

RFH STEM STUDENT OPPORTUNITIES!

Greetings RFH Students!

This document will provide links and information to all sorts of STEM opportunities for our students throughout the 2026-2027 school year. Save it to your Google Drive and continue to check back in!! The next page has an index of the events, but also feel free to scroll down at your leisure.

Most of these will take place outside of the school day on an individual basis while others may be of interest to particular groups of students or a club here at school. If you are interested, please follow the directions for each event/opportunity. This is great for personal growth, honor society hours, and trying to find fields of STEM that interest you!

If you have any questions or would like to expand on some of these events, please feel free to reach out to me. Also, I would love feedback for anything that you have attended!

I'm excited to see how we all can take advantage of these opportunities!!

Have a great day,

Jon Pennetti

Supervisor of STEM

732-842-1597 ext. 554

jpennetti@rumsonfairhaven.org

RFH STEM
STUDENT OPPORTUNITIES!

Upcoming Events/Activities:

1. [Join RFH Clubs!](#)
2. [NASA Climate Change Research Initiative](#)
3. [NASA TechRise Student Challenge](#)
4. [RPI Architecture Career Discover Programs](#)
5. [Stanford Summer Data Science & AI Program \(Online\)](#)
6. [Rutgers Young Scholars Program in Biochemistry](#)

RFH STEM STUDENT OPPORTUNITIES!

Join RFH Clubs:

RFH supports many opportunities for students to become involved in our very own Science, Technology, Engineering and Math-focused clubs. If you're interested, please sign up for their google classroom and reach out to the Advisor!

Our Clubs

Environmental Awareness Club

Advisor: Mr. Haughwout (Room 606)

Google Classroom Join Code: 4gvwjia

RFH STEM Club

Advisor: Mrs. Kilar (Room 607)

Google Classroom Join Code: 7y73yhp

Computer Programming Club

Advisor: Ms. McBain(Room 106)

Google Classroom Join Code: kpsnwd7

Competitions this year

Science League

Advisor: Mrs. Kilar (Room 607)

Google Classroom Join Code:

Math League

Advisor: Mrs. Deremiah (Room 203)

Google Classroom Join Code:

Honor Societies

Math National Honor Society ([MNHS Requirements/Guidelines](#))

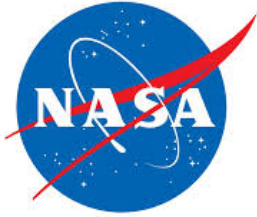
Advisor: Mrs. DeMeter (Room 204)

Science National Honor Society ([SNHS Requirements/Guidelines](#))

Advisors: Mr. Haughwout (Room 606)

RFH STEM STUDENT OPPORTUNITIES!

NASA Climate Change Research Initiative



Program Overview

NASA Earth Science Division's Early Career Research (ECR) Program Climate Change Research Initiative (CCRI) is an interdisciplinary, collaborative, year-long STEM engagement, and experiential learning opportunity for educators and graduate students to work directly with NASA scientists and lead research teams in a NASA research project hosted at either NASA's Goddard Institute for Space Studies, Lamont Doherty Earth Observatory, CUNY City College of Technology in New York City, NY, or NASA's Goddard Space Flight Center in Greenbelt, MD. The summer component of each CCRI project also includes undergraduate and high school interns.

During the fall and spring terms of CCRI, the research team will consist of NASA Scientists who lead in-service high school STEM educators and graduate student research assistants to become immersed in a NASA science research area related to climate change. During the summer session, the primary research team will add an undergraduate intern and high school intern to the CCRI research team. The entire team will work collaboratively on a full-time basis to complete the research project, deliver presentations, create a scientific poster and a publishable research paper that will be presented at the CCRI HQ Day at NASA Headquarters in Washington, DC, and other science conferences and symposiums.

Undergraduates Students/ High School Students

Application Requirements

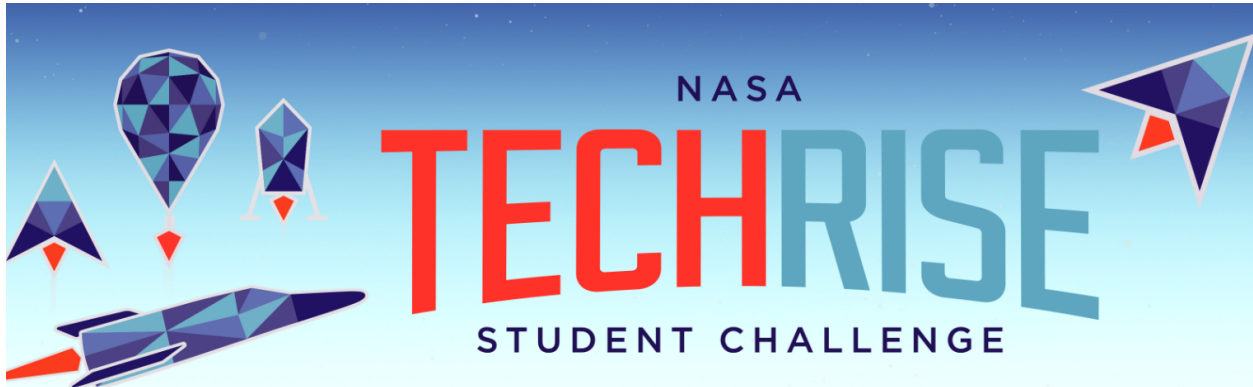
Student interns must complete the entire application within [NASA's Internship STEM Gateway](#)(search for CCRI).

Performance Requirements

Undergraduate and high school students work on real NASA projects with the guidance of a NASA CCRI mentor, a research scientist, and gain practical work experience. All students are required to submit a final report upon completion of the program.

RFH STEM
STUDENT OPPORTUNITIES!

NASA TechRise Student Challenge



[Challenge Flyer HERE](#)

The NASA TechRise Student Challenge empowers teams of sixth to 12th-grade students to design, build, and launch experiments on flights aboard commercial suborbital vehicles. Guided by an educator, student teams affiliated with U.S. public, private, and charter schools can submit experiment ideas for flight testing. Sixty winning teams will be selected to receive \$1500 to build their experiment, technical support from Future Engineers, and an assigned spot for their experiment on a NASA-sponsored flight with an industry provider.

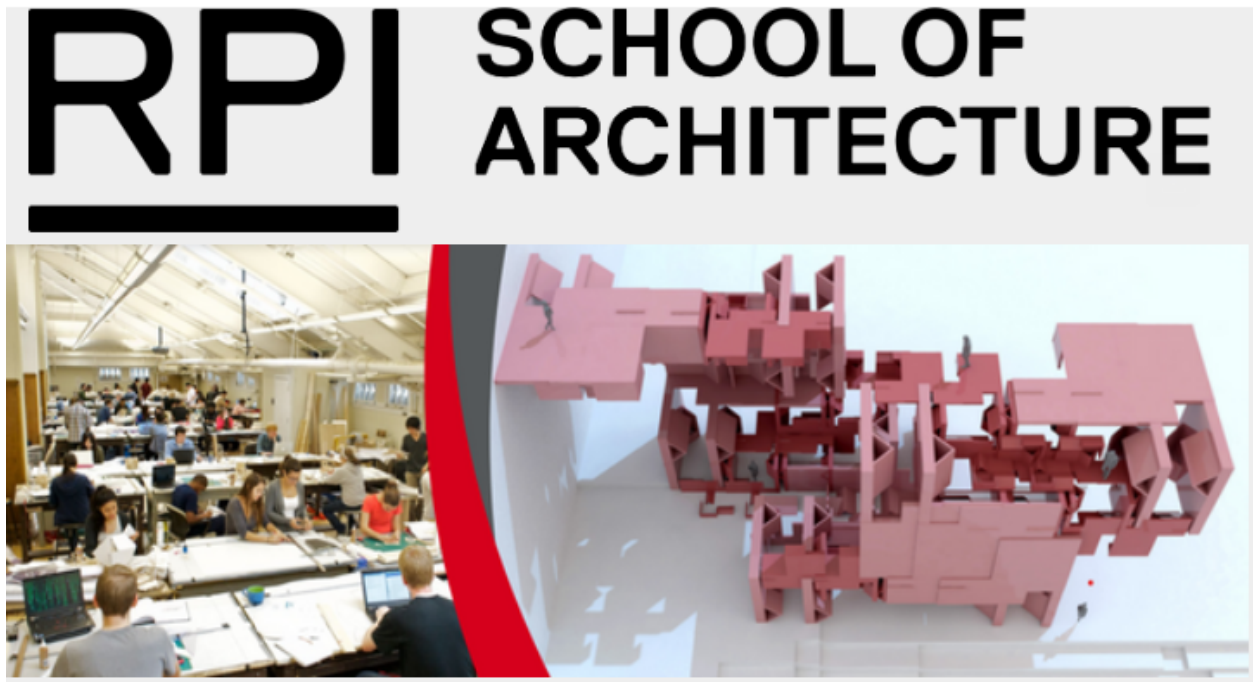
2025-26 NASA TechRise Student Challenge winning teams were announced on January 20, 2026. The list of winners can be found [HERE](#). Teams spend their spring semester building their experiments and preparing them for flight on either a World View high-altitude balloon or a Virgin Galactic Suborbital-Spaceship. For the latest news, visit the [NASA webpage](#).

The 2026-27 NASA TechRise Student Challenge suborbital vehicle will be the high-altitude balloon. The challenge is expected to open in September 2026.

[Back to Main Page](#)

RFH STEM
STUDENT OPPORTUNITIES!

RPI Architecture Career Discover Programs



If you have students with an interest in art, science, and technology, we are excited to invite them to register for one of our [Architecture Career Discovery Programs](#).

This two-week class is designed to expose students to a high-quality undergraduate architecture program. The core of this course is studio work.

High school students entering 10th, 11th, and 12th grade in the fall who are interested in future careers in architecture or design-related fields and curious about the world are encouraged to apply. The first week of the course will focus on building models and making drawings by hand. The second week will focus on using the computer as a design tool. Students will learn 3D modeling in Rhinoceros, 2D drawing, and image editing in Adobe Creative Suite.

This exciting, immersive workshop will open students' eyes to architecture as a future career and provide them with an impressive portfolio piece, essential to be accepted into a premier program - like RPI.

In-person session:

July 6-17, 2026 (9 a.m. - 4 p.m. EDT)

Online session:

July 20-July 31, 2026 (9 a.m. - 4 p.m. EDT)

Program cost: \$1850 and Registration is on a first come, first served basis.

[Back to Main Page](#)

RFH STEM STUDENT OPPORTUNITIES!

Stanford Summer Data Science & AI Program (Online)

Stanford Summer Data Science & AI Program (Online) – Opportunity for Your Students

High school students (grades 9–12) are invited to apply to **Stanford Medicine's Stanford Data Ocean Online Summer Camp**, a 4-week online program focused on **data science, AI/ML, and precision medicine**. Students will work with real biomedical datasets, learn foundational data science and AI/ML skills, and earn two **Stanford Genetics** certificates upon completion:

- Fundamentals of Data Science in Precision Medicine and Cloud Computing
- Fundamentals of AI/ML in Precision Medicine

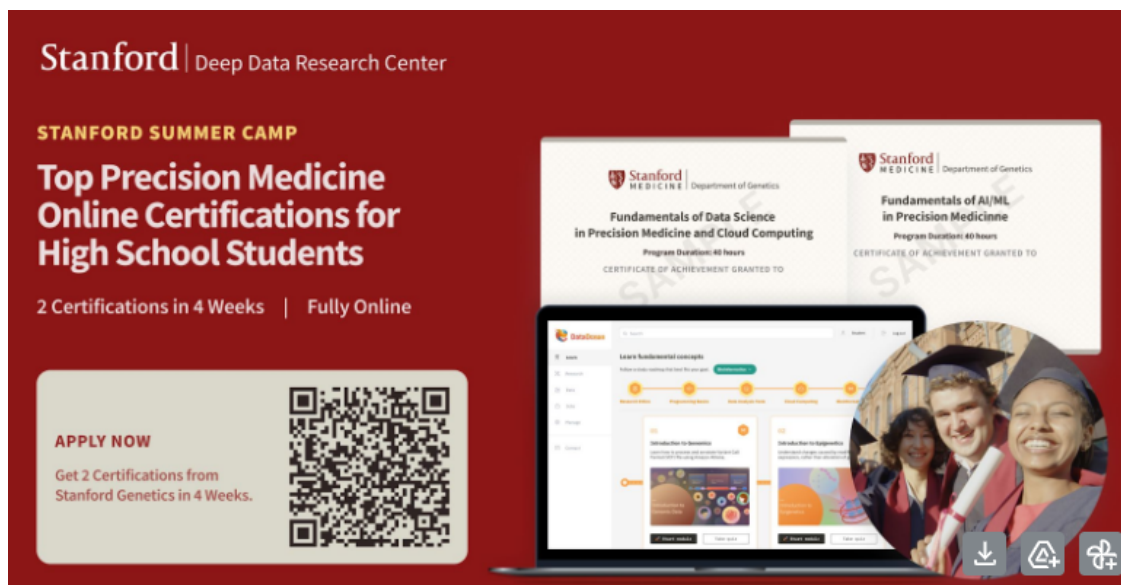
The camp includes self-paced modules, live instructor sessions, weekly office hours, access to an AI tutor, and a collaborative team capstone project. **No coding experience is required.**

- **Application fee:** \$0
- **Program fee after acceptance:** \$1,500
- **Need-based scholarships are available**

Learn more and apply:

Stanford Data Ocean Online Summer Camp – Data Science & AI for Precision Medicine

<https://deepdata.stanford.edu/stanford-data-ocean-summer-camp/>

A promotional graphic for the Stanford Summer Camp. The background is dark red. At the top left, it says "Stanford | Deep Data Research Center" in white. Below that, in orange, is "STANFORD SUMMER CAMP". In large white text, it reads "Top Precision Medicine Online Certifications for High School Students". Below this, in white, it says "2 Certifications in 4 Weeks | Fully Online". On the left, there is a white box with the text "APPLY NOW" and "Get 2 Certifications from Stanford Genetics in 4 Weeks." next to a QR code. On the right, there is a laptop displaying a website with a flowchart. Behind the laptop are two white certificates from Stanford Medicine, Department of Genetics. The first certificate is titled "Fundamentals of Data Science in Precision Medicine and Cloud Computing" and the second is "Fundamentals of AI/ML in Precision Medicine". Both certificates mention a program duration of 40 hours. In the bottom right corner, there is a circular inset photo of three smiling students in graduation caps and gowns. Below the photo are three icons: a download arrow, a share icon, and a link icon.

[Back to Main Page](#)

RFH STEM STUDENT OPPORTUNITIES!

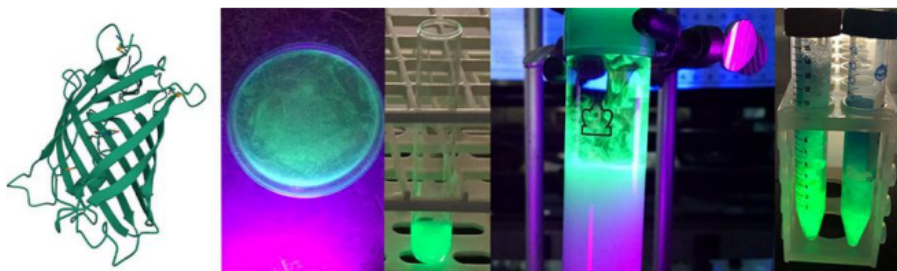
Rutgers Young Scholars Program in Biochemistry

[See this Informational Flier for additional Details](#)



Rutgers Young Scholars Program in Biochemistry Experiments with GFP (Green Fluorescent Protein)

(11:115:110) 3 credits for students interested in exploring the chemistry of living organisms at the molecular level



We are pleased to offer the summer course *Experiments with GFP* for high school students interested in exploring STEM education within a collegiate environment. This hands-on course introduces participants to essential biochemical techniques and provides access to standard laboratory equipment, all under the guidance of experienced professionals. Students will engage in the study of recombinant protein technology through interactive instruction and practical experimentation. The course is designed to foster meaningful engagement in a supportive, small-group setting, with a maximum of 14 students per section. Upon successful completion, students will earn college credits that are transferable to most colleges and universities.

Where and When

This hands-on biochemistry lab/discussion course is held in a Rutgers biochemistry teaching laboratory on the second floor of [Lipman Hall](#) on the Cook Campus of Rutgers University, 76 Lipman Drive, New Brunswick, NJ.

The schedule for Summer 2026

Course #11:115:110 - EXPERIMENTS WITH GREEN FLUORESCENT PROTEIN (3 credits)

[Link](#)

Session Dates: 07/06/2026 – 07/31/2026

DAY	TIME	ROOM
Monday	8:00 AM - 10:45 AM	Lipman Hall (LH-207)
Tuesday	8:00 AM - 10:45 AM	Lipman Hall (LH-207)
Wednesday	8:00 AM - 10:45 AM	Lipman Hall (LH-207)
Thursday	8:00 AM - 10:45 AM	Lipman Hall (LH-207)

[Back to Main Page](#)