

Department of Psychology
Center for Gesture, Sign, and Language

Presents

**The Dual Origins of Language Ability:
Postnatal Brain Development and
Linguistic Experience**



Thursday, March 5, 2014
4:00 p.m.
Stuart Hall 105

Featuring

Rachel Mayberry
University of California San Diego

Sign language is similar to spoken language in fundamental ways: their linguistic structure is similar, they are produced and comprehended in a similar fashion, and the language regions of the brain's left hemisphere are responsible for language in both modalities. However, in a series of studies we have found that these statements are true only if the child experiences language used in the environment from birth. Because deaf children cannot hear the language spoken around them, and cannot see sign language when it is absent from the environment, they often experience language for the first time at older ages well past infancy when their hearing peers have already acquired language. Using this unique situation to model the critical period for language, we have discovered that linguistic stimulation during early life is necessary for the human language capacity to develop fully. Here I discuss psycholinguistic and neuroimaging studies showing that the universal human ability to learn language and the ability of the traditional language regions of the brain to process language crucially depend upon the timing of linguistic experience in early human development.