

Zhaolan (Joe) Zhou, Ph.D., is an Associate Professor of Genetics at the University of Pennsylvania Perelman School of Medicine, and Director of the Preclinical Models Core at the Intellectual and Developmental Disabilities Research Center (IDDRC) at the Children's Hospital of Philadelphia. After receiving a B.S. in bioengineering from Nankai University and a Ph.D. in molecular and cellular biology from Harvard University, he carried out his postdoctoral training in neuroscience at Harvard Medical School and Children's Hospital of Boston.

In 2018, Dr. Zhou has received the prestigious R01 grant from the NIH to focus his research efforts on CDKL5 Deficiency Disorder.

His research focuses on understanding the pathophysiology of genetic disorders that impact brain development and function. These include Rett Syndrome and CDKL5 Deficiency with monogenic causes, Asperger Syndrome with complex genetics, and Major Depressive Disorder with environmental insults. As a recipient of the NIH BRAINS award and a Pew Scholar in biomedical sciences, Dr. Zhou has led a research team that developed the first lines of mouse models recapitulating human genetic mutations in Rett Syndrome and CDKL5 Deficiency, and engineered genetically modified mice to interrogate the genetic basis of Asperger Syndrome and environmental stress-related epigenetics in the brain. Through a combination of genetic, genomic, physiological, and behavioral approaches, the Zhou laboratory aims to gain pathophysiological insights into genetic disorders of interest, identify robust and quantitative biomarkers, and uncover new therapeutic avenues to improve treatment for patients.