

Curriculum Vitae

Natalya Kaganovich, PhD

Academic Record

<u>Degree</u>	<u>Year</u>	<u>Institution</u>	<u>Years Attended</u>
Ph.D.	2007	Purdue University	2003-2007
M.A.	2003	Purdue University	2000-2003
M.A.	2000	University of Wisconsin-Eau Claire	1997-2000
B.A.	1996	Kemerovo State University, Russia	1991-1996

Academic Appointments

2017 – present	Associate Professor, Departments of Speech, Language, and Hearing Sciences (75%) and of Psychological Sciences (25%), Purdue University
2010 – 2017	Assistant Professor, Departments of Speech, Language, and Hearing Sciences (75%) and of Psychological Sciences (25%), Purdue University
2007 – 2009	Post-Doctoral Research Associate, Departments of Speech, Language, and Hearing Sciences (75%) and of Psychological Sciences (25%), Purdue University

Awards and Honors

2019	Excellence in Research Award (the Bronze acorn)
2017	PRF International Travel Grant Award (\$1600)
2011	The College of Health and Human Sciences' Mentoring for Grant Writing Award (Mentors: Dr. Lisa Goffman and Dr. Laurence Leonard)
2006	Bilsland Dissertation Fellowship, Purdue University
2004	Purdue University Graduate Student Award for Outstanding Teaching
2003	Special Initiative Scholarship, Purdue University

Published Work

Refereed Articles

[*indicates primary author(s); superscript numbers indicate co-author(s) mentored by the candidate: ¹undergraduate student, ²graduate student, ³postdoctoral scientist]

Kaganovich*, N., & Christ, S. (2021). ERP evidence for long-term audiovisual representations of phonemes in adults. *European Journal of Neuroscience*, 54 (11), 7860-7875.

Kaganovich*, N., & Schumaker, J., Christ, S. (2021). Impaired audiovisual representation of phonemes in children with developmental language disorder. *Brain Sciences*. 11, 507.

<https://doi.org/10.3390/brainsci11040507>. Special Issue titled "The Impact of Non-Speech Cues on Speech Perception across Development."

Kaganovich*, N. & Ancel², E. (2019). Different neural processes underlie visual speech perception in school-age children and adults: An event-related potentials study. *Journal of Experimental Child Psychology*, 184, 98-122. Special issue titled "Multisensory Development in Infants and Children."

Kaganovich, N. (2017). Sensitivity to Audiovisual Temporal Asynchrony in Children with a History of Specific Language Impairment and Their Typically Developing Peers: A Replication and Follow-up Study. *Journal of Speech, Language, and Hearing Research*, 60, 2259–2270.

Kaganovich*, N., Schumaker, J., & Rowland², C. (2016). Atypical audiovisual word processing in school-age children with a history of specific language impairment: An event-related potentials study. *Journal of Neurodevelopmental Disorders*, 8(33), doi: 10.1186/s11689-016-9168-3 (published online 9.4.2016).

Kaganovich*, N., & Schumaker, J. (2016). Electrophysiological correlates of individual differences in perception of audiovisual temporal asynchrony. *Neuropsychologia*, 86, 119-130.

Kaganovich*, N., Schumaker, J., & Rowland², C. (2016). Matching heard and seen speech: An ERP study of audiovisual word recognition. *Brain and Language*, 157-158, 14-24.

Kaganovich, N. (2016). Development of sensitivity to audiovisual temporal asynchrony during mid-childhood. *Developmental Psychology*, 52(2), 232-241.

Kaganovich*, N., Schumaker, J., Macias², D., & Gustafson², D. (2015). Processing of audiovisually congruent and incongruent speech in school-age children with a history of Specific Language Impairment: a behavioral and event-related potentials study. *Developmental Science*, 18(50), 751-770.

Kaganovich*, N., & Schumaker, J. (2014). Audiovisual integration for speech during mid-childhood: Electrophysiological evidence. *Brain and Language*, 139, 36-48.

Kaganovich*, N., Schumaker, J., Leonard, L.B., Gustafson², D., & Macias², D. (2014). Children with a history of SLI show reduced sensitivity to audiovisual temporal asynchrony: An ERP study. *Journal of Speech, Language, and Hearing Research*, 57(4), 1480-1502.

Purdy, J.D., Leonard*, L.B., Weber-Fox*, C., & **Kaganovich**, N. (2014). Decreased sensitivity to long-distance dependencies in children with a history of specific language impairment: Electrophysiological evidence. *Journal of Speech, Language, and Hearing Research*, 57(3), 1040-1059.

Kaganovich*, N., Kim², J., Herring², C., Schumaker, J., MacPherson, M., & Weber-Fox, C. (2013). Musicians show general enhancement of complex sound encoding and better inhibition

of irrelevant auditory change in music: An ERP study. *European Journal of Neuroscience*, 37, 1295-1307.

Kaganovich*, N., Hampton, A., & Weber-Fox*, C. (2010). Non-linguistic auditory processing and working memory update in pre-school children who stutter: An electrophysiological study. *Developmental Neuropsychology*, 35(6), 712-736.

Francis*, A., **Kaganovich**, N., & Driscoll-Huber, C. (2008). Cue-specific effects of categorization training on the relative weighting of acoustic cues to consonant voicing in English. *The Journal of the Acoustical Society of America*, 124(2), 1234-1251.

Kaganovich*, N., Francis, A. & Melara, R.D. (2006). Electrophysiological evidence for early interaction between talker and linguistic information. *Brain Research*, 1114, 161-172.

Research Grants and Awards Received

Extramural:

Agency/Title: NIH-NIDCD R01/*Audiovisual processing in developmental language disorder*

Duration: 5 years (06/01/2019-05/31/2024)

Role: Principal Investigator (Co-Investigators: Dr. Leonard, Ms. Greenwell, and Dr. Christ)

Total Direct Costs: \$1,023,077

This project focuses on several sensory and cognitive factors that play a key role in normal audiovisual function and evaluates their status in children with developmental language disorder (DLD) and their typically developing peers. The overarching goal is to identify specific neural mechanisms that underlie audiovisual deficits in children with DLD and to map the connections between these mechanisms and language skills.

Agency/Title: NIH-NIDCD/ *Audiovisual processing in specific language impairment*

Duration: 3 years (02/15/2013 – 01/ 31/2016)

Role: Principal Investigator

Total Direct Costs: \$300,000

The goal of this grant was to evaluate behavioral and event-related potential indices of audiovisual language processing in school-age children with specific language impairment (SLI) and their typically developing (TD) peers at the acoustic, phonemic, and lexical levels of speech perception. The studies funded by this grant showed that visually observed articulatory gestures influence auditory processing at the acoustic level similarly in children with TD and SLI. However, the matching of the two senses at the lexical level is impaired in school-age children with SLI.

Agency/Title: NIH-NIDCD/ *Electrophysiological indices of attention in language processing*

Duration of Funding: 2 years (09/17/2009 – 08/31/2011)

Total Direct Costs: \$612,248

Role: Principal Investigator (Mentor: Laurence B. Leonard)

The aim of this grant was to examine the relationship between attention and audiovisual processing in children with specific language impairment (SLI) and their typically developing peers. The studies funded by this grant identified audiovisual temporal processing as an area of significant weakness in children with SLI and showed that audiovisual temporal skills in these children are related to their language and attention abilities. This grant allowed Dr. Kaganovich to forge a new research direction by capitalizing on the strengths of the SLHS department in the area of developmental language disorders and her earlier work on attention.

Intramural:

Agency: COVID-19 Research Disruption Fund

Duration: 1 year

Role: Primary Investigator

Total Direct Costs: \$25,000

Agency/Title: The Kinley Trust Award/*Perception of audiovisual speech in school-age children with specific language impairment and their typically developing peers*

Duration: 1 year (May 1, 2018 – April 30, 2019)

Role: Principal Investigator

Total Direct Costs: \$20,000

Other Evidence of National and International Recognition

Ad-Hoc Reviewer for the following journals:

Attention, Perception, and Psychophysics

Biological Psychology

Brain and Language

Brain Research

Cognitive, Affective, and Behavioral Neuroscience

Developmental Psychology

Ear and Hearing

European Journal of Neuroscience

Experimental Brain Research

International Journal of Psychophysiology

Journal of Speech, Language, and Hearing Research

Language and Speech

Language Learning

PlosOne

Research in Developmental Disabilities

Scientific Reports

Grant Reviewer:

National:

- NIH NIDCD Voice, Speech, and Language Review Group:
- NIH Speech, Language, and Communication Review Group:
- NIH NIDCD LCOM Panel (ad-hoc reviewer)
- ASHA SPARC Award Review

International:

- Swiss National Science Foundation