F·L·A·S·H

FRIDAY SEMINARS IN SPEECH, LANGUAGE, AND HEARING

Bruton Conferences are Sponsored by the David Bruton, Jr. Endowed Lecture Series in Communication Disorders

Ioulia Kovelman, PhD

From Cross-Linguistic Variations to Large-Scale Language Processing: Insights into Bilingual Child Language and Literacy Development

This talk explores the complex interplay between language, brain, and literacy development in bilingual children. I will present findings from our ongoing research on cross-linguistic comparisons of bilingual children's reading development, examining the unique challenges and opportunities that arise when learning to read in languages with distinct structures, such as Chinese, Spanish, and English. I will then introduce our new research directions employing large language modeling tools to investigate language comprehension in bilingual children and diverse learners, including children with reading disorders (dyslexia, Developmental Language Disorder). By integrating insights into universal, cross-linguistic, and individual differences, we aim to understand how variations in language experiences shape children's emerging neural networks for language and literacy. This program of research has implications for informing theories of language and literacy development across languages and learners, and for understanding individual differences within broader theoretical frameworks that explain how variations in language and literacy experiences impact learning and child development

Dr. Ioulia Kovelman is a Professor of Speech, Language, and Hearing at the University of Texas at Dallas. A Developmental Cognitive Neuroscientist, her research focuses on the interplay between environmental and biological factors in shaping language, literacy, and brain development. With a particular emphasis on bilingualism, Dr. Kovelman employs a child-friendly functional Near Infrared Spectroscopy (fNIRS) brain imaging method to understand how bilingual children acquire language and literacy skills, including those with typical development and those with dyslexia. Her current research explores the dynamic interactions between language structure and cognitive processes in bilingual children learning to speak and read in languages such as English, Spanish, and Chinese. Her broader interests encompass the cognitive and neural mechanisms underlying language development in children with varying learning and hearing profiles, including those with cochlear implants and proficiency in American Sign Language (ASL). This work aims to reveal the complex interplay of universal, language-specific, and learner-specific factors that contribute to the developing brain's specialization for language and literacy.

Date/Time: Friday, October 2, 12 noon to 1 pm

Location: MS Teams and Room Glorig