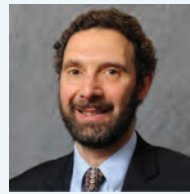


# LEAD RESEARCHERS & PARTNERS



**Morton Barlaz**  
NC State University



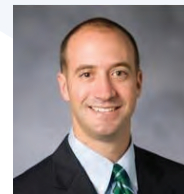
**Orlando Coronell**  
UNC-Chapel Hill



**Dongyang Deng**  
NC A&T University



**Jamie DeWitt**  
East Carolina University



**Lee Ferguson**  
Duke University



**Rebecca Fry**  
UNC-Chapel Hill



**David Genereux**  
NC State University



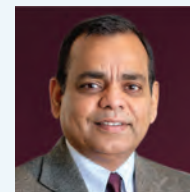
**Kathleen Gray**  
UNC-Chapel Hill



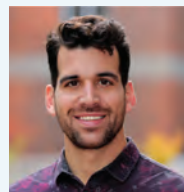
**Jane Hoppin**  
NC State University



**Detlef Knappe**  
NC State University



**Deepak Kumar**  
NC Central University



**Frank Leibfarth**  
UNC-Chapel Hill



**Ralph Mead**  
UNC Wilmington



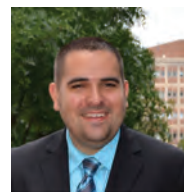
**Bryan Ormond**  
NC State University



**Heather Stapleton**  
Duke University



**Mei Sun**  
UNC Charlotte



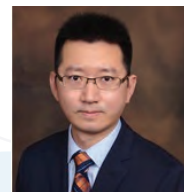
**Jason Surratt**  
UNC-Chapel Hill



**Barbara Turpin**  
UNC-Chapel Hill



**Marcey Waters**  
UNC-Chapel Hill



**Renzun Zhao**  
NC A&T University



**NORTH CAROLINA**  
*Environmental Quality*



NC DEPARTMENT OF INSURANCE  
**OFFICE OF STATE  
FIRE MARSHAL**  
MIKE CAUSEY, STATE FIRE MARSHAL



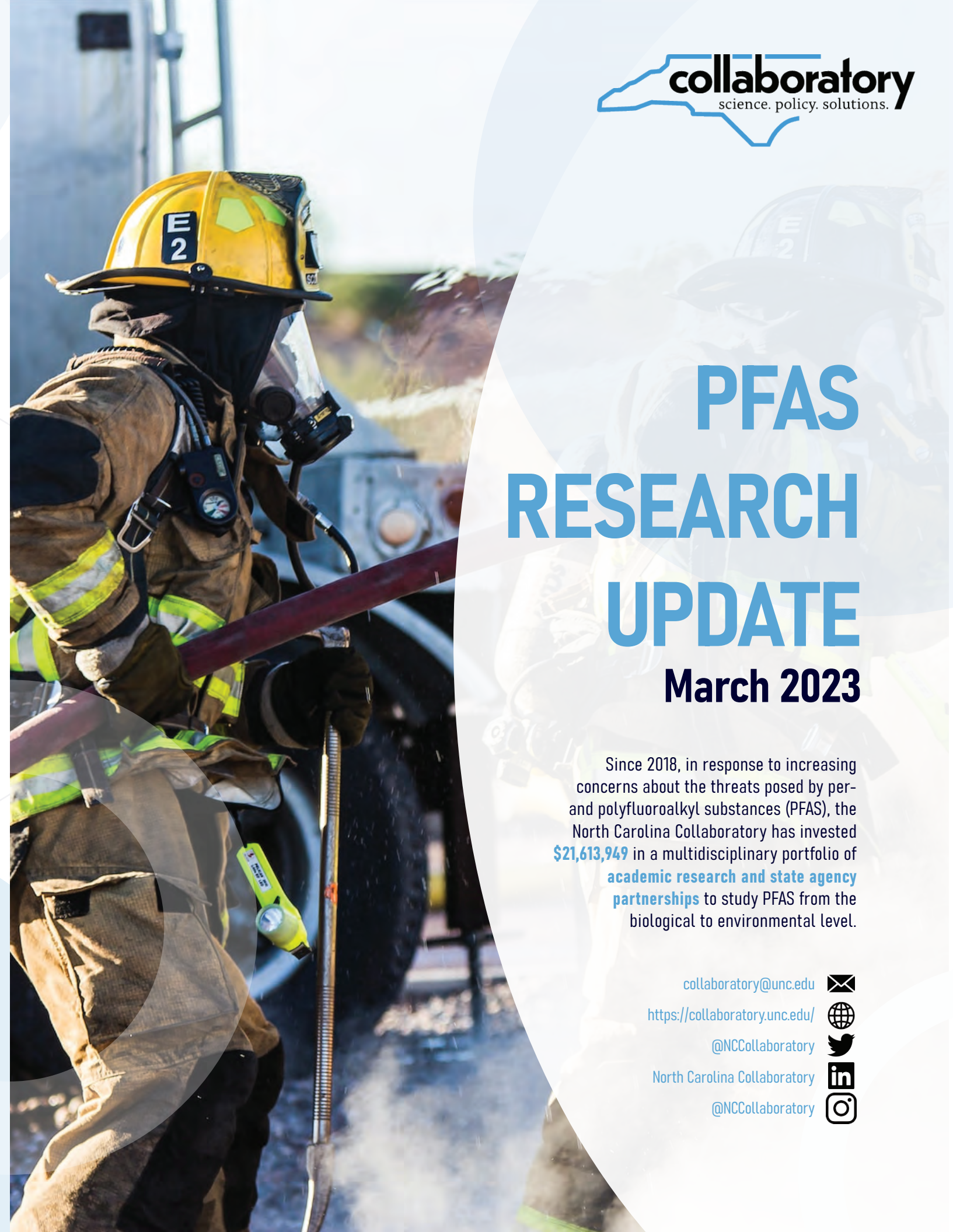
Established in 2016 by the North Carolina General Assembly, the North Carolina Collaboratory is dedicated to transforming academic research into practical information for use by State and local governments and the communities they serve.



# PFAS RESEARCH UPDATE March 2023

Since 2018, in response to increasing concerns about the threats posed by per- and polyfluoroalkyl substances (PFAS), the North Carolina Collaboratory has invested **\$21,613,949** in a multidisciplinary portfolio of **academic research and state agency partnerships** to study PFAS from the biological to environmental level.

[collaboratory@unc.edu](mailto:collaboratory@unc.edu)  
<https://collaboratory.unc.edu/>  
[@NCCollaboratory](#)  
North Carolina Collaboratory  
[@NCCollaboratory](#)





**\$5,013,000**

awarded to 23 researchers at seven universities to **establish the North Carolina PFAS Testing Network**, which conducts PFAS-related research such as analyzing known and unknown PFAS at public water supplies and toxicological analysis of newly identified, understudied PFAS

**\$3,938,462**

to continue and expand PFAS Testing Network research

**\$200,000**

for the NC Department of Insurance-Office of the State Fire Marshal to **develop and maintain an online reporting portal for AFFF storage and deployment** in North Carolina

**\$150,000**

to launch a new **Applied Research Fellowship Program** in partnership with the NC Department of Environmental Quality

**\$1,217,474**

awarded to 10 researchers across four universities to **study GenX and other emerging contaminants** in sources such as private wells and the Cape Fear River Basin, as well as developing platforms for GenX detection

**\$8,300,092**

awarded to four researchers at two universities, as well as the UNC Office of Technology Commercialization, to **develop and deploy new technologies to remediate PFAS** from North Carolina water

**\$329,430**

awarded to three researchers to examine **biotreatment of GenX**, the molecular mechanisms of PFAS in **liver disease**, and economical and sustainable approaches to **PFAS disposal**

**\$704,045**

awarded to eight researchers across four universities for PFAS research such as **estimating PFAS emissions from landfills**, as well as supplementary funding for the NC Office of the State Fire Marshall to create the AFFF online reporting portal



Toxicology researchers are generating data to guide **new drinking water advisories** for unknown PFAS compounds found in the blood of North Carolina residents



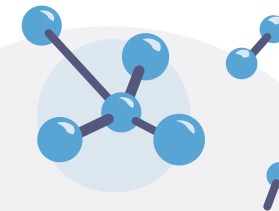
Samples collected from 461 water systems across North Carolina have identified **strategic targets for research and regulatory action**



In partnership with fire departments and the Office of the State Fire Marshal, researchers are learning more about **airborne PFAS and other exposure risks** within local firehouses



Biomedical researchers are examining the link between **PFAS exposure and liver disease** to identify possible treatment options



Using the latest instrumentation and methods, chemistry researchers have discovered that **PFAS might be restructured** when transported through the atmosphere, potentially creating new, unknown compounds



Researchers collecting atmospheric samples have found that **PFAS can be transported far and wide through wind and rain**, highlighting new exposure risks for people across North Carolina



After detecting elevated PFAS levels, open data sharing between researchers and NC DEQ has led to **urgent drinking water utility upgrades** for towns



Chemists and environmental engineers are **developing new technologies** for PFAS removal and disposal to improve drinking water safety in North Carolina



A new fellowship program based at the NC Department of Environmental Quality is **expediting the translation of research into state agency action**



Using wristbands and other detection methods, researchers are **helping people in high risk areas and with contaminated private wells** build a comprehensive picture of their exposure to PFAS