

## Newsletter

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A North Carolina research study assessing exposure to GenX and related chemicals in people living in the Cape Fear River Basin.

### From the Principal Investigator

Dear GenX Exposure Study Members,

I hope this letter finds you and your family well.

Even in these different times, we continue to make progress with the study. Most importantly, we look forward to growing the GenX Exposure Study to include more people from New Hanover and Brunswick Counties and more people who live around the Chemours facility in Fayetteville. We will also enroll people who live in Pittsboro, NC, to allow us to study the impact of PFAS upriver of the Chemours plant. We will start contacting the people currently in the study in mid to late October.



This new funding will allow us to follow 1400 people to measure PFAS (per- and polyfluoroalkyl substances) exposure in blood, evaluate thyroid hormones and other clinical measures, and to assess health changes over time. We are currently funded to do this for five years.

Because there is a concern that PFAS could affect COVID response, we received additional funding to help answer that question. We'll be testing blood for COVID antibodies as part of this year's data collection.

We haven't forgotten the samples in the lab. Labs are starting to reopen, so we hope to get you those blood results as soon as we can.

In July, the first research paper to come out of the GenX Exposure Study was published. In this paper, we shared blood results from the Wilmington cohort. Read more about it on Page 2.

Even as we move forward with a new phase, we will still share your results with you when available. We will also share them within your communities. In June, we held a virtual community meeting to share tap and well water results from the Fayetteville part of the study. We have a recording of the meeting on our website ([genxstudy.ncsu.edu](http://genxstudy.ncsu.edu)) under the "Communicating Results" page.

Please continue to reach out to us with any questions. Keep an eye on your mail and email as we'll continue to be in touch with study updates.

If you've moved or your contact information has changed, let us know!  
[genx-exposure-study@ncsu.edu](mailto:genx-exposure-study@ncsu.edu)  
855-854-2641

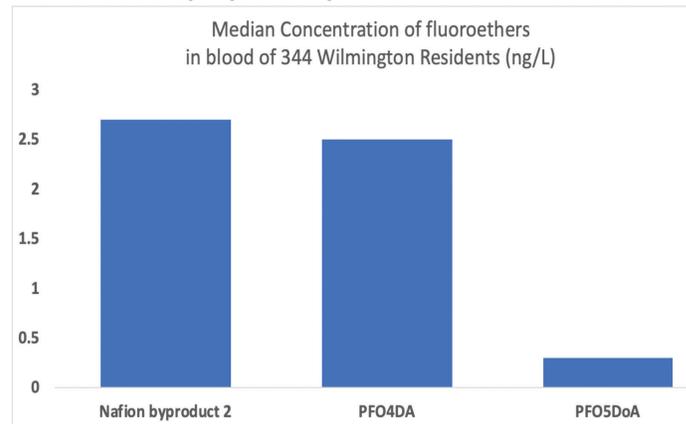
Jane Hoppin

## GenX Exposure Study Publishes First Paper

The first research paper to come out of the GenX Exposure Study was published in July 2020: “Measurement of novel, drinking water-associated PFAS in blood from adults and children in Wilmington, North Carolina” in *Environmental Health Perspectives*.

This paper led by Dr. Nadine Kotlarz, builds on the results we shared with you and other community members at public presentations. The paper reports results for the new PFAS called “fluoroethers such as Nafion byproduct 2 which are unique to the chemical plant Chemours, and “legacy” PFAS which have been used for decades (for example, PFOA, PFOS).

One of the major findings discussed in this paper is that even though blood samples collected in from people in Wilmington had detectable levels of fluoroethers, GenX was not found. The figure here shows three fluoroethers that were found.



A new finding that we shared in the paper is that 25% of the total measured PFAS in blood samples was from the fluoroethers. This new finding is something that we are very interested in and plan on exploring further.

You can read our website post, “GenX Exposure Study Publishes Blood Results Paper,” for a summary of the paper here: [tinyurl.com/y27nm6vd](https://tinyurl.com/y27nm6vd). You can also find the full paper at [doi.org/10.1289/EHP6837](https://doi.org/10.1289/EHP6837).

## Meet the Team

In addition to our team at NC State, we have several co-investigators from other universities and backgrounds that help inform our study. Here are a few of our co-investigators with health backgrounds from East Carolina University that have been instrumental in developing the GenX Exposure Study.



### David Collier

Dr. Collier is a pediatrician and professor at ECU. He has helped us figure out the best ways to process and analyze study samples. His knowledgeable feedback has also helped us decide how to safely enter the field this fall amidst COVID.



### C. Suzanne Lea

Dr. Lea is an associate professor at ECU and has over 20 years of experience in epidemiology and public health. In addition to her research expertise, Dr. Lea shares her experience working with diverse communities to help us plan and execute our fieldwork events.

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