

# Week at the Labs

From February 29 to March 5, the My Brother's Keeper and Council on Women and Girls initiatives are supporting communities, universities, and Federal labs in connecting young people with authentic hands-on interactive science, technology, engineering, math (STEM) and computer science (CS) events across the country.

You can join the educators, scientists, and community leaders participating in this exciting initiative by hosting or supporting young people in your community in four exciting ways.

**Tune in to White House Live on February 29 starting at 9:00AM:**

*Tune into the [whitehouse.gov/live](http://whitehouse.gov/live) to watch the White House Day at the Labs program live or view the archive online.*

**Host a Lab Day:**

*Organize hands-on interactive activities to expose young people to STEM and CS! Invite students from your local community to engage in an authentic STEM or CS experience at your university or in your classroom.*

**Visit a Local Lab:**

*Enable young people from across the country to experience STEM and CS! Answer President Obama's call to mentor and guide our Nation's young people by helping them take advantage of opportunities to explore STEM and innovation.*

**Host a STEM Speed Mentoring Event:**

*Share your excitement about a career in STEM with young people! Spend time with young people to share how you got started in STEM, why STEM matters to society, and what exciting projects you're working on.*

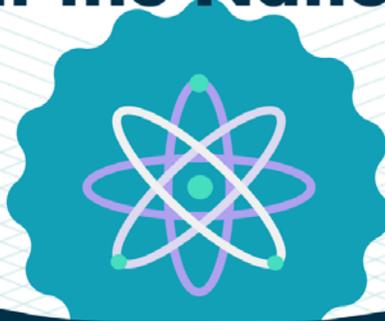
**Social Media:**

#WeekAtTheLabs

***Read on for more information and resources!***

# Week at the National Labs

February 29, 2016



March 5, 2016

Creating an Inclusive STEM Community for All Youth

Support Our Nation's Youth in Entrepreneurship and Engagement in Hands-On STEM Experiences

## Ways to Participate

Tune in on February 29 to view the White House Day at the Lab



Host a Week at the Labs Day event in your community, campus, or classroom between February 29 and March 5.

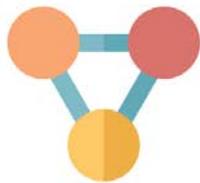
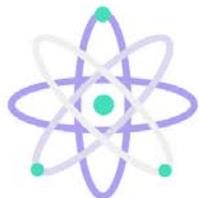


Partner with community leaders to enable youth to participate in a local Week at the Labs Event by providing transportation and meals



Host a STEM Speed Mentoring Session by providing a space and mentors to share their passion and experiences in STEM including computer science





## Sample Activities for Lab Day Hosts

### **A Day in the Life Aboard the International Space Station**

On this site, students can learn about the life of an astronaut on the International Space Station.

<http://www.nasa.gov/audience/foreducators/stem-on-station/dayinthelife/>

### **Compare Vitamin C Content**

In this lab, students will compare relative vitamin C content and rank fruits, juices, and beverages from highest to lowest Vitamin C content.

<http://www.ars.usda.gov/is/kids/AgSciProjects/methoddefined.htm>

### **How Things Fly**

In these lessons, students can learn about the properties of air.

<http://howthingsfly.si.edu/sites/default/files/attachment/IsAirReallyThere.pdf>

### **Encryption, Decryption**

In this lesson, students can learn how to encrypt and decrypt messages.

[https://www.nsa.gov/change/files/solution/cipher\\_disk.pdf](https://www.nsa.gov/change/files/solution/cipher_disk.pdf)

### **How Much Iron?**

In this lab, students will separate and measure the amount of iron in breakfast cereal.

[www.ars.usda.gov/is/kids/AgSciProjects/ironmeasured.htm](http://www.ars.usda.gov/is/kids/AgSciProjects/ironmeasured.htm)

### **CS Bits & Bytes**

Each issue of CS Bits & Bytes highlights innovative Computer Science (CS) research and includes profiles of the women and men who do this exciting work, links for further exploration, and interactive activities.

<http://www.nsf.gov/cise/csbytes/>

# Speed STEM Mentoring

To connect students with science, technology, engineering, and mathematics (STEM) professionals around the country, STEM professionals have engaged in quick show-and-tell chats about their STEM careers and impact on society. The Department of Energy hosts a series of successful [STEM mentoring events](#) where professionals rotate tables allowing students to ask questions and engage with many different STEM career leaders. These events have been hosted throughout the country to engage students in or after school. The following information describes the role of mentors, teachers, students, and hosting venues in planning and participating in these types of mentoring events.

## **ROLE of STEM MENTORS**

STEM professionals usually participate as mentors on the day of the event. The professional comes with show-and-tell items to provide an interactive experience. The STEM professionals often share how they got their start in STEM, what interests them the most about their job, what exciting projects they are currently working on, and why STEM matters to society.

## **ROLE of TEACHERS and STUDENTS**

These mentoring events usually have a low mentor-to-student ratio, but this has varied. Teachers brief their students before the event about what STEM is and whom they will be meeting with at the event.

## **TIPS for HOSTING a SPEED STEM MENTORING EVENT**

The following are best practices for hosting a successful STEM mentoring session:

- Work with schools, libraries, and other community organizations to select a date and time for the event and to establish the event capacity.
- Coordinate logistics, including sharing directions, offering instructions for entry to the building, parking, ensuring easy access to restrooms, and posting signage to help participants find the room location.
- Set up tables that can seat 6-10 people (2 mentors and up to 8 students).
- Have a speaking podium and microphone available.
- Choose an event coordinator for planning and day of event facilitation.
- Provide a compelling welcome speaker.