

Genetics, the Addiction Phenotype, and the Adolescent Brain and Cognitive Development Study

Pamela A.F. Madden

Washington University, St. Louis, MO, U.S.A.

The Adolescent Brain and Cognitive Development (ABCD) Study is a large-scale, longitudinal study of brain development and child health in the U.S., which launched earlier this year, on Sept. 1, 2016. Data from (1) brain imaging, (2) neurocognitive testing, (3) psychological and psychiatric interview, (4) self- and other reports on substance use/dependence, and bio-specimen collection for genetic and other testing are being obtained from a nationally representative sample of children, 9 to 10 years of age, in the first year of this study. Plans are to enroll 10,000+ children at 9-10 years of age, with 9 years of follow-up. Presented will be a description of the ABCD study (see ABCDDStudy.org), including organizational structure, assessments, plans for the release of data to the scientific community, and information on data accrued to date and data projections (especially in relation to addiction-related phenotypes) all years of this project. A discussion on how study data might be used in the future to: (1) advance genetics research; (2) refine addiction-related phenotypes; and (3) clarify the relationships between substance use disorders and neuroimaging and neurocognitive phenotypes will be included.