



## **PFAST Network** (Per- and Polyfluoroalkyl Substance Testing Network)

Meet Team 5c: Health effects following PFAS exposure- immunotoxicity assessment

**Jamie DeWitt, Ph.D.**, Team 5 co-lead and team 5c project lead, is Associate Professor of Pharmacology and Toxicology at East Carolina University. Dr. DeWitt's lab studies how early life exposure to a variety of agents including environmental contaminants may impact the immune, nervous, and endocrine systems, during development and adulthood. By studying the affects of exposures on the immune system and developing brain, they hope to better understand diseases and disorders such as Alzheimer's disease, autism spectrum disorders and other conditions believed to be responsive to early-life immune influences.

**Tracey Woodlief, Ph.D.**, Postdoc at East Carolina, animal dosing, endpoint collection, data analysis  
**Kathleen Ferris**, Undergraduate student at East Carolina, assist with experiments and data collection

Team Objective: Evaluate immunotoxicity (dose-responsive suppression of antigen-specific antibody responses) in mice exposed to PFASs. Specific aims include:

- Determine effects of selected PFASs on major immune cell subpopulations in primary (thymus) and secondary (spleen) lymphoid organs.
- Assess functional responsiveness of the adaptive immune system (T cell-dependent antibody response targeting B cells) following exposure to selected PFASs.
- Asses functional responsiveness of the innate immune system (NK cell cytotoxicity) following exposure to selected PFASs.