NEWS

Video: From men to mice and back again

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Mouse models are a powerful tool for investigating the role of genes associated with autism and other disorders. However, creating mice with disruptions in these genes can be more complicated than expected, especially because knowledge of gene structure and function is constantly evolving.

That has turned out to be particularly true of SHANK3, which forms a scaffolding to organize other proteins at the **synapse**, the junction between neurons. SHANK3 is one of the strongest candidate genes for autism. In the past year, researchers have debuted at least **three different SHANK3 mouse models**, but puzzlingly, the mice have exhibited very different features.

Late last year, **Joseph Buxbaum**, professor of psychiatry at Mount Sinai School of Medicine in New York, was the first to debut a SHANK3 mouse. In a video interview at the **2011 Society for Neuroscience annual meeting** in Washington, D.C., Buxbaum discussed the path researchers have traveled towards a mouse model — **and now a rat model** — of SHANK3 mutations.

*For more reports from the 2011 Society for Neuroscience annual meeting, please **click here**.*