

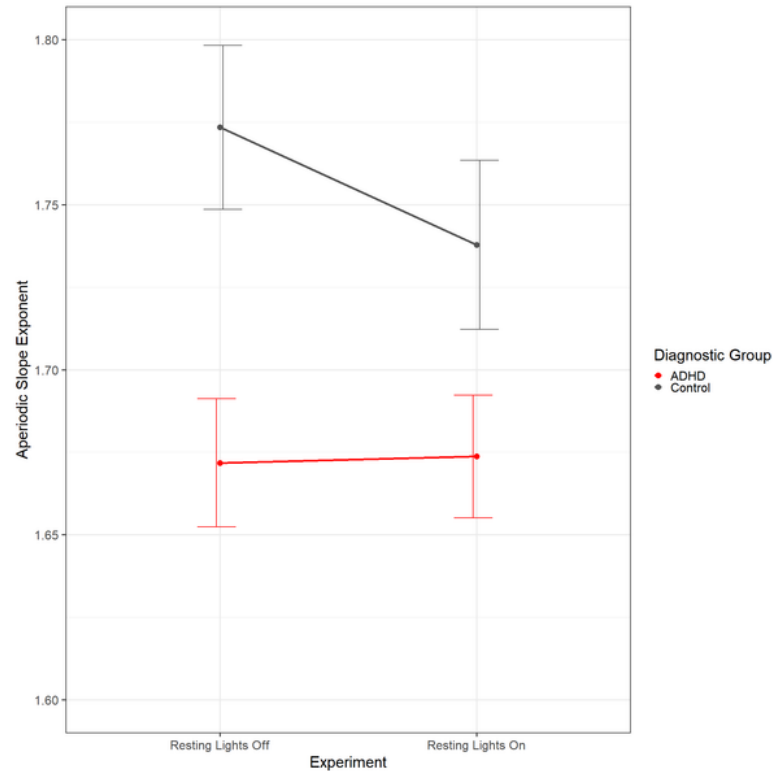
# ARNETT LAB

*Newsletter*

## RESEARCH FINDINGS

Arnett Lab members have a paper under review at a peer reviewed journal examining aperiodic spectral slope among children diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD) and typically developing controls. Aperiodic spectral slope is a measure of the relative strengths of fast and slow oscillations in the brain. It can be measured with electroencephalography (EEG) and is thought to support the brain's ability to tune itself appropriately to the environment.

This means, for example, setting itself up to filter and attend to important information in a busy environment, like a classroom. Dr. Arnett and her colleagues found that, compared to control children, the brains of children with ADHD do not adjust their aperiodic slope as their environment changes, suggesting that children with ADHD may struggle to optimize brain activity in a given situation.



## MEET THE TEAM

Dr. Anne Arnett is the head of the new Arnett Laboratory at Boston Children's Hospital in the Division of Developmental Medicine. She is currently running a study, called the RHINO STUDY, which investigates brain signatures of young children with a family history of ADHD. Dr. Arnett previously worked at the University of Washington on a similar study, the Re-ACTIVE Study. When Dr. Arnett is not at work, she enjoys hiking and skiing with her family, and raising bees!



## RECRUITING STUDIES

The RHINO Study is now recruiting! We are looking for: 1) 2.5-4 year old children with or without a family member who has ADHD and 2) 7-11 year old children with or without ADHD. If you know or have a child that qualifies for this study, please visit our website or contact us for more details. Participation in this study involves the completion of online questionnaires, a remote interview, and a single in-person visit to our laboratory, during which your child will complete an EEG and a neuropsychological evaluation. The visit takes about 3 hours and you will earn \$40, plus reimbursement for parking and public transportation.

### CONTACT INFORMATION

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