

Distinguished Lecturer Series / Deanna Barch
2018-2019

Biographical Information

Deanna Barch is currently Chair of the Department of Psychological & Brain Sciences and the Gregory Couch Chair of Psychiatry. She received her undergraduate degree from Northwestern University, completed her Ph.D. at the University of Illinois in Champaign-Urbana and completed a postdoctoral fellowship at Western Psychiatric Institute and Clinic. Dr. Barch is Deputy Editor at *Biological Psychiatry* and is on the Editorial Boards of *Schizophrenia Bulletin*, *Journal of Abnormal Psychology*, and *Clinical Psychological Science*. Dr. Barch is on the Scientific Board of the Brain and Behavior Research Foundation and the Stanley Foundation and on the Executive Committee of the Association for Psychological Science. Dr. Barch's research has been funded by the NIMH, NARSAD, NSF, and the McDonnell Center for Systems Neuroscience. She is one of the Principal Investigators of the Lifespan Human Connectome Project and the Adolescent Brain and Cognitive Development Study. She is a Fellow of the Association for Psychological Science and a member of the American College of Neuropsychopharmacology. Her research program is focused on understanding normative patterns of functional brain connectivity across development as well as the mechanisms that give rise to the challenges in behavior and cognition found in illnesses such as schizophrenia and depression, utilizing behavioral, neuroimaging and computational approaches.

Presentation

Title: *Understanding Risk Factors for the Development of Psychosis: Early Findings from the Adolescent and Brain Cognitive Development (ABCD) Study*

One of the holy grails of research on psychopathology is to identify early predictors during development that might help us better understand the causes of various forms of mental illness. Ideally we would be able to use such information to identify those children or adolescents who might benefit from early prevention or intervention. However, this is very challenging with forms of mental illness that are relatively less common (such as schizophrenia), even individuals who suffer from such illnesses often experience impairment and distress. We have some clues about early predictors of schizophrenia from previous epidemiological studies, and this presentation will provide a review of what we currently know about factors that for-tell psychosis. However, many of these studies occurred prior to the development of modern advances in tools to understand brain development. Thus, this presentation will also focus on emerging findings using data from a novel study of brain development, the Adolescent, Brain and Cognitive Development (ABCD) study, which is providing a unique opportunity examine the neural, cognitive, and behavioral correlates of psychotic-like experiences in childhood. Using data from 3,984 9-10-year olds, we demonstrate that impairments in memory and thinking, motor coordination impairments, symptoms of depression and anxiety, and family history of psychotic disorders are associated with increased psychotic like experiences in children. Further, we have also begun to examine brain development in relationship to psychotic like experiences in children, showing differences in both the functional organization of networks in the brain and the volume of particular brain regions among children with greater psychotic like experiences. In combination with previous findings in the literature, the results provide evidence that correlates of childhood psychotic like experiences may be useful in predicting risk for psychosis.