Research Study Finds MRI-based Assessments Assist in Diagnosing ADHD

The Center for Autism & Neurodevelopmental Disorders’ researcher finds MRI a promising strategy for understanding and diagnosing ADHD in young adults

SANTA ANA, Calif. - May 15, 2017 - Jean Gehricke, Ph.D., associate professor of pediatrics at UC Irvine and a clinical psychologist with the Center for Autism & Neurodevelopmental Disorders, completed a study with his team of researchers to examine the brain anatomy and connectivity associated with attention-deficit/hyperactivity disorder (ADHD) in a large sample of young adults.

The study revealed widespread differences in brain anatomy and connectivity, which suggests complex differences in cognitive, audio-visual, motivational and emotional functioning associated with ADHD in young adults. The identified brain circuitry predicted an ADHD diagnosis correctly in 83% of all cases and included the superior longitudinal fasciculus (SLF), frontal, and cortico-limbic areas. This suggests that Magnetic Resonance Imaging (MRI)-based assessments are a promising strategy for the development of a biomarker.

“These are significant findings that change our understanding of ADHD and its diagnosis,” said Jean Gehricke. “We are very excited to advance our work to find a biomarker for ADHD that can be used in addition to standard clinical and behavioral assessments.”

A total of 72 young adults (31 participants with a diagnosis of ADHD and 41 control participants without ADHD) participated in a MRI protocol to identify structural brain areas associated with the symptoms and diagnosis of ADHD.

The investigation was supported by grants from the National Institute on Drug Abuse of the National Institutes of Health, the National Center for Research Resources and the National Center for Advancing Translational Sciences, National Institutes of Health.
“Research is one of the core pillars of our mission,” said Catherine Brock, M.A., executive director of The Center for Autism & Neurodevelopmental Disorders. “With Jean Gehricke continuing to pioneer research efforts, we are better able to help parents and families overcome obstacles they face and assist children in reaching their optimal potential.”

To read the full paper: [http://bit.ly/2oIt68d](http://bit.ly/2oIt68d)

**About The Center for Autism & Neurodevelopmental Disorders**

Founded in 2001 (originally as For OC Kids), The Center is home to a team of experts in the field of autism and neurodevelopmental disorders. Since its opening, The Center has been a leader in clinical services, research, education, and outreach, serving clients from birth through 22 years old.

In late 2012, a catalytic investment by the Thompson Family Foundation and the Children and Families Commission of Orange County provided $14.8 million to expand The Center for Autism & Neurodevelopmental Disorders.

The Center was established to provide help and hope to children, adolescents, young adults and their families living with autism spectrum and other neurodevelopmental disorders through excellent clinical care, innovative research, quality education, and community engagement. For more information, please visit [www.thecenter4autism.org](http://www.thecenter4autism.org).

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