



Discovery Science Emerging Scholars Lecture

“UNRAVELING *PTEN* STRUCTURAL AND FUNCTIONAL DYNAMIC ARCHITECTURE FOR THERAPEUTIC MODULATION IN CANCER AND AUTISM”



IRIS SMITH
RESEARCH INSTRUCTOR
CLEVELAND CLINIC
LERNER RESEARCH INSTITUTE

Tumor suppressor gene *PTEN*, when mutated in the germline, predisposes to *PTEN* hamartoma tumor syndrome (PHTS), a rare inherited cancer syndrome and, intriguingly, one of the most common causes of autism spectrum disorder (ASD). Currently, it is impossible to predict at the individual level who will develop cancer, ASD, and/or both. Utilizing an integrative structural modeling approach, we demonstrate the structural and conformational effects of clinically relevant *PTEN* mutations revealing disease-specific molecular features that contribute to autism or cancer and unveil potential allosteric druggable sites to be targeted as a viable and currently unexplored treatment approach for individuals with PHTS.

Friday, October 20th

12:00 pm CT, 202 Light Hall

Add to Calendar!

This lecture series features the most promising young scientists who are making notable discoveries as postdoctoral fellows or early career faculty.

Sponsored by



**School of Medicine Basic Sciences
Department of Biochemistry**