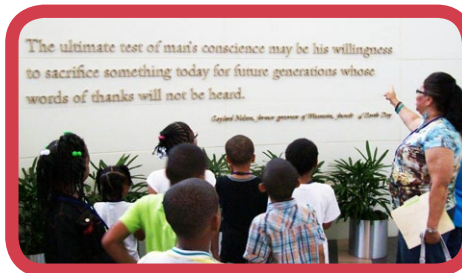




## EDUCATING LOCAL STUDENTS AND THE COMMUNITY ABOUT THE ENVIRONMENT AND STEM (SCIENCE, TECHNOLOGY, ENGINEERING & MATH)

EPA's Science, Technology, Engineering and Math (STEM) Outreach Program in Research Triangle Park (RTP) supports EPA's mission of protecting human health and the environment by increasing awareness, providing education, and inspiring the public, especially K-12 students. Since it began in 2004, the STEM Outreach Program has evolved – from offering guest speakers and judges at science fairs, to engaging in impactful community partnerships and providing hands-on educational programming for students and teachers in central N.C. and beyond.

### THE POWER OF ONE



### EPA EMPLOYEE ENGAGEMENT

Each year, **150-200** EPA-RTP employees spend **1,500-2,000** hours inspiring students with their passion for science, and sharing new STEM knowledge. Since the program began in 2004, we've clocked over **19,000** hours of volunteered time.



### CLOSING THE OPPORTUNITY GAP

Most of our programming takes place in schools where at least **50%** of students are on free or reduced lunch. We strive to inspire all students to consider STEM careers with the understanding that a diverse workforce is essential in addressing future environmental challenges.



### HANDS-ON SCIENCE

EPA develops hands-on activities and interactive discussions to engage student STEM learning and promote environmental awareness. Through participation in local, state and national education conferences, we offer K-12 educator trainings that provide teachers with hands-on STEM strategies for their classrooms, and share our model with other agencies and businesses.



### BEYOND THE CLASSROOM

The EPA-RTP campus hosts many educational events each year, including a week-long climate change workshop for high school students. The workshop is taught by EPA employees and a few guests from local universities. Students learn about real, on-going climate change research and the importance of climate change mitigation and adaptation, which are crucial in preparing students for the future.



### LASTING PARTNERSHIPS

In 2015, we participated in **15** multi-visit or long-term educational programs. Since the [Citizen Schools](#) program came to Durham in 2008, we've lead **24**, 10-week apprenticeships for over **340** middle school students. Through these sustained community partnerships, EPA staff have educated students in STEM topics and developed hands-on curriculum.

## IN THE CLASSROOM

- Provide guest speakers in preK-12 classrooms and universities.
- Develop hands-on activities for employees to use to teach students about EPA science – like the EPA-developed game, Generate!, which teaches students how energy use contributes to greenhouse gas emissions.
- Serve as STEM career role models through formal and informal mentoring and offer programming with a strong air and climate research focus.
- Support teacher development by participating in local, state and national STEM education and training conferences.

## IN THE COMMUNITY

- Partner with schools, and other organizations including Citizen Schools, US2020, NC New Schools/Breakthrough Learning, NC Science Festival, East Durham Children's Initiative and the Wake County Boys and Girls Clubs to promote STEM and environmental education.
- Staff booths at schools and community events such as career days, festivals, and museum science days.
- Judge science competitions and mentor student teams.
- Serve as community leaders by participating on and chairing advisory councils.

## ON OUR CAMPUS

- Hold a week-long climate change workshop for high school students each summer since 2011.
- Host students, teachers and the community on our campus to promote STEM education.

## AWARDS & RECOGNITIONS

- **US2020 Industry Partner of the Year** – For making a significant impact on RTP's STEM community during the 2015-16 school year by increasing access to STEM through focused volunteerism and on-site visits.
- **Presidential Early Career Award for Scientists and Engineers (PECASE) Award** – Awarded in 2016 and 2010 to EPA-RTP staff for advancing research and helping the U.S. to educate the next generation of scientists and engineers.
- **Durham Public Schools Community Partnership Award** – For outstanding commitment to the students and families of Durham Public Schools, February 2016.
- **NC Science, Mathematics and Technology (SMT) Education Center 2015 Partner Award in Science, Mathematics and Technology Education** – For recognizing the role the STEM Outreach Program has played in partnering with schools and community groups to support the advancement of science, mathematics and technology education.

“ My favorite part was when we built the sensor because it made me feel like a scientist or something, like an engineer! ”

— 3RD GRADE STUDENT  
SOUTHWEST ELEMENTARY SCHOOL

“ Since 2004, EPA has organized an annual Science Day at YE Smith that continues to have a positive impact on our students and teachers. During Science Day, our 350 students interact with EPA scientists and engineers and learn about the environment by doing hands-on activities. The students are exposed to career options that they may have never considered. ”

— MORGAN C. HUNT  
MUSEUM AND PARTNERSHIP COORDINATOR AT  
Y.E. SMITH ELEMENTARY MUSEUM SCHOOL

“ In my two years of running the US2020 RTP program, I have seen few industry partners dedicate the time and energy to STEM outreach like the EPA has. They literally have an around-the-clock, 365-day approach to outreach. ”

— BRETT BRENTON  
US2020 STEM OUTREACH PROJECT  
DIRECTOR AT RESEARCH TRIANGLE PARK

## **REQUEST A STEM SPEAKER OR PRESENTER**

The [EPA-RTP Speakers Bureau](#) provides easy access to request our employees and programs. Teachers and community members can also contact us directly via [email](#) or phone. We pride ourselves on being adaptable to meet the needs of the public and in our ability to develop innovative activities and programs while maximizing our greatest resource: our employees. Employees can travel within 50 miles of the EPA-RTP campus.

### **FOR MORE INFORMATION, CONTACT:**

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[WWW.EPA.GOV/RTP-SPEAKERS-BUREAU](http://WWW.EPA.GOV/RTP-SPEAKERS-BUREAU)