSCRIPTS IN PREPARATION

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- Morton, C., Thomas, E., & **Demir-Lira, Ö. E.** (in preparation). Relations of preterm-birth to depressive symptom severity before and after birth and child development.*
- Scheiber, F., Nelson, P., Momany, A., Ryckman, K. & **Demir-Lira, Ö. E.** (in preparation). Relations between maternal mental health and verbal and visuospatial skills in preterm and full-term children: The moderating role of parent-child activities.*
- Nelson, P.M., & **Demir-Lira, Ö. E.** (in preparation). Sources of plasticity in preterm children's language development: Interacting roles of gestational age and parent-child interactions.*

OTHER PUBLICATIONS

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- Saragosa-Harris, N., Chaku, N., MacSweeney, N., Williamson, V. G., Scheuplein, M., Feola, B., ..., **Demir-Lira, Ö. E.**, ... & Mills, K. (2021). A practical guide for researchers and reviewers using the ABCD Study and other large longitudinal datasets. PsyArXiv. doi: [10.31234/osf.io/aqckx](https://doi.org/10.31234/osf.io/aqckx)
- Asaridou, S. S., **Demir-Lira, Ö. E.**, Uddén, J., Goldin-Meadow, S., & Small, S. (2019). Pragmatic language processing in the adolescent brain. bioRxiv 871343; doi: <https://doi.org/10.1101/871343>
- Suárez-Pellicioni, M., **Demir-Lira, Ö. E.**, Lytle, M. & Booth, J. R. (2019, July 3). Neurocognitive mechanisms of the role of math attitudes in predicting gains in subtraction skill in children. Retrieved from osf.io/d5rc9

INVITED TALKS

- Demir-Lira, Ö. E.** (November, 2025). *Parental input and children's academic performance*. Psi Chi The International Honor Society in Psychology Induction Keynote Speaker. St. Ambrose University, IA.
- Demir-Lira, Ö. E.** (September, 2024). *Interactive relations between children's home environment and the neurocognitive basis of numerical development*. Annual FLUX Conference Jacobs Foundation Science of Learning Symposia, Baltimore, MD.
- Demir-Lira, Ö. E.** (November, 2023). *Verbal cascades: The role of verbal skills in children's numerical processing*. University of Chicago Developmental Brown Bag. Chicago, IL.
- Demir-Lira, Ö. E.** (October, 2023). *Illuminating the role of parent-child interactions in children's cognitive development via fNIRS*. WestNIRS fNIRS Workshop. Western University. London, Canada.
- Demir-Lira, Ö. E.** (2023, March). *Sources of academic resilience: Interactive relations between early parental input and the neurocognitive basis of children's academic performance*. Development Area Meeting Talk, Temple University, PA.
- Demir-Lira, Ö. E.** (2022, July). *An introduction to Developmental Cognitive Neuroscience*. CogIST: Cognitive Science Group, Istanbul, Turkey.
- Demir-Lira, Ö. E.** (2021, November). *Sources of variability in the neurocognitive basis of children's academic performance: The role of parent-child interactions*. Neurodevelopment Research Program Seminar Turner Institute for Brain and Mental Health, Monash University.
- Demir-Lira, Ö. E.** (2021, November). *Relations between early parental input and the behavioral and neurocognitive basis of children's academic performance*. Developmental Psychology Brown Bag, University of California Riverside.
- Demir-Lira, Ö. E.** (2020, June). *The role of parental language input in preterm children's cognitive development: A case of heightened plasticity*. Universitat Pompeu Fabra, Barcelona, Spain. – Cancelled due to COVID-19.
- Demir-Lira, Ö. E.** (2017, December). *Academic resilience and the role of parental factors*. Social Sciences and Humanities Seminar. Koç University, Istanbul, Turkey.
- Demir-Lira, Ö. E.** (2017, November). *Academic resilience: Implications for Learning Sciences*. Boğaziçi University Graduate Program in Learning Sciences. Boğaziçi University, Istanbul, Turkey.
- Demir-Lira, Ö. E.** (2017, November). *Language development in children with early brain injury: The role of biological and environmental factors*. Inaugural talk of the Doctoral Program on Translation and Language Sciences and Master Talk in Linguistics. Universitat Pompeu Fabra, Barcelona, Spain.
- Demir-Lira, Ö. E.** (2017, September). *Academic resilience: Relations between early parental input and the behavioral and neurocognitive basis of children's academic performance*. Twelfth International Summer School on Mind, Brain and Education: Neuroscience of Poverty. Erice, Sicily, Italy.
- Demir-Lira, Ö. E.** (2016, April). *A brief introduction to hierarchical linear modeling*. Purdue International Biology Education Research Group Workshop. Purdue University, Lafayette, IN.
- Demir, Ö. E.** (2016, March). *Unpacking individual differences in academic development: Relations between early input, brain, and behavior*. Talk presented at the Developmental Brown Bag, University of Illinois at Urbana-Champaign, Chicago, IL.
- Demir, Ö. E.** (2015, November). *Unpacking socioeconomic status differences in academic development: Relations between early input, brain, and behavior*. Talk presented at the Department of Psychology, Loyola University Chicago, Chicago, IL.
- Demir, Ö. E. & Levine, S. C.** (2015, October). *Language and literacy learning*. Talk presented at the Second Meeting of the University of Chicago Science of Learning Network, Chicago, IL.
- Levine, S. C. & Demir, Ö. E.** (2015, April). *Language development in children with early brain injury*. Talk presented at the Pediatric Hemiplegia Symposium, Northwestern University and Rehabilitation Institute of Chicago, Chicago, IL.

- Demir, Ö. E.** (2014, November). *Parental socioeconomic differences in academic development: Effects of early input on brain and behavior*. Talk presented at the Department of Psychological and Brain Sciences, Indiana University Bloomington, Bloomington, IN.
- Demir, Ö. E.** (2012, April). *Development of reading skills: The role of individual- and environmental-level factors*. Talk presented at the Workshop on Education & Committee on Human Development Workshop, University of Chicago, Chicago, IL.
- Rowe, M. & **Demir, Ö. E.** (2009, November). *Parental talk to children: The importance of quality versus quantity in predicting child vocabulary and narrative skill*. Talk presented at the Workshop on Education, Committee on Education, University of Chicago, Chicago, IL.
- Levine, S. C., Sauer, E., & **Demir, Ö. E.** (2009, September). *Language development in children with pre- or perinatal unilateral lesions*. Instructional course presented at the 63rd Annual Meeting of The American Academy of Cerebral Palsy and Developmental Medicine, Scottsdale, AZ.
- Demir, Ö. E.** (2009, June). *Narrative structure in preschoolers' speech and gesture*. Talk presented at the Language and Communicative Development Group Series Workshop, Koç University, Turkey.

CONFERENCE PRESENTATIONS

- Sweet, J., Williams, M., **Demir-Lira, Ö. E.**, & Thomas, E. B. K. (2026, April). Prefrontal Resting-State Connectivity and Childhood Adversity in Early Pregnancy. [Oral presentation]. Oral presentation scheduled for presentation at the Midwestern Psychological Association Conference, Chicago, IL.
- Li, Y. & Demir-Lira, & **Demir-Lira, Ö. E.** (2024, July). *Neural synchrony during parent-child spatial problem-solving interaction: Role of parental gesture strategy*. Paper presented as part of the symposium, Unraveling the predictive role of gesture in children's linguistic and cognitive development (I. Vilà-Giménez & P. Prieto, chairs), at the International Congress for the Study of Child Language, Prague, Czech Republic.
- Yılmaz, B., Doğan, I., Kaya, E. N., Karadöller, D. Z., **Demir-Lira, Ö. E.**, & Göksun, T. (2024, July). *The role of gestures and parental input in mathematical development: An intervention study*. Paper presented as part of the symposium, Unraveling the predictive role of gesture in children's linguistic and cognitive development (I. Vilà-Giménez & P. Prieto, chairs), at the International Congress for the Study of Child Language, Prague, Czech Republic.
- Li, Y., Laughlin, H. & **Demir-Lira, Ö. E.** (September, 2023). *Neural synchrony during parent-child spatial problem-solving interaction: Role of parental gesture strategy*. Paper presented at Annual FLUX Conference. Santa Rosa, California.
- Karadöller, D.Z., Öztürk, T.P., Şanlıtop, D., **Demir-Lira, Ö. E.**, & Göksun, T. (June, 2023). *Full-term children receive more math input multimodally compared to preterm children*. Paper presented at the 52nd Annual Meeting of the Jean Piaget Society, Madrid, Spain.
- Demir-Lira, Ö. E.**, Gomez, R., Goetz, I. & Göksun, T. (March, 2023). *Differential role of parental strategy used during puzzle play in preterm and term-born preschoolers*. Paper presented at the Biennial Meeting of the Society for Research in Child Development. Salt Lake City, Utah.
- Karadöller, D.Z., Öztürk, T.P., Şanlıtop, D., **Demir-Lira, Ö. E.**, & Göksun, T. (2023, January). *Relationship between multimodal math input, gestational status, and children's expressive vocabulary*. Paper presented at the 13th Budapest CEU Conference on Cognitive Development, Budapest, Hungary.
- Gervain, J. & ManyBabies3NIRS Project Team. 2022. *ManyBabies3NIRS: A large-scale, multi-lab NIRS replication study assessing infants' ability to extract regularities from speech*. Paper presented at the fNIRS 2022 Biennial Meeting of the Society for fNIRS, Oct 9-12, 2022, Boston, USA.
- Sun, X., de la Cruz-Pavía, I., Gervain, J. & ManyBabies 3 NIRS Project Team. 2022. *ManyBabies3NIRS: A large-scale, multi-lab NIRS replication study assessing infants' ability to detect regularities in speech*. Paper presented at the 2022 Big Team Science Conference, Oct 27-28, 2022, virtual.

- Doğan, I., Ozer, D., Aktan-Erciyes, A., Furman, R., **Demir-Lira, Ö. E.**, Özçalışkan, S., Göksun, T. (July, 2022). *Children's receptive vocabulary predicts iconic gesture comprehension*. Paper presented as part of the symposium at the International Conference on Gesture Studies, Chicago, IL.
- Demir-Lira, Ö. E.**, Silvey, C., Goldin-Meadow, S., & Raudenbush, S. W. (May, 2022). *Effects of time-varying parent vocabulary and syntax input on children's reading comprehension*. Paper presented at the APS Annual Convention, Chicago, IL.
- Clingan-Silvey, S., Nelson, P., Gökşun, T. & **Demir-Lira, Ö. E.** (July, 2022). *Relations between gesture production and children's cognitive development*. Paper presented at the International Society for Gesture Studies, Chicago, IL.
- Farmer, I., Laughlin, H., & Demir-Lira, Ö. E. (April, 2022). *Differential role of verbal versus spatial skills in numerical development of term and preterm-born children*. Paper presented at the 94th Annual Meeting of the Midwestern Psychological Association.
- Connolly, E., Laughlin, H., & **Demir-Lira, Ö. E.** (April, 2022). *Interactive relations between parental education and rurality in predicting children's language performance*. Paper presented at the 94th Annual Meeting of the Midwestern Psychological Association.
- Demir-Lira, Ö. E.**, Nelson, P., Okine, D., & Schumer, M., (August, 2021). *Parent-child numerical activities and the neurocognitive basis of preschoolers' numerical processing*. Paper presented at the EARLI Online 2021, Invited Session O 18: SIG 22: Genes, brain, and social contexts: their interactions and implications for education.
- Laughlin, H. & **Demir-Lira, Ö. E.** (July, 2021). *Interacting roles of prematurity and parent-child synchrony in preschoolers' socioemotional and behavioral development*. Paper presented at the 2021 Annual Meeting of the Cognitive Science Society (CogSci 2021).
- Vilà-Giménez, I., Dowling, N., **Demir-Lira, Ö. E.**, Prieto, P., & Goldin-Meadow, S. (June, 2021). *The important discourse-pragmatic and prosodic properties of children's early spontaneous non-referential beat gestures in predicting later narrative structure*. Paper presented at the 4th Phonetics and Phonology in Europe conference, Universitat Pompeu Fabra, Barcelona.
- Doğan, I., Kızıldere, E., Kobaş, M., Aktan-Erciyes, A., **Demir-Lira, Ö. E.**, & Gökşun, T. (July, 2021). *Parental verbal input in different gestational weeks and atypical development*. Paper to be presented at the 15th International Association for the Study of Child Language, Philadelphia, PA. - Postponed due to COVID-19.
- Kızıldere, E., Kobaş, M., Doğan, I., Aktan-Erciyes, A., **Demir-Lira, Ö. E.** & Gökşun, T. (July, 2021). *Event representation, parental spatial input, and relational language comprehension in full-term and preterm infants*. Paper presented in Demir-Lira (chair), Beyond quantity-quality: Specifying aspects of high-quality parental language input that predict optimal child outcomes. International Congress for the Study of Child Language, Philadelphia, PA. - Postponed due to COVID-19.
- Nelson, P., Scheiber, F., Momany, A., Ryckman, K. & **Demir-Lira, Ö. E.** (July, 2021). *The role of literacy activities in preterm and full-term children's vocabulary acquisition*. Paper to be presented at the 2020 International Association for the Study of Child Language Conference. - Postponed due to COVID-19.
- Vilà-Giménez, I., Dowling, N., **Demir-Lira, Ö. E.**, Prieto, P., & Goldin-Meadow, S. (January, 2021) *Predicting children's narrative structure: The value of non-referential beat gestures and their concomitant prosodic prominence in spontaneous interactions*. Paper to be presented at the 18th Old World Conference on Phonology (OCP), University of the Balearic Islands, Eivissa, Illes Balears.
- Vilà-Giménez, I., **Demir-Lira, Ö. E.**, & Prieto, P. (January, 2021). *Referential iconic vs. Non-referential beat gestures performed in children's narratives: The predictive value of iconic gestures*. Paper presented at the Budapest CEU Conference on Cognitive Development, Cognitive Development Center CEU, Budapest, Hungary.
- Scheiber, F., Nelson, P., Momany, A., Ryckman, K., **Demir-Lira, Ö. E.** (October, 2020). *Parental*

- mental health, socioeconomic status, and children's verbal abilities.* Paper presented at the Many Paths to Language Conference, Nijmegen, The Netherlands.
- Nelson, P., Scheiber, F., Momany, A., Ryckman, K. & **Demir-Lira, Ö. E.** (October, 2020). *Sources of plasticity in preterm children's vocabulary acquisition: Interacting roles of gestational age and parent-child interactions.* Paper presented at the Many Paths to Language, Nijmegen, The Netherlands.
- Vilà-Giménez, I., **Demir-Lira, Ö. E.**, & Prieto, P. (September, 2020). *The role of referential iconic and non-referential beat gestures in children's narrative production: Iconics signal oncoming changes in speech.* Paper presented at the 7th Gesture and Speech in Interaction (GESPIN), KTH Speech, Music & Hearing and Språkbanken Tal, Stockholm, Sweden.
- Schumer, M., Nelson, P., Okine, D., Berteletti, I. & **Demir-Lira, Ö. E.** (June, 2020). *Parent-child numerical activities and child numerical processing.* Paper presented at the Annual meeting of the Mathematical Cognition and Learning Society, Dublin, Ireland.
- Demir-Lira, Ö. E.**, Schatt, D., Levine, S.C., & Goldin-Meadow, S. (May, 2019). *Predictors of parent decontextualized talk during book reading: Role of book genre and parental resources.* Paper presented as part of symposium organized by Frausel, R. and Goldin-Meadow, S.G., "The role of decontextualized talk in children's cognitive development" at the 31st APS Annual Convention, Washington, DC.
- Demir-Lira, Ö. E.** (March, 2019). Discussant at the Conversation Roundtable "The use of preregistration tools in ongoing, longitudinal cohorts" presented at the Biennial Meeting of the Society for Research in Child Development, Baltimore, MD.
- Kanero, J., **Demir-Lira, Ö. E.**, Oranç, O., Koşkulu, S., Franko, I., Adıgüzel, Z., Uluşahin, O., Göksun, T., & Küntay, A. C. (November, 2018). *How do robot gestures help second language learning?* Paper presented as part of a symposium organized by van den Berghe, R., "Social Robots for Language Learning" at the EARLI Conference on SIG 5 Learning and Development in Early Childhood, Berlin, Germany.
- Demir, Ö. E.**, Asaridou, S. S., Goldin-Meadow, S., & Small, S. (February, 2016). *Early parental language input quality, but not quantity, predicts neural basis of narrative processing at child age 7-9.* Paper presented at the 6th Beckman Institute Annual Postdoctoral Research Symposium, University of Illinois-Urbana Champaign, Champaign, IL.
- Gullick, M., **Demir, Ö. E.**, & Booth, J. R. (2014, April). *Socioeconomic status may drive divergent reading skill-coherence relationships in right visuospatial tracts.* Paper presented as part of a symposium organized by Demir, Ö. E., "New approaches to understanding SES differences in neurocognitive development across the lifespan" at the Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA.
- Demir, Ö. E.**, Rowe, M., Heller, G., Goldin-Meadow, S., & Levine, S. C. (2014, July). *Vocabulary, syntax and narrative development in children with and without early unilateral brain injury: Early parental talk about the there-and-then matters.* Paper presented in 13th International Congress for the Study of Child Language, Amsterdam, Netherlands.
- Treiman, R., Schmidt, J., Decker, K., Robins, S., Levine, S. C., & **Demir, Ö. E.** (2014, July). *Parent letter talk and the home literacy environment.* Paper presented at the Society for the Scientific Study of Reading, Santa Fe, NM.
- Demir, Ö. E.**, Fisher, J. A., Goldin-Meadow, S., & Levine, S. C. (2013, November). *Narrative processing in typically developing children and children with early pre- or perinatal focal brain injury.* Paper presented at the annual American Speech-Language-Hearing Association Convention, Chicago, IL.
- Cartmill, E., **Demir, Ö. E.**, Green, M., Levine, S. C., & Goldin-Meadow, S. (2013, April). *Parent use of gesture to children with early brain injury.* Paper presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA.
- Holt, A. E., Riley, J. D., **Demir, Ö. E.**, Goldin-Meadow, S., & Small, S. (2012, November). *Early maternal use of decontextualized language predicts individual differences in children's white matter at age 7-9.* Paper presented at the Neurobiology of Language Conference, San Sebastian, Spain.

- Cartmill, E., **Demir, Ö. E.**, Levine, S. C., & Goldin-Meadow, S. (2012, July). *Using the hand to ground the mind: Parents' use of gesture during decontextualized speech to typically-developing children and children with early brain injury*. Paper presented at the 5th Conference of the International Society for Gesture Studies, Lundt, Sweden.
- Demir, Ö. E.**, Ates, A. B., & Küntay, A. (2011, July). *When words fall short: Non-speech communicative devices of Turkish toddlers and their caregivers*. Invited symposium presented at the International Association for Cross-Cultural Psychology Regional Conference, Istanbul, Turkey.
- Demir, Ö. E.**, Applebaum, L., Levine, S. C., Petty, K., & Goldin-Meadow, S. (2010, November). *The story behind parent-child book-reading interactions: Relations to later language and reading outcomes*. Paper presented at the Boston University Conference on Language Development 35, Boston, MA.
- Demir, Ö. E.**, Goldin-Meadow, S., & Levine, S. C. (2009, July). *A tale of two hands: Development of narrative structure in preschoolers' speech and gesture*. Paper presented at the Multimod 2009 International Conference: Multimodality of communication in children: Gestures, emotions, language and cognition, Toulouse, France.
- Demir, Ö. E.**, So, W. C., Goldin-Meadow, S., & Özyürek, A. (2009, April). *The influence of shared perceptual context on English- and Turkish-speaking children's referring expressions: Taking what listeners see into account*. Paper presented as part of a symposium organized by So, W. C. & Demir, Ö. E., "The role and universality of discourse-pragmatic principles in referential expression in speech and gesture" at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.
- So, W. C., **Demir, Ö. E.**, & Goldin-Meadow, S. (2009, April). *When speech is ambiguous gesture steps in: Sensitivity to discourse-pragmatic principles in early childhood*. Paper presented as part of a symposium organized by So, W. C. & Demir, Ö. E., "The role and universality of discourse-pragmatic principles in referential expression in speech and gesture" at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.
- Demir, Ö. E.**, Goldin-Meadow, S., & Levine, S. C. (2008, October). *A tale of two hands: Narrative structure in preschoolers' speech and gesture*. Paper presented at the Boston University Conference on Language Development 33, Boston, MA.
- So, W. C., **Demir, Ö. E.**, & Goldin-Meadow, S. (2008, August). *Speaking and gesturing under discourse constraints in early childhood*. Paper presented in XI International Congress for the Study of Child Language, Edinburgh, UK.
- Angeleri R., **Demir Ö. E.**, So W. C., & Goldin-Meadow S. (2007, September). *L'argomento verbale nelle parole e nei gesti dei bambini: Uno studio cross-linguistico*. Paper presented at Congresso Nazionale AIP, Como, Italy.
- So, W. C., **Demir, Ö. E.**, Goldin-Meadow, S., & Özyürek, A. (2007, April). *Gone from the charts, but not from our hearts*. Paper presented as part of a symposium organized by So, W. C. & Demir, Ö. E., "Cognitive and pragmatic constraints in early child argument representation in speech and gesture" at the Biennial Meeting of the Society for Research in Child Development, Boston, MA.
- Demir, Ö. E.**, So, W. C., & Goldin-Meadow, S. (2006, November). *What's hidden in the hands? How children use gesture to convey arguments in a motion event*. Paper presented at the Boston University Conference on Language Development 31, Boston, MA.
- Demir, Ö. E.** (2003, July). *Annelerin gören ve görme engelli çocuklarına direktif kullanımı [Mothers' directive input to blind and sighted children]*. Paper presented at the Eighth Annual Congress of Psychology Students, Ankara, Turkey.

WORKSHOPS AND TUTORIALS

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- Demir-Lira, Ö. E.** (2025, June). *Brief Introduction to fNIRS Hyperscanning in Developmental Science*. Koç University, Istanbul, Turkey.

- Demir-Lira, Ö. E.**, Lira, M. & Lindgren, R. (2025, June). *Bridging Neuroimaging and Learning Sciences: fNIRS as an Innovation for Embodied and Social Interaction Studies*. International Society of the Learning Sciences Annual Conference, Helsinki, Finland.
- Demir-Lira, Ö. E.** (2025, May). *Use of fNIRS Hyperscanning in Developmental Science*. REU ASL-English Bilingual Centre. Gallaudet University, DC.
- Demir-Lira, Ö. E.** (2025, May). *A Brief Introduction to Hyperscanning*. REU ASL-English Bilingual Centre. Gallaudet University, DC.

POSTER PRESENTATIONS

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- Troendle, B., Scott, N., & **Demir-Lira, Ö. E.** (2026, April 16-19). *Early mathematical performance: Contributions of family and neighborhood factors* [Poster presentation]. Midwestern Psychological Association 2026 Annual Meeting, Chicago, IL, United States.
- Vander Wilt, M., Scott, N., & **Demir-Lira, Ö. E.** (2026, April 16-19). *Informal and formal math interactions and the effect of maternal executive functioning* [Poster presentation]. Midwestern Psychological Association 2026 Annual Meeting, Chicago, IL, United States.
- Scott, N., **Demir-Lira, Ö. E.**, & McMurray, B. (2026, April 9-11). *Real-time language processing and the brain: Structural contributions of the dorsal language pathway* [Poster presentation]. Cognitive Development Society 2026 Conference, Montreal, QC, Canada.
- Clingan-Siverly, S., **Demir-Lira, Ö. E.**, Stieff, M., & Lira, M. (2025, July). *Gestures that guide: The role of multimodal learning in solving organic chemistry problems*. Poster presented at the 10th Conference of the International Society for Gesture Studies (ISGS10), Nijmegen, The Netherlands.
- Hughes, R., Li, Y., Hernandez-Garcia, J., Orr, R., **Demir-Lira, Ö. E.** (2025). *Relation between Maternal Mental Health and Neural Synchrony Score*, Poster presented at the Annual Conference of the Midwestern Psychological Association, Chicago, IL, United States.
- Nguyen, S., Miskolczi, A., & **Demir-Lira, Ö. E.** (2025, April). *Exploring Language as a Predictor of Externalizing and Internalizing Behavior in Preterm and Term Preschoolers*, Poster presented at the Annual Conference of the Midwestern Psychological Association, Chicago, IL, United States.
- Miskolczi, A., Li, Y., & **Demir-Lira, Ö. E.** (2024, September). *Caregiver-child brain synchrony patterns as a correlate of child internalizing and externalizing behavior*. Poster presented at the Annual Flux Congress, Baltimore, MD, United States
- Yılmaz, B., Doğan, I., Kaya, E. N., Karakaş, S., Karadöller, D. Z., **Demir-Lira, Ö. E.**, & Göksun, T. (2024, September). *Ebeveynlerin Multimodal Dil Kullanımının Çocukların Matematik Gelişimine Etkisi: Bir Müdahale Çalışması [The Effect of Parents' Multimodal Language Use on Children's Math Development: An Intervention Study]*, Poster presented at the 4. Gelişim Psikolojisi Sempozyumu, [4th Symposium on Developmental Psychology], Bilkent University, Ankara, Türkiye.
- Akkan İ., Yılmaz, B., **Demir-Lira, Ö. E.** & Göksun, T. (2024, September). *Ebeveynin multimodal dil kullanımı ile zamanından önce ve zamanında doğan çocuklarda kelime dağarcığı gelişimi ilişkisinde ortak dikkatin aracı rolü [The mediating role of joint attention in the relationship between parents' multimodal language use and vocabulary development in preterm and full-term children]*, Poster presented at the 4. Gelişim Psikolojisi Sempozyumu, [4th Symposium on Developmental Psychology], Bilkent University, Ankara, Türkiye.
- Yılmaz, B., Doğan, I., Karadöller, D. Z., **Demir-Lira, Ö. E.**, & Göksun, T. (2024, March). *Sources of variation in children's math achievement: The role of gesture use and parents' attitudes toward mathematics*. Poster presented at the Cognitive Development Society Conference, Pasadena, CA, USA.
- Busick, E. & **Demir-Lira, Ö. E.** (2024, October). *The role of higher-order thinking language in early childhood math ability*. Poster presented at the 2024 International Society for Developmental Psychobiology Annual Meeting, Chicago, IL, United States.
- Shettigar, B., & Demir-Lira, E. (2024, July 24). *Relations Between Green Space Access and Children's Cognitive*

- Performance* [Poster Presentation]. Summer Undergraduate Research Conference (SURC) at the University of Iowa, Iowa City, IA, United States.
- Hughes, R., Nelson, P., **Demir-Lira, Ö. E.** (2024, April 18-20). *Effect of gestational age on children's neurodevelopmental outcomes*. Poster presented at the Midwestern Psychological Association, Chicago, IL, United States.
- Miskolczi, A. Li, Ying, & **Demir-Lira, Ö. E.** (2024, April). *Caregiver-child brain synchrony as a correlate of child internalizing/externalizing behavior*. Poster presented at the 96th Annual Meeting of the Midwestern Psychological Association, Chicago, IL, United States.
- Morales, L., **Demir-Lira, Ö. E.**, Michalska, K. (2024, April). *Emotional talk in latino father-daughter dyads and mental health outcomes*. Poster presented at the 96th Annual Meeting of the Midwestern Psychological Association, Chicago, IL, United States.
- Yılmaz, B., Doğan, I., Karadöller, D. Z., **Demir-Lira, Ö. E.**, & Göksun, T. (2024, March). *Sources of variation in children's math achievement: the role of gesture use and parents' attitudes and beliefs towards mathematics*. Poster presented at the Cognitive Development Society Conference, Pasadena, CA.
- Nelson, P.M, **Demir-Lira, Ö. E.**, Schumer, M., Nelson, P.M., Laughlin, H. Busick, E. (2023, September). *Parent-child numerical interactions and the neural basis of children's number processing*. Annual FLUX Conference, California.
- Karadöller, D.Z., Öztürk, T.P., Şanlıtop, D., **Demir-Lira, Ö. E.** & Göksun, T (2023, June). *Full-term children receive more math input multimodally compared to preterm children*. Presented at the 52nd Annual Meeting of the Jean Piaget Society, Madrid, Spain.
- Halleck, T. Bassuk, P. B., Li, Y. & **Demir-Lira, Ö. E.** (2023, April). *Exploring parent gender stereotypes as a predictor of variation in parental feedback between dyads of different gender composition*. Poster presented at the 95th Annual Meeting of the Midwestern Psychological Association.
- Morton, C., M., Nelson, P. M., **Demir-Lira, Ö. E.** (2023, April). *Maternal depression trajectories of mothers of preterm- and term-born children*. Poster presented at the 95th Annual Meeting of the Midwestern Psychological Association.
- Akkan, I. Esmer, S.C., Doğan, I., **Demir-Lira, Ö. E.** & Göksun, T. (2023, January). *Do dynamic vs. static presentation of stories affect narrative skills in children: differential effects of working memory, and parental talk*. Poster presented at the Budapest CEU Conference on Cognitive Development.
- Doğan, I., Kızıldere, E. Kobaş, M., Aktan-Erciyes, A., **Demir-Lira, Ö. E.** & Göksun, T. (2021, November). *Early caregiver multimodal input is differentially associated with later vocabulary knowledge for preterm infants*. Poster presented at Harvard Women in Psychology TiPS.
- Laughlin, H., Conroy, E. Landherr, M. & **Demir-Lira, Ö. E.** (2022, April). *The relation of parent-child synchrony to child cognitive outcomes*. Poster presented at the 94th Annual Meeting of the Midwestern Psychological Association.
- Conroy, E., Landherr, M., Laughlin, H., & **Demir-Lira, Ö. E.** (2022, April). *Child's exposure to activities- relations to mutual responsiveness orientation*. Poster presented at the 94th Annual Meeting of the Midwestern Psychological Association.
- Landherr, M., Conroy, E., Laughlin, H., & **Demir-Lira, Ö. E.** (2022, April). *Parental perceptions of child's ability and relations to mutual responsiveness orientation*. Poster presented at the 94th Annual Meeting of the Midwestern Psychological Association.
- Severino, E. Nelson, P., **Demir-Lira, Ö. E.** (2022, April). *The role of parental input and dialogue in children's number processing development*. Poster presented at the 94th Annual Meeting of the Midwestern Psychological Association.
- Scheiber, F., Momany, A., Nelson, P., Ryckman, K. & **Demir-Lira, Ö. E.** (2021, July). *The role of parental mental health in children's language outcomes*. Poster presented at the 2020 International Association for the Study of Child Language Conference. - Postponed due to COVID-19.
- Kızıldere, E. Kobaş, M., Doğan, I., Aktan-Erciyes, A., **Demir-Lira, Ö. E.** & Göksun, T. (2021, July).

- Parental verbal input in different gestational weeks and atypical development.* Poster presented at the 2020 International Association for the Study of Child Language Conference. - Postponed due to COVID-19.
- Vilà-Giménez, I. Dowling, N. **Demir-Lira, Ö. E.**, Prieto, P. & Goldin-Meadow, S. (2021, July). *Early children's use of non-referential beat gestures predicts narrative abilities at 5 years of age.* Poster presented at the 2020 International Association for the Study of Child Language Conference. - Postponed due to COVID-19.
- Dowling, N., Vilà-Giménez, I., **Demir-Lira, Ö. E.**, Prieto, P. & Goldin-Meadow, S. (2021, July). *Non-referential flip gestures follow distinct developmental trajectories of functions.* Poster presented at the 2020 International Association for the Study of Child Language Conference. - Postponed due to COVID-19.
- Bessner, E. & **Demir-Lira, Ö. E.** (2021, April). *The role of time preference in parent child interactions: a possible mediator of socioeconomic differences in child language outcomes.* Poster presented at the 93rd Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Kızıldere, E., Kobaş, M., Doğan, I., Aktan-Erciyes, A., **Demir-Lira, Ö. E.**, Akman, İ. & Göksun, T. (2021, April). *Parents' spatial language scaffolds pre- and full-term infants' mental rotation skills.* Poster presented at the Society for Research on Child Development.
- Doğan, I., Kızıldere, E., Kobaş, M., Aktan-Erciyes, A., **Demir-Lira, Ö. E.** Akman, İ. & Göksun, T. (2021, April). *Parents' gestural but not verbal input associates with word comprehension in pre- and full-term infants.* Poster presented at the Society for Research on Child Development.
- Doğan, I., Kobaş, M., Kızıldere, E., Aktan-Erciyes, A., **Demir-Lira, Ö. E.**, Akman, İ. & Göksun, T. (2021, January). *Parents' gestures scaffold preterm children's vocabulary use through children's gestures.* Poster presented at 11th Budapest CEU Conference on Cognitive Development, Budapest, Hungary.
- Nelson, P., Scheiber, F., Momany, A., Ryckman, K. & **Demir-Lira, Ö. E.** (2020, May). *Sources of plasticity in preterm children's vocabulary acquisition: interacting roles of gestational age and parent-child interactions.* Poster presented at the 32nd APS Annual Convention, Chicago, IL.
- Scheiber, F., Momany, A., Nelson, P., Ryckman, K. & **Demir-Lira, Ö. E.** (2020, May) *The relationship between parental mental health, socioeconomic status, and children's cognitive outcomes.* Poster presented at the 32nd APS Annual Convention, Chicago, IL.
- Kızıldere, E., Aktan-Erciyes, A., Kobaş, M., **Demir-Lira, Ö. E.**, Doğan, I., & Göksun, T. (2019, September). *Term ve preterm bebeklerde olay temsili ve ebeveynlerin uzam girdisi.* Poster presented at the 5th Experimental-Cognitive Psychology Symposium, İstanbul, Turkey.
- Asaridou, S. S. **Demir-Lira, Ö. E.**, Goldin-Meadow, S., Levine, S. C. & Small, S. (2019, March). *Language development and brain reorganization in a child born without the left hemisphere.* Poster presented at the Biennial Meeting of the Society for Research in Child Development, Baltimore, MD.
- Demir-Lira, Ö. E.**, Kanero, J., Oranç, O., Koşukulu, S., Franko, I., Adıgüzel, Z., Uluşahin, O., Göksun, T., & Küntay, A. C. (2018, November). *Using gestures in L2 vocabulary teaching: Human or robot tutors?* Poster presented at the 43rd Annual Boston University Conference on Language Development (BUCLD), Boston, MA.
- Demir-Lira, Ö. E.**, Oranç, C., Kanero, J., Koşukulu, S., Franko, I., Adıgüzel, Z., Göksun, T. & Küntay, A. C. (2018, April). *Sosyal robotların jest kullanımının çocuklarda ikinci dil öğrenimine etkileri.* Poster presented at the Turkish Robotics Conference 2018. İstanbul, Turkey.
- Asaridou, S. S., Siu, **Demir-Lira, Ö. E.**, Goldin-Meadow, S. & Small, S. (2017, June). *Neuroanatomical correlates of reading in typically developing children.* Poster presented at the Annual Meeting of the Organization for Human Brain Mapping. Vancouver, Canada
- Asaridou, S. S. **Demir-Lira, Ö. E.**, Siu, Levine, S. C. & Small, S. (2017, November). *Brain network reorganization for language after complete prenatal hemispheric infarction.* Poster presented at the Annual Meeting of the Society for the Neurobiology of Language Conference. Baltimore, MD.
- Glenn, D., Congdon, E. Gibson, D., **Demir-Lira, Ö. E.**, Levine, S. C. (2016, May). *Possible limits to*

- brain plasticity in numerical cognition*. Poster presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Asaridou, S. S., **Demir-Lira, Ö. E.**, Tune, S., Goldin-Meadow, S., & Small, S. (2015, June). *Inferences during auditory sentence comprehension in the developing brain*. Poster presented at the 2016 CNS Annual Meeting. New York, NY.
- Demir-Lira, Ö. E.**, Asaridou, S. S., Goldin-Meadow, S., & Small, S. (2016, April). *Early parental language input quality, but not quantity, predicts cortical thickness at child age 7-9*. Poster presented at the 2016 CNS Annual Meeting. New York, NY.
- Frausel, R. R., Silvey, C., **Demir, Ö. E.**, Freeman, C., Richland, L. Levine, S.C., Goldin-Meadow, S. *Modality and discourse mode affordance of higher-order thinking*. (2015, October). Poster presented at the Ninth Biennial Meeting of the Cognitive Development Society. Columbus, OH.
- Demir, Ö. E.**, Asaridou, S.S., Goldin-Meadow, S., & Small, S. (2015, October). *Pace of vocabulary development in preschool years is associated with individual differences in brain structure in school years*. Poster presented at the Seventh Annual Meeting of the Society for the Neurobiology of Language, Chicago, IL.
- Asaridou, S. S., **Demir, Ö. E.**, Goldin-Meadow, S., & Small, S. (2015, June). *Early vocabulary growth and white matter microstructure: dorsal or ventral?* Poster to be presented at the Seventh Annual Meeting of the Society for the Neurobiology of Language, Chicago, IL.
- Asaridou, S. S., **Demir, Ö. E.**, Goldin-Meadow, S., & Small, S. (2015, June). *Early vocabulary growth rate is associated with individual differences in children's white matter*. Poster presented at the Organization of Human Brain Mapping Annual Meeting, Honolulu, HI.
- Demir, Ö. E.**, Prado, J. & Booth, J. R. (2014, September). *The neural systems predicting long-term outcomes in arithmetic development vary as a function of parental socioeconomic status*. Poster presented at the Annual Flux Conference, Los Angeles, CA.
- Demir, Ö. E.**, Prado, J., & Booth, J. R. (2013, July). *The differential role of spatial and verbal working memory in the neural basis of arithmetic*. Poster presented at the Maryland Neuroimaging Center Summer Institute, College Park, MD.
- Demir, Ö. E.**, Carlson, M., Levine, S. C., & Goldin-Meadow, S. (2013, April). *Summer setback: The impact of time off from school on reading in children with brain injury*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA.
- Carlson, M., **Demir, Ö. E.**, Goldin-Meadow, S., & Levine, S. C. (2013, April). *Using the path of early MLU growth to predict later syntactic development*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA.
- Demir, Ö. E.**, Applebaum, L., Levine, S. C., Petty, K., & Goldin-Meadow, S. (2011, July). *Early parent-child book-reading and its relations to later language and reading outcomes*. Poster presented at the Eighteenth Annual Conference of the Society for the Scientific Study of Reading, St. Pete Beach, FL.
- Raja Beharelle, A., **Demir, Ö. E.**, Mok, E., McIntosh, A., & Small, S. (2011, June). *Distributed neural activity patterns related to phonological reading skill in young readers*. Poster presented at the 17th Annual Meeting for the Organization of Human Brain Mapping, Quebec, Canada.
- Demir, Ö. E.**, Applebaum, L., Levine, S. C., & Goldin-Meadow, S. (2011, April). *Early parent-child book-reading: Aspects that predict later reading outcomes*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.
- Demir, Ö. E.**, Applebaum, L., Levine, S. C., & Goldin-Meadow, S. (2011, April). *Relations between academic language use by preschool children and later reading comprehension*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.
- Ates, A. B., **Demir, Ö. E.**, & Küntay, A. (2011, April). *Effects of discourse-pragmatic factors on verbal and gestural reference of Turkish toddlers and primary caregivers*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

- Mok, E. H., Dick, A. S., Raja, A., Zinchenko, E., **Demir, Ö. E.**, & Small, S. (2010, November). *Neural processing of co-speech iconic gestures*. Poster presented at the 40th annual meeting of Society for Neuroscience, San Diego, CA.
- Demir, Ö. E.**, Rowe, M., Heller, G., Levine, S. C., & Goldin-Meadow, S. (2009, October). *Decontextualized language use in the early home environment of children with early unilateral brain injury: Relations to vocabulary and narrative development*. Poster presented at the 6th Biennial Meeting of the Cognitive Development Society, San Antonio, TX.
- Vaish, A., **Demir, Ö. E.**, & Baldwin, D. (2009, April). *Twelve- and 18-month-olds recognize when they need referential information*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.
- Demir, Ö. E.**, So, W. C., Goldin-Meadow, S., & Özyürek, A. (2008, August). *Preschoolers' use of referring expressions in speech and in gesture: Sensitivity to extralinguistic context*. Poster presented in XI International Congress for the Study Of Child Language, Edinburgh, UK.
- Demir, Ö. E.**, Song, S., Levine, S. C., & Goldin-Meadow, S. (2008, May). *Narrative ability in children with pre- and perinatal brain lesion*. Poster presented at the Midwestern Psychological Association Annual Meeting, Chicago, IL.
- Sauer, E., & **Demir, Ö. E.** (2007, November). *Gesture ability in children with perinatal lesions (PL): Relation to language and motor ability*. Poster presented at the Cognitive Development Society V Biennial Meeting, Santa Fe, NM.
- Vaish, A., & **Demir, Ö. E.** (2007, August). *Eighteen-month-old infants recognize when they need information*. Poster presented at the 13th European Conference in Developmental Psychology, Jena, Germany.
- Demir, Ö. E.**, Levine, S. C., & Goldin-Meadow, S. (2006, June). *Development of verb and verb morphology use in children with early unilateral brain injury*. Poster presented at the Symposium on Research in Child Language Disorders, Madison, WI.
- Demir, Ö. E.**, Küntay, A., & Özyürek, A. (2004, September). *Görme engelli Türk çocuklarının ve annelerinin işaret zamiri kullanımı: Dokunsal ortak dikkat [Demonstrative pronoun use by Turkish blind children and their mothers: Tactile joint attention]*. Poster presented at the National Psychology Congress, Istanbul, Turkey.
- Demir, Ö. E.**, Küntay, A., & Özyürek, A. (2004, April). *Görme engelli Türk çocuklarının ve annelerinin işaret zamiri kullanımı: Dokunsal ortak dikkat [Demonstrative pronoun use by Turkish blind children and their mothers: Tactile joint attention]*. Poster presented at the Second National Language and Communicative Disorders Congress, Eskişehir, Turkey.
- Demir, Ö. E.** (2003, July). *Mothers' directive input to their blind children*. Poster presented at the Eighth European Congress of Psychology, Vienna, Austria.

PROFESSIONAL DEVELOPMENT

2021	Workshop on Modeling Developmental Change in the ABCD Study: Longitudinal Analyses for Clinical Outcomes, National Institute of Mental Health
2019	Completion of National Research Mentoring Network (NRMN)-sponsored, 8-hour evidence-based, research mentor training workshop, the Iowa Mentoring Academy at the University of Iowa. (Curriculum Reference: Pfund, C., House, S., Asquith, P., Spencer, K., Silet, K., & Sorkness, C. (2012). <i>Mentor training for clinical and translational researchers</i> . Entering Mentoring Series. New York, NY: WH Freeman and Co, 1-121).
2019	TILE (Spaces to Transform, Interact, Learn, Engage) Instruction Certificate, UI
2018	Boston University fNIRS Training Workshop, Boston

2017	Advanced Techniques in Neuroimaging, 21 st National Biomedical Engineering Meeting, Istanbul, Turkey
2015	Chicago Neuroimaging Workshop 2015: The Dynamic Social Brain, Chicago
2012	SPM8 for Basic and Clinical Investigators, Neurometrika, Chicago
2011	Training Course in fMRI, University of Michigan

TEACHING AND STUDENT SUPERVISION

TEACHING EXPERIENCE

<i>University of Iowa</i>	Co-Instructor , Foundations in Cognitive Neuroscience, Fall 2021, Fall 2022, Fall 2024 Instructor , Laboratory in Psychology, Fall 2021, Fall 2022, Fall 2024 Instructor , Developmental Cognitive Neuroscience, Spring 2020, Fall 2022, Spring 2025, Fall 2025 Instructor , The Brain Goes to School: An Introduction to Educational Neuroscience – Spring 2019, Spring 2020 Instructor , Research Methods and Data Analysis – Fall 2018, Fall 2019, Fall 2020, Spring 2022, Spring 2023, Spring 2024, 2026, Fall 2025 Guest Lecturer , Foundations of Learning Sciences, Matthew Lira – Fall 2018, Fall 2021
<i>University of Chicago</i>	Instructor , Psychological Research Methods - Spring 2010 John Dewey Prize Lecturer , Introduction to Pragmatic Development – Fall 2008 Lecturer , Mind, Core Curriculum – Spring 2008 Teaching Assistant , Introduction to Language Development, Susan Goldin Meadow – Winter 2008 Teaching Assistant , Experimental Design, William Goldstein – Spring 2008 Teaching Assistant , Introduction to Developmental Psychology, Susan C. Levine, Cybele Raver - Spring 2007 Teaching Assistant , Mind, Core Curriculum - Fall 2006, Winter 2007, Spring 2007 Guest Lecturer , Introduction to Language Development, Susan Goldin Meadow - Winter 2008 Guest Lecturer , Introduction to Developmental Psychology, Susan C. Levine, Cybele Raver, Spring 2007
<i>Koç University</i>	Visiting Professor , Cognitive Development, Fall 2017 Guest Lecturer , Psychology of Science and Technology, Matthew Lira, Fall 2017
<i>University of Illinois Chicago</i>	Guest Lecturer , Oral Language: Its Development and Role in the Classroom, at Perla Gamez – Fall 2011
<i>Loyola University Chicago</i>	Guest Lecturer , Language Development, Perla Gamez – Fall 2017
<i>Northwestern University</i>	Guest Lecturer , the Word Gap: Linking Early Language and Cognition Across Development and Across Socioeconomic Strata, Sandra Waxman - Fall 2014
<i>Pedagogy Workshops</i>	Fundamentals of Teaching in Psychology , University of Chicago - Fall 2016

GRADUATE STUDENT ADVISING AT UIOWA**Graduate Student Advising**

Student Name	Degree	First Post-graduate Position
Francesca Scheiber	PhD	Graduated / Postdoctoral Scholar at Duke University School of Medicine
Paige M. Nelson	PhD	Graduated/ Postdoctoral Scholar at the University of Iowa Carver College of Medicine
Ying Li	PhD	5th year in the program, Cognition, Degree in progress
Abigel Miskolczi	PhD	2nd year in the program, Clinical Science, Degree in progress
Noah Scott	PhD	1st year in the program, Cognition, Degree in progress

Graduate Student Committee Membership

Student	Years	Committee
Megan Lorenz	2018–2019	Dissertation Committee
Todd Pruner	2018–2019	Dissertation Committee
Mary Aldugom	2019–2020	Dissertation Committee
Morgan di Napoli Parr	2021–2023	Dissertation Committee
Francesca Scheiber	2021–2023	Dissertation Committee (chair)
Sydney Houlton	2022–2023	Dissertation Committee
Alyssa Sullivan	2021–2023	Dissertation Committee
Marco Pipoly	2021–2024	Dissertation Committee
Leiana de la Paz	2024–2025	Dissertation Committee
Paige Nelson	2024–2025	Dissertation Committee (chair)
Lilly Bendel-Stenzel	2024–2025	Dissertation Committee
Tess Filip	2024–present	Dissertation Committee
Ashby Martin	2024–2026	Dissertation Committee
John Zbaracki	2025–present	Dissertation Committee
Bryan Madero	2024–2026	Dissertation Committee
Xiaou Tang	2025–2026	Dissertation Committee
Mary Aldugom	2018–2019	Comps Committee
Francesca Scheiber	2019–2020	Comps Committee (chair)
Morgan di Napoli Parr	2020–2021	Comps Committee
Sydney Houlton	2020–2021	Comps Committee
Alyssa Sullivan	2020–2021	Comps Committee
Michala Cox	2021–2022	Comps Committee
Lilly Bendel-Stenzel	2022–2023	Comps Committee
Leiana de la Paz	2022–2023	Comps Committee
Charlotte Jeppsen	2022–2023	Comps Committee
John Zbracki	2022–2023	Comps Committee
Paige M. Nelson	2022–2023	Comps Committee (chair)
Ying Li	2023–2024	Comps Committee (chair)

Ashby Martin	2023–2024	Comps Committee (chair)
Alexis Hosch	2023–2024	Comps Committee
Ariel Kim	2023–2024	Comps Committee
Xiaou Tang	2024–2025	Comps Committee
Sam Clingan-Siverly	2024–present	Comps Committee
Minzhi Liu	2024–present	Comps Committee
Jessica Tharaud	2024–present	Comps Committee
Adrian Bradley	2024–present	Comps Committee
Jessica Tharaud	2025–present	Comps Committee
Taylor Christiansen	2025–present	Comps Committee
Ariel Kim	2019–2022	Research Advisory Committee
Alyssa Sullivan	2018–2020	Research Advisory Committee
Sydney Houlton	2020–2022	Research Advisory Committee
Paige M. Nelson	2020–2022	Research Advisory Committee (chair)
Alexis Hosch	2020–2022	Research Advisory Committee
Ying Li	2021–2023	Research Advisory Committee (chair)
Hazal Arpacı Atmacaoğlu	2022–2024	Research Advisory Committee
Efe Gur	2023–2024	Research Advisory Committee
Taylor Christiansen	2023–present	Research Advisory Committee
Hjoyi Ha	2023–present	Research Advisory Committee
Abigél Miskolczi	2024–present	Research Advisory Committee (chair)
Shujing Zhang	2024–present	Research Advisory Committee
Megan Schumer	2025–present	Research Advisory Committee
Keely Thornton	2025–present	Research Advisory Committee

UNDERGRADUATE AND POST-BAC STUDENT ADVISING AT UIOWA

Student	Years	Training	Outcome
Stella Son	2018-2019	Honors Committee	B.S.
Megan Schumer	2018-2020	Honors Advisor	B.S.
Maggie Landherr	2021-2022	Honors Advisor	B.S.
Callahan Morton	2022-2023	Honors Advisor	B.S.
Lupita Morales Aguilar	2023-2024	Honors Advisor	B.A.
McKenna Revis	2024-present	Faculty Advisor Committee	iDream
Zoya Akhtart	2025-present	Faculty Advisor	iDream

STUDENT FUNDING

Student	Years	Funding
Megan Schumer	2019-2020	ICRU Research Fellow
Maria Carriel	2019-2020	ICRU Research Fellow
Francesca Scheiber	2021-2023	NIH Supplement
Isabelle Farmer	2022-2023	ISA Science Alliance Intern
Paras Bassuk	2022-2023	Rhodes Scholarship
Lupita Morales Aguilar	2022-2023	ISA Science Alliance Intern
Lupita Morales Aguilar	2023-2024	UI-MARC Fellow
Sabrina Nguyen	2023-2025	ISA Science Alliance Intern
Bhoomika Shettigar	2024-2025	ISA LSAMP Intern
Kylie E. Wassmer	2025-present	ISA Science Alliance Intern

Evan Rignalda	2026-present	ICRU Research Fellow
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OTHER ADVISING AND MENTORSHIP

PhD Thesis Committee Member

- 2024 – 2025 Jiali Li, Character viewpoint gestures in storytelling across different age groups and contexts, *Universitat Pompeu Fabra Barcelona, Spain*
- 2023 – 2024 Jazelle Pilato, Neurocognitive strategies in visuospatial thinking: impacts on science achievement and the role of socioeconomic status, *American University*

Masters' Theses Committee Member

- 2023 – 2024 Jiali Li, Multimodal marking in child-directed and adult-directed speech, *Universitat Pompeu Fabra Barcelona, Spain*
- 2023 – 2024 Ilkyaz Deniz Bilgic, The Impact of Contextual, Multimodal Language Input and Child's Inhibitory Control on the Development of Early Literacy Skills, *Middle Eastern Technical University, Turkey*
- 2014 – 2015 Ayse Karaduman, Narratives of focal brain injured individuals: A macro-level analysis

Masters' Theses Co-Advised

- 2016 – 2017 Abigail Walker, Relation of parental spatial talk on the development of spatial cognition in children with pre- or perinatal brain injury, *University of Chicago*
- 2016 – 2017 Antonia Muzard, Higher-order thinking in speech in typically-developing children and children with early brain injury, *University of Chicago*
- 2009 – 2010 Monika Marko, Predictors of early decoding skills: Role of early child language and parental input, *University of Chicago*

Undergraduate Honors Theses Co-Advised

- 2011 – 2012 Jennifer Liu, Early caregiver-child fictional narrative interactions and children's later language performance, *University of Chicago*
- 2009 – 2010 Katherine Petty, Early parent-child book-reading interactions, *University of Chicago Illinois Math and Science Academy Student Inquiry and Research Program Projects Co-Advised*
- 2016 – 2017 Leisha Igoel, Parental responsiveness and sensitivity in parents of typically-developing children and children with early brain injury
- 2010 – 2011 Ethan Jacobs, Early literacy-input in the home environment and its relations to later reading outcomes
- 2008 – 2010 Gabriella T. Heller, Academic language in the early home environment of children with early unilateral brain injury
- 2007 – 2008 Sabrina Song, Narrative skill in children with early unilateral brain injury

SERVICE

DEPARTMENTAL SERVICE AT IOWA

- 2025 – 2026 **Member**, Clinical Science Faculty Search Committee, Department of Psychological and Brain Sciences, University of Iowa

2025 – 2026	Member , Faculty Advisory Committee (Elected by Faculty), Department of Psychological and Brain Sciences, University of Iowa
2020 – present	Member , Behavioral-Biomedical Interface Training Program (BBIP), Curriculum and Evaluation Committee, Department of Psychological and Brain Sciences, University of Iowa
2021 – 2024	Chair , Behavioral-Biomedical Interface Training Program (BBIP), Curriculum and Evaluation Committee, Department of Psychological and Brain Sciences, University of Iowa

COLLEGIATE SERVICE AT IOWA

2021 – present	Member , Curriculum Steering Committee, Undergraduate Studies for the Neuroscience Major
2021 – present	fNIRS Center Co-Director , Hawk-IDDRC, Neurocircuitry and Behavior Core, Neuroimaging Division, University of Iowa
2019 – 2020	Member , Diversity Committee, Interdisciplinary Neuroscience Graduate Program, University of Iowa
2020	Panelist , Psychology/Sociology Careers Road Show, University of Iowa
2020	Panelist , Learning How to Teach: A Panel Discussion, Neurobiology of Disease, University of Iowa

UNIVERSITY SERVICE AT IOWA

2023 – present	Steering Committee Member, University of Iowa Representative , Big Ten Early Learning Alliance Representative for the University of Iowa, Committee of experts at the nation's Big 10 universities, representing 14 universities across 13 states
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COMMUNITY AND STATE OF IOWA SERVICE AT IOWA

2026	Keynote Speaker , Brains in Bloom: How Parent-Child Interactions Support Child Development, Annual Board and Staff Retreat, Iowa Children's Museum
2025	Panelist , Playful Perspectives Educator Conversation, Iowa Children's Museum
2020 – 2022	Board Member , Board of Directors of Home Instruction for Parents of Preschool Youngsters (HIPPY) USA

OTHER PROFESSIONAL SERVICE AND OUTREACH

2020	Panelist , Diversity in Psychology Panel, Iowa State University
2019	Discussant , Alfred P. Sloan Foundation Science on Screen, Iowa City Film Scene
2016	Reading Mentor , Open Books Reading Buddies Program
2015	Discussant , Language and Behavior Focus Group, Pediatric Hemiplegia Symposium, Northwestern University and Rehabilitation Institute of Chicago
2014	Reviewer , Society for Research in Child Development
2013 – 2014	Co-chair , Interdepartmental Neuroscience Program Postdoctoral Affairs Committee, Northwestern University
2013, 2014	Presenter , Brain Fair, Chicago Public Schools
2013, 2014	Science Fair Judge , Galileo Math and Science Academy

2007 – 2008	Chair , Psychology Graduate Students Travel and Research Funding Committee, University of Chicago
2004 – 2007	Member , Psychology Graduate Students Travel and Research Funding Committee, University of Chicago
2003 – 2004	Secretary , Student Senate, Koç University
2002 – 2003	Representative , Student Senate, Koç University
2002 – 2003	Representative , Turkish Psychological Association Student Chapter

PROFESSIONAL MEMBERSHIP

American Educational Research Association, Cognitive Development Society, Flux International Society for Developmental Cognitive Neuroscience, Midwestern Psychological Association, Society for Research in Child Development, Society for Scientific Study of Reading, American Psychological Association

EDITORIAL ACTIVITIES

2025 – present	Guest Editor , <i>Cognitive Development</i>
2024 – present	Consulting Editor , <i>Child Development</i>
2020 – present	Associate Editor , <i>Developmental Cognitive Neuroscience</i>

Journal Reviewing (since 2007): *Brain and Language*, *Child Development*, *Cognitive Science*, *Cognition*, *Developmental Cognitive Neuroscience*, *Developmental Science*, *Developmental Psychology*, *Early Childhood Research Quarterly*, *Gesture*, *Journal of Child Language*, *Journal of Cognitive Neuroscience*, *Journal of Experimental Child Psychology*, *Journal of Experimental Psychology*, *Language and Cognition*, *Language and Cognitive Processes*, *Language Learning and Development*, *Neuropsychologia*, *Pediatric Research*, *Neurophotonics*

GRANT REVIEWING

2026	Panel Member , NSF, Directorate for Social, Behavioral and Economic Sciences
2025	External Reviewer , L'Agence Nationale de la Recherche, France
	Panel Member , NSF, Directorate for Social, Behavioral and Economic Sciences
2024	External Reviewer , Dutch Research Council (NWO), Netherlands
	External Reviewer , Social Sciences and Humanities Research Council of Canada (SSHRC), Canada
	Ad-hoc Reviewer , NIH Study Section, NICHD, Biobehavioral and Behavioral Sciences Study Section
	Panel Member , NSF, Directorate for Social, Behavioral and Economic Sciences
2023	Panel Member , NIH Study Section, NICHD, Learning Disabilities Research Centers (P50), Special Emphasis Panel
2022	Panel Member , NIH Study Section, NICHD, Learning Disabilities Innovation Hubs Panel
2021	Panel Member , NSF, Science of Learning Program and Augmented Intelligence Program
	Panel Member , NIH Study Section, NICHD, Language and Communication (LCOM) Study Section
	External Reviewer , Austrian Science Fund (FWF), Austria
2020	External Reviewer , Gallaudet University Research Fun