Bilingualism reveals how experience shapes language and the brain

Variation in language experience plays a crucial role in our understanding of language learning and processing. Increasing evidence suggests that the ways in which bilinguals use their languages with different people and across distinct interactional contexts may contribute to observed variability in processing trajectories and outcomes. In this talk, I present converging evidence using brain and behavioral measures to demonstrate how bilinguals who are highly proficient in the same two languages engage language and cognitive resources differently depending on their language environment. I propose a framework that exploits such variability and illustrate how it can be applied to develop an international network for research on diverse bilingual populations. Overall, the emerging picture is complex but systematic, suggesting that the language system is dynamic and adaptive to the demands of distinct contexts of language use.

Anne L. Beatty-Martínez is an NIH Ruth L. Kirschstein postdoctoral fellow at McGill University. She received her Ph.D. in Spanish & Language Science at the Pennsylvania State University in 2019. The mission of her research program is to lay a theoretical and empirical foundation for understanding how variability in the language experiences of bilingual speakers impacts interactions between language representation, access, and control. In her research, she combines ethnographic and experimental approaches, including corpus-based methods, pupillometry, and event-related potentials, to study language experience and its influences on the brain, mind, and behavior.