



Overview of the NC PFAS Testing Network

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Legislative Mandate: 2018 Appropriations Act (S99; SL 2018-5)

Section 13.1.(f) – NC General Assembly finds that academic expertise & instrumentation in public & private universities in NC should be “maximally utilized to address the occurrence of PFAS, including GenX, in drinking water resources.”




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Legislative Mandate: 2018

Appropriations Act (S99; SL 2018-5)

Section 13.1.(I) – Other Research Directives

- Predictive modeling of private well contamination
 - Performance testing of removal technologies
 - Air emissions & atmospheric deposition
 - Evaluate other research opportunities
- 

Legislative Mandate: 2018 Appropriations Act (S99; SL 2018-5)

Section 13.1.(h) – Reporting requirements

Quarterly progress reports to NCGA Environmental Review Commission and regulatory agencies (NCDEQ, NCDHHS, EPA)

first report: Oct. 1, 2018 >>>> final report: Dec. 1, 2019

(provisional timeline extending 1 more year, pending passage of relevant legislation)

Section 13.1.(i) – Appropriation

\$5,013,000

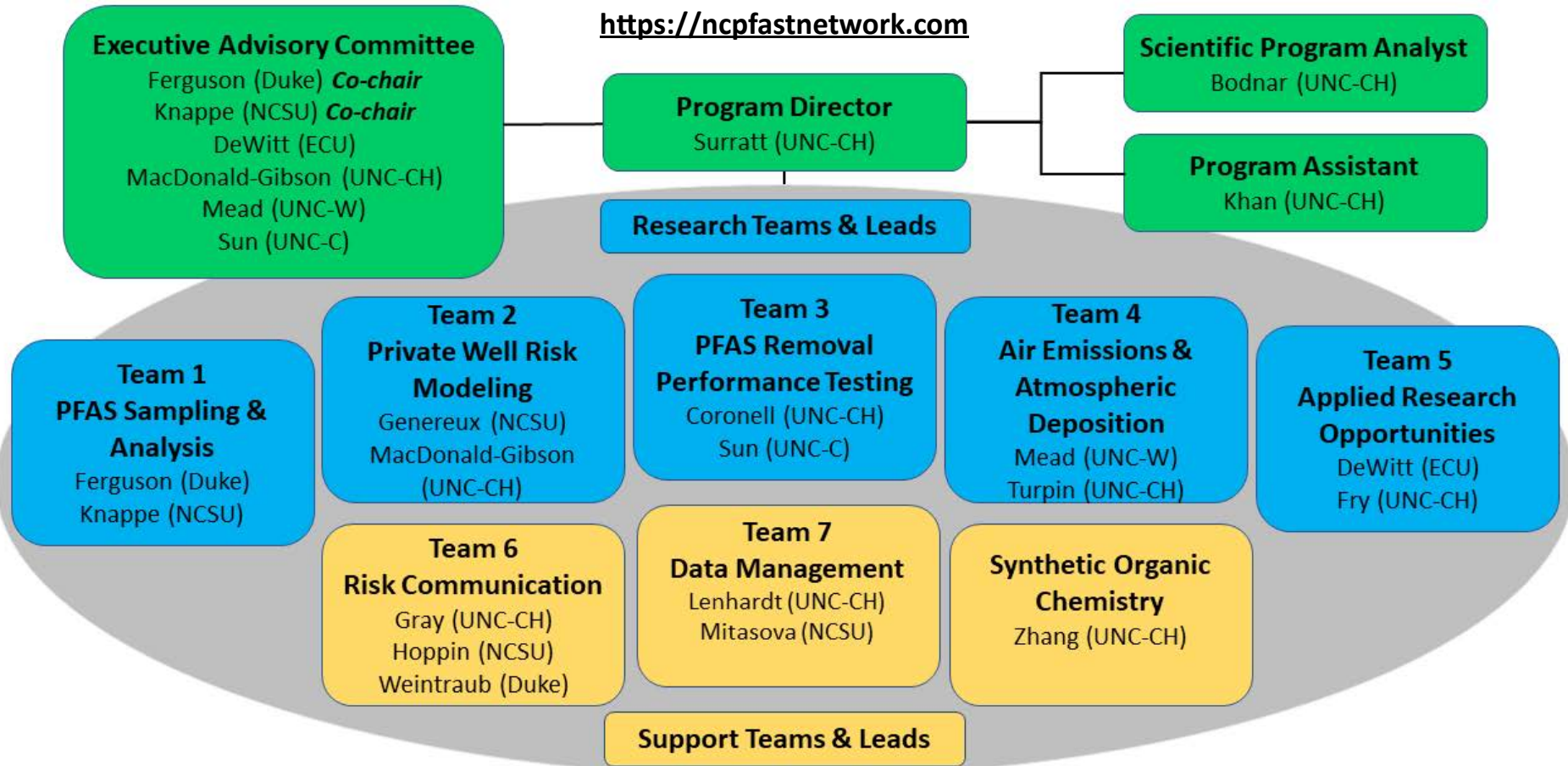
(FY 2018-19; non-recurring; non-reverting)

Additional \$1.7 M provided by NC Policy Collaboratory (through grant matching)





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Research Objectives of NC PFAS Testing Network

Statewide Baseline Water Testing

- measure PFAS levels by targeted analysis
- estimate total organic fluorine
- identify more PFAS with non-target analysis



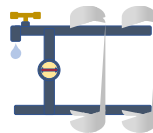
Private Well Contamination Risk Modeling

- calculate time for PFAS to flush from aquifer
- analyze contributions to well contamination
- create app for private well owners to predict risk



PFAS Removal Performance Testing

- evaluate commercial options
- test tap water with in-home filtration
- develop and test novel Fluorogel materials
- assess electrochemical degradation



Air Emissions & Atmospheric Deposition

- identify PFAS present in air and rainwater
- analyze geographic distribution of PFAS
- calculate contribution of wet dep. to watershed
- investigate multiphase atmospheric chemistry



Applied Research Projects

- assess importance of other PFAS sources (landfills, WWTPs) to surface and ground waters



- study PFAS bioaccumulation and biomagnification in ecologically relevant species



- test PFAS in mouse model of immunotoxicological response



- examine PFAS uptake in food crops and effects of soil composition



- study effects of PFAS on pregnancy and placental health and function



- develop computer models to predict where PFAS go in organisms and the environment



website:
<https://ncpfastnetwork.com/>

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NC PFAS Testing Network

About Research Team Data and Tools In the News Resources Newsletters FAQs

NORTH CAROLINA PFAS Testing Network

The beauty of North Carolina's lakes and rivers is being threatened by a group of human-made chemicals, known as PFAS, including GenX.

[What are PFAS?](#)

To understand the extent of PFAS contamination across the state, the North Carolina General Assembly funded a statewide research study.

[Learn about the study](#)

This study is a collaboration among universities to document the presence of PFAS and understand its impacts on the environment and our health.

[Meet the research team](#)

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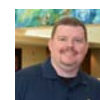
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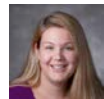
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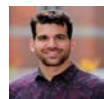
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