

CHOP Research Institute Summer Scholars Program



Laura Almasy, Ph.D.

Biomedical and Health Informatics

Basic Research: Research most often conducted in a laboratory setting that is designed to enhance our scientific knowledge base (does not involve human subjects)

Gene Identification for Complex Human Disorders

My research centers are focused on development and application of statistical and bioinformatics approaches to identify and characterize genes influencing complex human disorders. I study autism, schizophrenia, addiction, and normal variation in brain development and function.

- **Potential summer research project:**
Research projects will involve scanning the genome to identify DNA markers associated with variation in brain structure and neurocognitive performance, then exploring these signals utilizing bioinformatics resources to identify genes and biological pathways influencing neurocognitive function and risk of psychiatric disorders. These are computational projects, utilizing previously collected human data.
- **Students will learn one or more of the following techniques:**
(1) Genome-wide association study analysis; (2) Polygenic risk scoring; and (3) Mendelian randomization.

Please click [here](#) to learn more about Dr. Almasy