



Graduate Seminar

Genoa Warner, PhD

Assistant Professor

Department of Chemistry and Environmental
Science at New Jersey Institute of Technology

November 18, 2024 (4:00 pm - 5:30 pm), Kupfrian Hall - Room 205

[Zoom Link: Click Here](#) Meeting ID: 994 3917 6432 Passcode: 058807

Nanoplastics and Female Reproductive Health

Abstract

Nanoplastics are plastic particles less than 1 micron that form from the physical breakdown of environmental and household plastic in the environment. Nanoplastics are persistent in the environment and are continuously formed, leading to ubiquitous exposure in humans and wildlife. In addition, nanoplastics can leach plastic additives such as plasticizers and per- and polyfluoroalkyl substances (PFAS) and adsorb and transport other environmental chemicals. Existing evidence from ecotoxicological and translational animal studies suggests that exposure to these tiny pervasive particles is disrupting human health, including sensitive windows of development.

About the Speaker

Genoa Warner an Assistant Professor in the Department of Chemistry and Environmental Science at the New Jersey Institute of Technology. She received her PhD in Chemistry from Carnegie Mellon University with Terry Collins, where she worked to develop small molecule catalysts to degrade micropollutants in water. She completed postdoctoral training in reproductive toxicology with Jodi Flaws in the Department of Comparative Biosciences at the University of Illinois at Urbana-Champaign. Her research on identifying the mechanisms of phthalate toxicity in the ovary is funded by a K99/R00 from NIEHS. Her interdisciplinary independent research program brings together her training in chemistry and biology to develop and apply new tools for environmental toxicology research. Her research focuses on the impacts of exposures from plastics on the female reproductive system, including chemical additives, alternative plasticizers, nanoplastics, and mixtures. Her long-term goal is to apply knowledge of endocrine disruption mechanisms in the design of safer alternative chemicals.

