

Developmental *Ube3a* effects on language-related assessments in a mouse AS model

R. Holly Fitch, University of Connecticut, Psychological Sci./Behavioral Neuroscience

Speech and language impairments represent one of the most impactful symptoms of Angelman Syndrome. Treatment depends on understanding how these problems arise. *Are they caused by auditory perceptual or cognitive difficulties related to language processing? By neural changes in social brain circuitry? Or underlying motor problems that limit oral speech?* **The purpose of this study is to use an engineered Angelman Syndrome (AS) mouse model to identify the brain circuitry that causes reduced vocalizations when mice are together.** Our hypothesis is that vocalization impairments in AS are caused by changes in *motor circuitry*. If so, treatments directed at motor recovery (which has a very late window for rescue, possibly up to ~12 years of age) could **greatly enhance speech and language for individuals with AS.**

AS model mice make significantly fewer vocalizations

