



educationunlimited®

# Science Camps for Girls

Science camps for girls entering grades 4 – 9



**SAVE  
\$100**

Register at least 21 days before the start of any EU program\* and save \$100. Use code EARLY100. \*Not valid on Camp Brainy Bunch.

Offered by Education Unlimited at  
Stanford University | UC Berkeley  
Massachusetts Institute of Technology | Caltech

# Welcome

## Science Camps for girls

These camps encourage girls' interests in science by providing hands-on learning in an environment that is designed to be supportive, enriching and – most importantly – fun! These unique overnight camps provide girls an opportunity to explore science, technology, and engineering through experiments and observations while staying on a university campus. We offer several week-long residential camps throughout the summer as well as day camps.

### A Science Camps for Girls graduate will have:

- Participated in an in-depth variety of hands-on science learning and activities
- Gained confidence and experience in a supportive girls-only classroom environment
- Learned from experienced and inspiring instructors
- Experienced a taste of college life
- Made lots of new friends from around the country or even globe!

## sample schedule

7:30am	Overnight campers – wake up!
8:00am	Breakfast in the dining hall (overnight campers only)
8:30 – 9:00am	Day camper & extended day camper check-in
9:00am	“Major” lab session
	<i>Options vary by camp session and include: Engineering, Marine Science, Astronomy and Robotics</i>
12:00pm	Lunch in the dining hall (included for overnight and extended day campers; day campers can purchase an optional lunch package or bring a lunch)
1:00pm	Afternoon recreation / personal time
2:00pm	Science “minors” plus workshops
	<i>Afternoon workshops give girls an opportunity for informal science learning, as well as leadership and problem-solving training. Past minors included Forensic Science and Chemistry</i>
5:00pm	Day camper check-out
	<i>Dinner in the dining hall (overnight and extended day campers only)</i>
6:30pm	Evening recreation and activities
8:00 – 9:00pm	Extended day camper check-out
9:00pm	Floor check (overnight campers get ready for bed)
10:00pm	Room check & lights out!



# Course Descriptions

## Class overview



**Before camp, each girl will choose a science major that includes related labs and activities during their morning classroom sessions. Majors vary by location and length of the program.**

### Anatomy & Physiology

**LOCATIONS** STANFORD | MIT

**DURATION** 6 DAYS | 5 NIGHTS (OVERNIGHT)

5 DAYS (DAY CAMP)

The Anatomy & Physiology major will delve into the how the human body works. Understanding how the major body systems function and interact will be studied through a variety of experiments and recreations. Campers will learn the foundational skills of life sciences through hands-on work with microscopes and dissection. Furthermore, they will demonstrate their new found knowledge by recreating the various systems of the human anatomy in a life-sized, layered “paper doll” of their own body!

### Astronomy

**LOCATIONS** STANFORD | UC BERKELEY | MIT

**DURATION** 6 DAYS | 5 NIGHTS (OVERNIGHT)

5 DAYS (DAY CAMP)

Astronomy majors will study celestial objects in the universe. Students will simulate the Big Bang Theory, study the surface of the sun and measure its diameter, make spectrometers and explore light and diffraction, and design and build their own water rockets. At the end of the week, students launch their rockets at the camp finale.

### Intro to Engineering

**LOCATIONS** STANFORD | MIT | CALTECH

**DURATION** 6 DAYS | 5 NIGHTS (OVERNIGHT)

5 DAYS (DAY CAMP)

Engineering majors will learn the basic principles of physics and design while building bridges, towers, hovercrafts and automobiles. Students will also create their own structures and designs that must survive trials and obstacles. At the end of the week, the students present the items they’ve constructed during the program to families at the camp finale.

### Intro to Marine Science

**LOCATIONS** MIT

**DURATION** 6 DAYS | 5 NIGHTS (OVERNIGHT)

5 DAYS (DAY CAMP)

This introductory session provides a taste of our Marine Science curriculum. Students will experiment with the chemical and physical properties of water, explore major marine habitats, write and perform phylum dramas and dissect a fish.

### Marine Science

**LOCATIONS** STANFORD | UC BERKELEY | MIT

**DURATION** 6 DAYS | 5 NIGHTS (OVERNIGHT)

5 DAYS (DAY CAMP)

Students will investigate animal adaptations in a creative creature project, dissect a shark, learn how temperature and salinity create ocean currents, and create an “oil spill” to see how human actions impact the planet.

### Neuroanatomy

**LOCATIONS** STANFORD | UC BERKELEY

**DURATION** 6 DAYS | 5 NIGHTS

Neuroanatomy majors will learn the anatomy and physiology of various systems in the brain and apply what you know to fictitious neurological patients. Specifically, we will focus on the cerebral cortex, various sub-cortical structures, the visual system, somatosensory system, and the motor system in the brain and spinal cord.

### Robotics

**LOCATIONS** STANFORD | CALTECH

**DURATION** 6 DAYS | 5 NIGHTS

Robotics majors will explore the emerging science of robot mechanics. Participants will build a robot from scratch, remotely control the robot, experiment with light and pressure sensors, create drive trains for different terrains, build and create a robot arm, and design and play robotic sports.

### Science Minors and Enrichment Activities

fill up most of the afternoons and evenings to give girls an opportunity for informal science learning, as well as leadership and problem-solving training. Past minors included Forensic Science and Chemistry. Students will also attend a mid-program excursion to a local science venue.

\*DESCRIPTIONS, PROGRAM DURATION, ACTIVITIES, STAFF AND LOCATIONS LISTED ARE SUBJECT TO CHANGE.

# Selected Faculty

Profiles of our outstanding instructors



## Rhonda McCoy

Dr. Rhonda McCoy obtained her Bachelor of Science degree in Chemistry from North Carolina A&T State University in Greensboro, NC. After graduating from college she accepted a teaching position in Charlotte, NC. She dedicated herself to teaching chemistry and physics, and strongly believes that “Our Kids are Worth Whatever It Takes”.

After three years of teaching science she decided to continue her education in order to become a Research Scientist.

In May 2012, Dr. McCoy completed her Ph.D. in Analytical Chemistry at Howard University in Washington DC. Her research interest includes understanding molecule-substrate interactions for applications in molecular electronics. Dr. McCoy is currently working as a Scientist in the Pharmaceutical Industry. Dr. McCoy began teaching Astronomy with Education Unlimited in 2006 and then became a Director for the Sally Ride Science Camps in Southern California in 2008.

## Vickie Obenchain

Vickie Obenchain has been teaching for Education Unlimited since 2008. Not only with the Education Unlimited program as a Marine Science and Astronomy instructor, but also with the A+ Middle School program.

She has two degrees in Environmental Science, a Bachelors of Science from Elon University, NC., and a Masters from Montclair State University, NJ. While she enjoys teaching during the summers for EU, she teaches the rest of the year at an independent school in Moraga, CA., as a K – 8th grade science teacher.

“If we’re going to out-innovate and out-educate the rest of the world, we’ve got to open doors for everyone.”

Former First Lady Michelle Obama

# 2018 Information

Dates and schedule

## Day Camp Sessions

At Caltech and MIT we offer special day-camp only sessions of the Science Camps for Girls program. These programs feature a convenient 5-day schedule, with classes from approximately 9am to 5pm each day. Please note that due to the program's shorter duration, students at the day-camp program participate in a truncated version of the curriculum offered at overnight sessions.

"I can't choose the best part of camp, because I loved every part of it! The camp was sooooo much better than my expectations!"

Science Camp participant



## 2018 dates

LOCATION	SESSION	GRADE	LOCATION	SESSION	GRADE
<b>Anatomy &amp; Physiology</b>			<b>Marine Science</b>		
Stanford	Jul 29 - Aug 3	4th - 5th	UC Berkeley	Jun 24 - Jun 29	6th - 8th
MIT	Jul 30 - Aug 2	4th - 6th	Stanford	Jul 29 - Aug 3	6th - 7th
<b>Astronomy</b>			MIT	Jul 30 - Aug 3	7th - 8th
UC Berkeley	Jun 24 - Jun 29	6th - 8th	<b>Neuroanatomy*</b>		
Stanford	Jul 29 - Aug 3	6th - 7th	UC Berkeley	Jun 24 - Jun 29	8th - 9th
MIT	Jul 30 - Aug 3	4th - 6th	Stanford	Jul 29 - Aug 3	8th - 9th
<b>Intro to Engineering</b>			<b>Robotics</b>		
Caltech	Jul 9 - Jul 13	4th - 6th	Caltech	Jul 9 - Jul 13	6th - 8th
Stanford	Jul 29 - Aug 3	4th - 5th	Stanford	Jul 29 - Aug 3	8th - 9th*
MIT	Jul 30 - Aug 3	4th - 6th	<b>Intro to Marine Science</b>		
MIT	Jul 30 - Aug 3	4th - 6th	<p>*Neuroanatomy and Robotics Grades 8th - 9th sessions do not have minors: campers will instead continue learning more in-depth about their majors.</p>		

# Join Us!

## Education Unlimited

**Regular Enrollment** A check for full tuition or a deposit, (credited toward the total program cost), must accompany your application. Applicants are considered on a first come, first served basis except for Summer Focus, A+ Summer and CAPC Intensive, which are competitive. Applicants not accepted to the program will have their tuition payment returned, otherwise no refund of any kind is offered without the Cancellation Protection Plan.

**Tuition Assistance** Students with financial need are encouraged to call or write for tuition assistance information, or send an email to [campinfo@educationunlimited.com](mailto:campinfo@educationunlimited.com). See website for details.

### Mail the Following

- Completed application.
- Deposit check (\$495 deposit for programs under \$2,300; \$695 for programs \$2,300–\$3,500; \$995 for programs over \$3,500), including the Tuition Protection Plan fee, if desired (*it may not be added after application*). See website for details.
- International students add \$100.
- Wait for your enrollment confirmation! (*Please do not make any travel plans until you receive final program details*).

### Sign me up for the following 2018 Camp:

Camp Name	Grade Range
Camp Location	
Camp Dates	Camp Tuition

### I am ready to apply!

Enroll me as a (circle one):	Overnight Camper	Extended Day Camper	Day Camper
Student's Name	Age	Grade Fall 2018	
Home Address	City	State	Zip
Home Phone	Student Email		
Date of Birth			
Parent (No. 1) Name	Parent (No. 2) Name		
Work Phone	Work Phone		
Cell Phone	Cell Phone		
Email	Email		
School Name			
School Address	City	State	Zip
How did you first hear about the program?			

**Reminder** You must remit the \$495, \$695 or \$995 deposit with your completed application. Make checks payable to Education Unlimited. Without the Tuition Protection Plan (TPP) this deposit is non-refundable unless the student is not accepted into the program. We recommend that you purchase the TPP, which provides a full or partial refund, as explained in our enrollment policies. The fee for the Protection Plan is 10% of the total tuition before any discounts and must be purchased with this application. No refund of any kind is offered without the TPP. If you answer yes for the TPP, full payment for the Protection Plan must be sent in with this application. With TPP, cancel 31 days or more before camp and receive 100% refund of tuition, cancel 15 - 30 days before camp for a 70% refund, cancel 3 - 14 days before camp for 40% refund. Cancel 2 days before camp or fewer, no refund is provided.

TPP Payment Enclosed: Yes No	Total Enclosed \$
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I hereby give permission for my child to participate in the above indicated program. I am also indicating my agreement to, and full acceptance of, all terms and conditions of enrollment listed on the Education Unlimited website and this brochure. See [www.educationunlimited.com/pages/enrollmentpolicies](http://www.educationunlimited.com/pages/enrollmentpolicies).

Signature of Parent	Date
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Please note: Each student's progress in the program is dependent on the individual student's motivation and abilities.

### Contact

[www.educationunlimited.com](http://www.educationunlimited.com)  
[campinfo@educationunlimited.com](mailto:campinfo@educationunlimited.com)  
510-548-6612

### Mail to Education Unlimited

1700 Shattuck Avenue, #305  
Berkeley, CA 94709



Education Unlimited®'s summer youth programs are independent of the listed Universities, their respective admissions offices and all other University programs and initiatives.