

Autism risk gene linked to differences in brain structure

March 21 2012



Brain Connectivity is published bimonthly in print and online. ©2012 Mary Ann Liebert, Inc. publishers

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

Provided by Mary Ann Liebert, Inc.

Citation: Autism risk gene linked to differences in brain structure (2012, March 21) retrieved 25 April 2024 from

<https://medicalxpress.com/news/2012-03-autism-gene-linked-differences-brain.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--