



Engaging Youth in Environmental Public Health

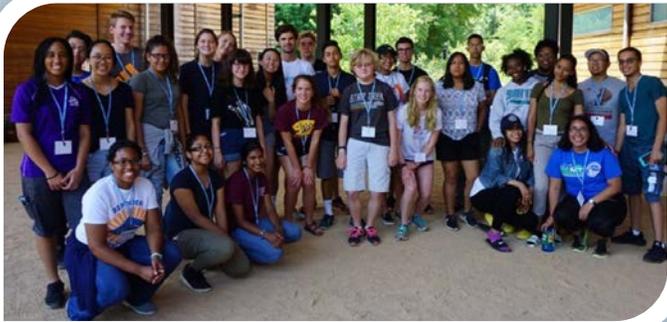
UNC Center for Environmental Health and Susceptibility · Alliance for Climate Education

Columbia University NIEHS Center for Environmental Health in Northern Manhattan · WE ACT

Harvard-Chan NIEHS Center for Environmental Health · Boston Children's Hospital Pediatric Environmental Health Specialty Unit

2017 PROGRAM: CLIMATE CHANGE & COMMUNITY RESILIENCE

**Columbia University
NIEHS Center for
Environmental Health in
Northern Manhattan &
WE ACT**



**UNC Center for
Environmental Health
and Susceptibility
& Alliance for Climate
Education**

PROGRAM COMPONENTS

Academic year workshops
Field trips
Webinars
Email exchanges
NYU Social Justice Expo
3-day Summer Institute
Action projects (NC)
Social justice projects (NY)

Climate Change & Human Health

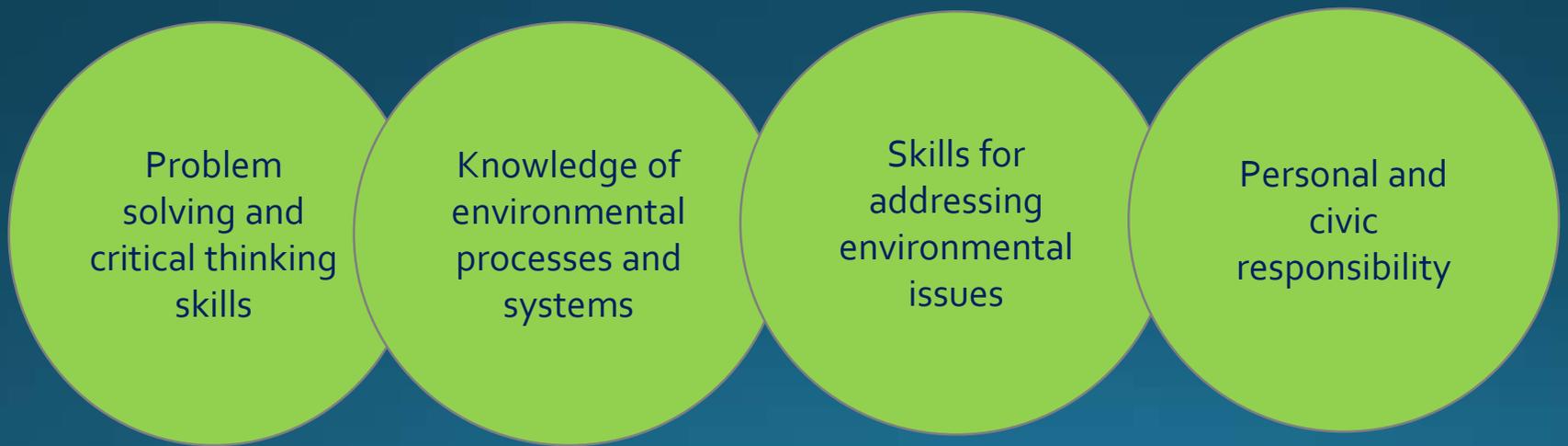
- Highlight interactions between Earth's spheres
- Promote **systems thinking & critical thinking**
- Bring **relevant and local** issues into the classroom
- **Reinforce curriculum** concepts
- Promote **science and engineering practices**
- Provide **interdisciplinary connections**
- Bring attention to **current and emerging public health issues and public health careers**



Environmental Literacy

The capacity to make informed decisions concerning the environment; to be willing to act on these decisions to improve the well being of other individuals, societies, and the global environment; and to participate in civic life.

(Adapted from NAAEE)



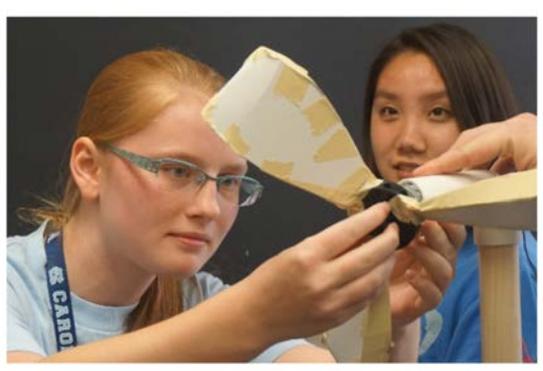
Problem
solving and
critical thinking
skills

Knowledge of
environmental
processes and
systems

Skills for
addressing
environmental
issues

Personal and
civic
responsibility

Strengthening Community Resilience



Climate mitigation

Reduce greenhouse gas emissions

Climate adaptation

Plan for climate change impacts



Community capacity building

Foster social networks and inclusion



Program Features

- Place-based
- Active learning
 - Hands-on STEM
- Solutions focused
- Capacity building

Program Topics



**Climate science · Air pollution · Human health ·
Disaster preparedness · Mitigation · Adaptation ·
Climate justice · Community resilience**

Connecting Public Health Professionals and Students

Webinar Series



Disaster Preparedness & Resiliency in Health Care
with Marissa Hauptman,
New England Pediatric Environmental Health
Specialty Unit at Boston Children's Hospital



Climate Change & Human
Health: A Clinician's
Perspective
with Ann Backus,
Harvard T.H. Chan School of Public Health

Community Capacity Building



- Provide opportunities for students from diverse backgrounds to work together to build a device or solve a problem
- Invite students to consider :
 - all people, including vulnerable populations, when evaluating climate mitigation and adaptation strategies
 - role of civic engagement in fostering resilience
 - how to foster social connections in disaster response and recovery

What can students do with this knowledge?

- Take measures to **protect their personal health**
- Raise **family awareness**
- **Recognize co-benefits** of adaptation and mitigation efforts
- **Engage with policymakers** to support policies that will improve public health
- **Promote climate justice** by working to protect vulnerable populations
- **Innovate new technologies** that protect health
- Pursue **careers in public health**



Student Action Projects



Grace Baucom: Exploring the impact of extreme heat on sustainable farmers



A student's perspective

Grace Baucom

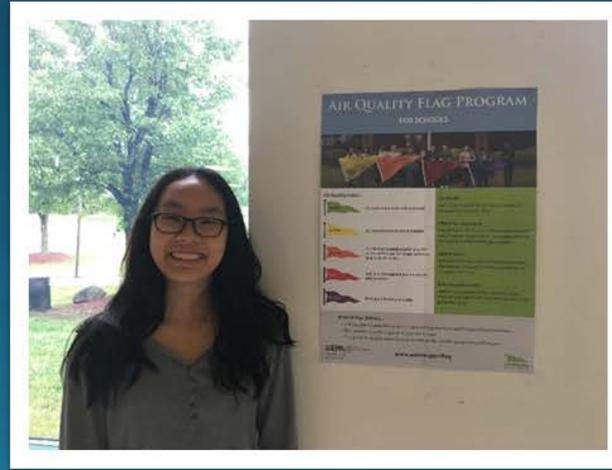
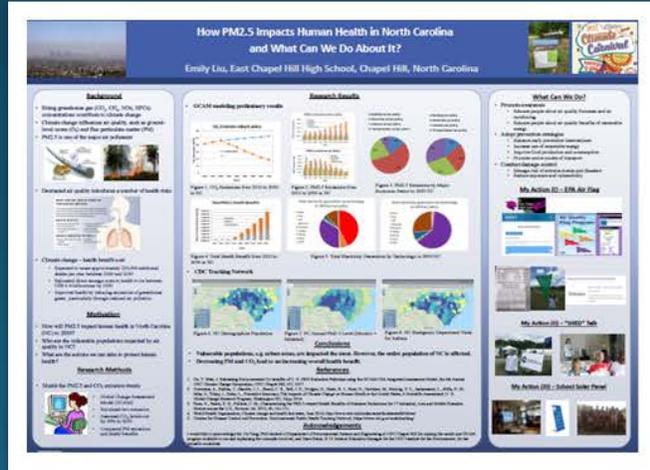
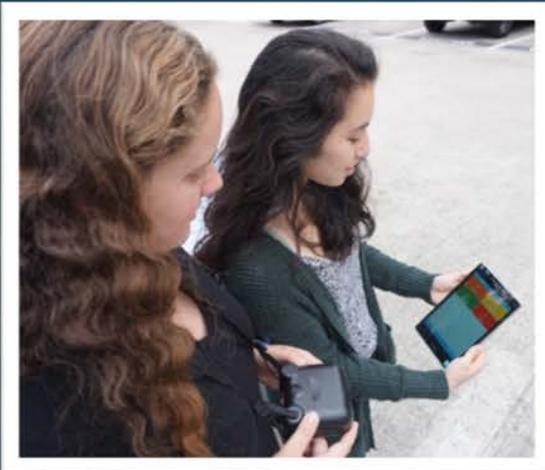
Hometown: Chapel Hill, NC

Current School: North Carolina State University

Student Action Projects



Grace Baucom: Exploring the impact of extreme heat on sustainable farmers



Emily Liu: Connecting air quality and renewable energy

Challenges

- Preparing guests to **tailor program content** to youth
- **Balancing delivery of science content** with engaging activities
- Providing opportunities for **sustained engagement** of students during year
- Providing **on-going support** for action projects



Project Team

North Carolina

- **Kathleen Gray & Dana Haine**, UNC Center for Environmental Health and Susceptibility
- **Briana Steele**, Alliance for Climate Education

New York

- **Diana Hernandez**, Columbia University
- **David Chang & Taylor Morton**, WEACTION for Environmental Justice

Massachusetts

- **Ann Backus**, Harvard T.H. Chan School of Public Health
- **Marissa Hauptman**, Boston Children's Hospital

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