Genes essential for healthy fetal development tied to autism

Genes known to be essential to life—the ones humans need to survive and thrive in the womb—also play a critical role in the development of autism spectrum disorder (ASD), suggests a new study...

...The new study shows that siblings with ASD had much higher levels of damaging mutations in essential genes compared to their non-affected siblings. Essential genes also constituted a significant fraction of known ASD risk genes.

٠.

The findings suggest that ASD stems from an aggregate effect of many damaged essential genes that "work" together during the early stages of development in the womb, as soon as eight weeks after conception. ASD is what's known as a polygenic disease, the authors said, where many small gene effects contribute to a disorder.

. . .

The researchers...called out a list of 29 "high-priority" essential genes that are co-expressed in the developing human brain with previously identified ASD-associated genes. Such genes could serve as targets for future functional and behavioral studies that could not only add to the growing body of knowledge on the disease but also potentially impactful treatments....

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Mutations in life's 'essential genes' tied to autism