

Human language gene linked to early attentional multi-tasking

Neuroscientists have found that a gene mutation that arose more than half a million years ago may be key to humans' unique ability to produce and understand speech.

Researchers from MIT and several European universities have shown that the human version of a gene called *Foxp2* makes it easier to transform new experiences into routine procedures. When they engineered mice to express humanized *Foxp2*, the mice learned to run a maze much more quickly than normal mice.

The findings suggest that *Foxp2* may help humans with a key component of learning language — transforming experiences, such as hearing the word “glass” when we are shown a glass of water, into a nearly automatic association of that word with objects that look and function like glasses, says Ann Graybiel, an MIT Institute Professor, member of MIT's McGovern Institute for Brain Research, and a senior author of the study.

“This really is an important brick in the wall saying that the form of the gene that allowed us to speak may have something to do with a special kind of learning, which takes us from having to make conscious associations in order to act to a nearly automatic-pilot way of acting based on the cues around us,” Graybiel says.

Read the full, original story: [Neuroscientists identify key role of language gene](#)