

Why do people with autism tend to repeat themselves? It may be genetics

April is [Autism Awareness Month](#) and even MIT scientists are getting in on the action with compelling new genetic research...[R]esearchers now suspect that there are risk genes driving specific autism symptoms, such as repetitive behaviors.

The [study](#)...looked at an ASD-associated gene known as SHANK3, [which] is a scaffolding protein that organizes the flow of neurons in the synapses. Researchers found that SHANK3-deficient mice displayed repetitive behaviors, both in regards to grooming and social interactions.

...

Guoping Feng, a neuroscience professor and lead author of the study, hypothesized that a mutation in SHANK3 affected the synaptic development in two neural pathways, direct and indirect striatal pathways...When researchers activated neurons in the indirect pathway, repetitive behaviors diminished. This suggests such symptoms might be a result of imbalances between the pathways.

...

This new research not only reveals a potential mechanism but also gives scientists a potential target to treat behavioral symptoms of ASD in the future.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [The Genetic Reason People With Autism Repeat Themselves](#)

For more background on the Genetic Literacy Project, read [GLP on Wikipedia](#)