

Brookhaven National Laboratory Patch Program Requirements *JUNIOR & CADETTE*



By completing this patch, you'll be one step closer to being a STEM Superwoman!

LEARN

The world of science, technology, engineering, and math (STEM) is full of exciting opportunities and challenges. Complete both activities below to learn more about what STEM can bring to your world.

1. **Student Scientists!** From the list below, select a video or article about high school students who do research at Brookhaven Lab. What are they researching and why? What scientific tools did they use? Did they work alone or with a team?
 - [Student Partnerships for Advanced Research and Knowledge](#) (SPARK)
 - [High School Research Program](#)
 - Shelter Island High School students in the [SPARK](#) program.
 - [Summer Students Tackle COVID-19](#)
 - [Student Researchers Published Study on Micrometeorites](#)
2. **STEM Superwomen!** Talk about girl power! Select one of the links below to learn about some of the smartest women in STEM and share their inspiring stories with others!
 - [Women at Brookhaven Lab](#): Meet some inspiring women who are a driving force for many of our scientific breakthroughs.
 - [Women@Energy: STEM Rising](#): Check out the profiles of women who work for the Department of Energy. Click on a profile to learn more.
 - Department of Energy: [In Her Element: Women Behind the Discoveries of the Periodic Table](#)

EXPLORE

Now that you have learned a little about some of BNL's STEM opportunities, let's dig a little deeper. Complete one of the activities below.

1. **Visit Brookhaven National Lab.** Visit the world-class facilities at Brookhaven National Lab for some free family fun at [Summer Sundays](#)! Brookhaven hosts a variety of exciting in-person and virtual school field trips, summer programs, and contests! [Visit the Office of Educational Programs website](#) to learn more.
2. Learn more about what inspires a scientist or intern. Check out one of the links below, or choose your own:

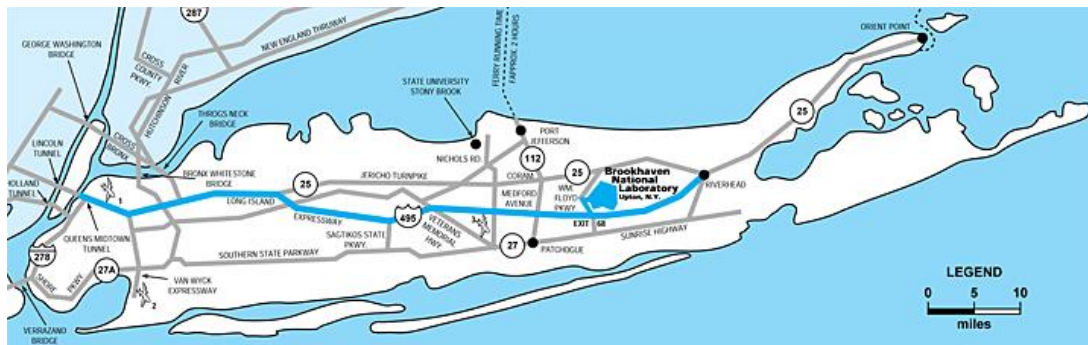
- [An Observer of the Natural World:](#) Read about Brookhaven Scientist Allison McComiskey, who's childhood curiosity in the environment led to a career in atmospheric science research.
 - [Meet the Intern Using Quantum Computing to Study the Early Universe:](#) Juliette Stecenko used modern supercomputers and quantum computing platforms to perform astronomy simulations that may help us better understand where we came from.
3. **Pick a Process!** Select one of the links below to learn about the scientific method or the engineering process, then give it a try!
- [The Scientific Method](#)
 - [The Engineering Design Process](#)
 - Ideas for science experiments and engineering challenges: [Science at Home](#)

SHARE

Now that you are an exploration expert, make a brief presentation to your troop about what you learned. Include pictures, videos and/or posters.

About Brookhaven National Laboratory

We're a U.S. Department of Energy (DOE) Lab that delivers discovery science and transformative technology to power and secure the Nation's future. Primarily supported by the DOE Office of Science, Brookhaven Lab is a multidisciplinary laboratory with seven Nobel Prize-winning discoveries, 37 R&D 100 Awards, and more than 70 years of pioneering research.



Thirsty for more? Check out these links to learn about Brookhaven National Lab's history, awards, and more!

[This is Brookhaven Lab](#) video

Brookhaven research has been honored by [seven Nobel Prizes](#), National Medals of Science, Enrico Fermi Awards, Wolf Foundation Prizes, dozens of R&D 100 awards, and many other recognitions. [Learn more about Brookhaven's awards.](#)

Learn more about the Lab's past, present, and future by visiting our [75th Anniversary site](#)

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