

Kevin Pelphrey is the Harrison-Wood Jefferson Scholars Foundation Professor at the University of Virginia. His research team investigates the brain basis of autism to develop biologically-based tools for detection, stratification and individually tailored treatments. Using multimodal neuroimaging, his team has identified the neural circuitry supporting representation of social cues. They have applied the knowledge generated from these studies to predict treatment response and identify neural-systems-level mechanisms of change in children, adolescents and adults with autism receiving evidence-based behavioral treatments, novel pharmacological compounds, and/or cognitive behavioral therapy. Dr. Pelphrey is also the Principal Investigator of the NIH Autism Center for Excellence— Multimodal Developmental Neurogenetics of Females with Autism network. This multi-site, multidisciplinary network implements a molecules-toneighborhoods approach in a longitudinal design to better understanding the causes and expression of autism spectrum disorders in girls and women as they transition through adolescence into young adulthood.

A.J. Drexel Autism Institute Director's Lecture

The Director's Lecture is intended to provide a forum for the presentation of cutting edge science related to the Institute's autism public health mission. An internationally recognized researcher is invited each year to present emerging findings or novel methods related to modifiable autism risk factors, early detection and intervention, or life course outcomes.

Toward Personalized Medicine for Autism(s)

Kevin Pelphrey, Ph.D.

Harrison-Wood Jefferson Scholars Foundation Professor University of Virginia

Dr. Pelphrey will present findings from his Autism Center of Excellence Network focused on understanding gender differences in the causes, characteristics and experiences of Autism Spectrum Disorder (ASD) concerning gender differences in ASD brain development, and describing efforts to bridge DNA sequence and brain development to identify neurogenetic profiles that predict treatment response as well as functioning and quality of life in adolescence and young adulthood. Departing from the usual binary characterization of gender, augmenting this approach with a continuous gender congruence score allows the validation a gender-sensitive behavioral assay, capturing the experience of gender identity from the perspective of people with ASD. Elucidating gender-related neurocognitive phenotypes in ASD will allow for more individualized medicine approaches to interventions, including targeting the needs of females with ASD.

Monday, February 17th, 2020 10-11:30 AM

> Behrakis Grand Hall 3210 Chestnut Street Philadelphia, PA 19104

For more information, contact AutismInstitute@drexel.edu

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