Autism risk gene linked to differences in brain structure

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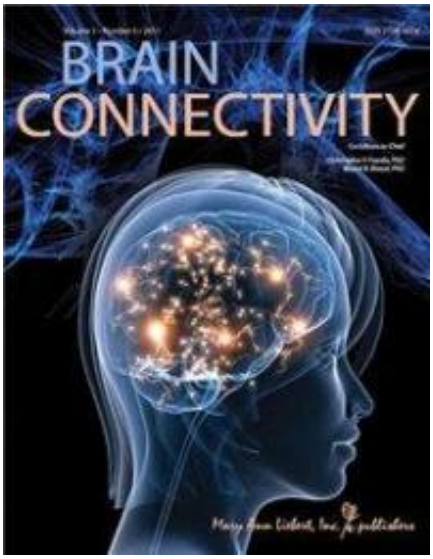

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Healthy individuals who carry a gene variation linked to an increased risk of autism have structural differences in their brains that may help explain how the gene affects brain function and increases vulnerability for autism. The results of this innovative brain imaging study are described in an article in the groundbreaking neuroscience journal *Brain Connectivity,* a bimonthly peer-reviewed publication from Mary Ann Liebert, Inc.

"This is one of the first papers demonstrating a linkage between a particular gene variant and changes in brain structure and connectivity in carriers of that gene," says Christopher Pawela, PhD, Co-Editor-in-Chief and Assistant Professor, Medical College of Wisconsin. "This work could lead to the creation of an exciting new line of research investigating the impact of genetics on communication between brain regions."

Although carriers of the common gene variant CNTNAP2—identified as an autism risk gene—may not develop autism, there is evidence of differences in brain structure that may affect connections and signaling between brain regions. These disruptions in brain connectivity can give rise to functional abnormalities characteristic of neuropsychological disorders such as autism.

More information: online.liebertpub.com/doi/abs/ … 1089/brain.2011.0064

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