

STEM Summer Opportunities

Overview

The purpose of this Guide is to provide information on **metro –area, nation and world-wide** summer STEM camp, internship, volunteer, and other enrichment opportunities in the areas of:

- ASTRONOMY, SPACE SCIENCE
- BIOMEDICAL SCIENCES, MEDICINE, NURSING, HEALTH CARE
- ENGINEERING, TECHNOLOGY, COMPUTER SCIENCE
- ENVIRONMENT, ECOLOGY, CONSERVATION, WEATHER, CLIMATE
- MARINE BIOLOGY, OCEANOGRAPHY
- MATHEMATICS
- PUBLIC HEALTH, EPIDEMIOLOGY, SOCIAL SERVICES
- ZOOLOGY, VETERINARY SCIENCES, ANIMAL HUSBANDRY

This Guide is not an exhaustive list of opportunities but is meant to highlight organizations with established programs targeted toward high school students.

****Please note the following:***

- ***Many of the opportunities listed below are competitive. Most require an application process with FALL and WINTER deadlines.***
- ***Most opportunities require tuition but some are free of cost or provide financial aid.***
- ***Some opportunities are single gender programs.***
- ***Most opportunities offer residential and commuter options.***

For More Information

If you have any questions or are aware of additional opportunities that are not listed on this Guide, please contact Paige Cucchi at 404-931-0004 or p_cucchi@comcast.net

ASTRONOMY, SPACE SCIENCE

LOCAL:

-none at this time-

NATION / WORLDWIDE:

[Advanced Space Academy](#) – AL

ADVANCED SPACE ACADEMY® is an adventure where high-school trainees are immersed in science, technology, engineering and math (STEM) education while focusing on college and career preparation. During the five-night program, trainees will get hands-on training, as well as learn about the mental, emotional and physical demands astronauts, engineers and technologists must face. Trainees will experience microgravity in our Underwater Astronaut Trainer*, a tumble spin in our Multi-Axis Trainer, and they'll learn what it's like to walk on the moon in our 1/6th gravity chair. Advanced Space Academy is a college-accredited program through the University of Alabama-Huntsville (UAHuntsville). Students will earn one hour of freshman-level general science credit from UAHuntsville. Students will also receive an information sheet explaining how they can have the credit transferred to another college or even their high school to be part of their official transcript.

[Aldred University Astronomy Camp](#) - NY

This camp is designed for students entering grades 10-12 who love astronomy and want to spend time learning more about this fascinating subject with other students who share their passion. When not in class, students enjoy planned activities on campus as well as free time for relaxation. Living, dining and learning together, students have ample opportunity to get to know each other well and develop lasting friendships. This popular program is directed and taught by the Alfred University Physics and Astronomy faculty, all recognized experts in their fields. Current research interests of the faculty include variable stars, asteroid measurements, the study of solar activity, computational physics and fluid dynamics. The program is conducted in the AU Science Center and at the Stull Observatory on the Alfred University Campus. The number of campers is kept small to allow for individualized attention and optimal use of the observatory's telescopes and other equipment. Attendance ranges from 20-25 each year.

[Astronomy Camp](#) – AZ

Astronomy Camp promotes an authentic understanding of science, research, and engineering among young students and adults by providing unique, hands-on adventures in scientific exploration via astronomy and related subjects. The Camps provide residential, "immersion" experiences at major astronomical observatories. The camp faculty includes faculty, researchers, educators, graduate students, and undergraduates from around the world. Student-staff ratio ~3:1 .

[NASA One Stop Shopping Initiative \(OSSI\)](#) - Multiple locations

The Student Online Application provides access to information on NASA Internships, Fellowships, and Scholarships. This system is an innovative system that allows students to search and apply for all types of higher-education NASA internship, fellowship and scholarship opportunities all in one location. A single internship or fellowship application places the student in the applicant pool for consideration by all NASA mentors.

[NASA's Women In STEM High School Aerospace Scholars \(WISH\) – TX](#)

NASA program for female high school at NASA's Johnson Space Center in Houston, Texas, where they will work alongside female NASA engineers and interns to design a mission to Mars. Approximately 40 WISH students will work in collaborative teams doing hands-on activities and presenting their projects to NASA personnel and community leaders.

BIOMEDICAL SCIENCES, MEDICINE, NURSING, HEALTH CARE

LOCAL:

[Children's Health Care of Atlanta](#)

Children's is a pediatric hospital and pediatric physician teaching site for Emory University School of Medicine and Morehouse School of Medicine. The summer VolunTEEN Program at Children's is available for high school students ages 15 to 18. Volunteering can be done at Children's at Egelston, Hughes Spalding, or Scottish Rite. VolunTEENS are placed in areas throughout the hospital ranging from customer service.

[Emory University School of Medicine Summer Science Academy](#)

The Emory University School of Medicine hosts this two-week program, which can be taken as a residential program or a day program. The academy was created to be “a learning atmosphere where a student's natural curiosity of science could be encouraged and freed from the constraints of time, grades, and the distractions of those whose interests were minimal.” Students research a scientific topic of their choice, participating in lectures, field trips and hands-on labs.

[Shepherd Center](#)

Shepherd Center is a private, not-for-profit hospital specializing in medical treatment, research and rehabilitation for people with spinal cord injury and brain injury. Volunteer opportunities in a variety of areas.

[Vivien Thomas Summer Research Program, Morehouse University School of Medicine](#)

The Vivien Thomas Summer Research Program (VTRSP) of Morehouse School of Medicine (MSM) is a six week program established in 2002 to recruit high school students to serve as apprentices in biomedical research laboratories. Students are mentored by an MSM research faculty and they conduct research by learning the content, process, and methodology involved in inquiry science.

[Wesley Woods Center Facility](#)

Wesley Woods is one of the first comprehensive outpatient and acute-care facilities to specialize in geriatric or elder care. Wesley Woods Center is the specialty geriatric health care component of Emory Healthcare. VolunTeen Program during the summer months for youth ages 15 to 18 years who wish to learn and make a contribution to our geriatric population. Most continue to volunteer throughout the year.

NATION / WORLDWIDE:

[National Cancer Institute Werner H. Kirsten Student Intern Program - MD](#)

The Werner H. Kirsten Student Intern Program (WHK SIP) at the Frederick National Laboratory for Cancer Research (FNLCR) is designed to expose high school seniors to research and administrative management in a

health care environment. The scientific interns experience the basic methods of biomedical research through “hands-on” laboratory training. The students in the Internships in Support of Science/Research are assigned projects in budget, personnel, information technology, graphics and media.

[National Heart, Lung and Blood Institute Summer Internship In Biomedical Research](#) - MD

The goal of the Summer Internship Program in Biomedical Research at NHLBI is to expose students to research investigation in a highly enriched environment that is devoted exclusively to biomedical research and training. The Program is open to high school and college, graduate or Medical and Dental Students. Participants join a research laboratory for a minimum of ten weeks between June and August and conduct research in selected areas of investigation under the guidance of an NHLBI intramural research scientist. To augment the training experience, students participate in a Seminar Series at the NHLBI, as well as the National Institutes of Health Summer Seminar Series and Summer Research Program Poster Day.

[National Institute of Arthritis and Musculoskeletal Diseases Summer Internship Program](#) - MD

Programs provides an opportunity to work side-by-side with some of the leading scientists in the world, in an environment devoted exclusively to biomedical research. Outstanding opportunities exist for high school, undergraduate, graduate and medical students contemplating a career in biomedical research or academic medicine. Intramural investigators pursue diverse projects in biomedical research ranging from fundamental analyses of protein structure and function involving crystallography, cryoelectron microscopy, and atomic force microscopy, through protein chemistry, cell biology, signal transduction, gene regulation, tissue development and differentiation, genetics and immunology to more directly applicable research on the genetics etiology, pathogenesis and treatment of a variety of rheumatic, autoimmune, inflammatory, joint, skin, and muscle diseases.

[National Institutes in Environmental Health Services Summer Internship Program](#) - NC

The Summer Internship Program provides internships to outstanding high school, undergraduate, and graduate students interested in pursuing careers in the biomedical/biological sciences to work on a research project that entails exposure to the latest biochemical, molecular, and analytical techniques in a given field. Participants are selected by scientific mentors from the NIEHS Division of Intramural Research.

[National Institute of Neurological Disorders and Stroke's Summer Program in the Neurological Sciences](#) - MD

The Summer Program in the Neurological Sciences offers a unique opportunity for academically talented high school, undergraduate, graduate, and medical students to receive first-rate training in neuroscience research. The internships provide students with a highly stimulating and rewarding summer research experience, with a view towards encouraging students to pursue advanced education and training in the biomedical sciences and future careers in scientific investigation, particularly basic and clinical research in the neurological sciences. Summer research training is designed to supplement and give practical meaning to students' academic course work. At the same time, students will make a valuable contribution to the NINDS research mission. At the end of the summer, students participate in the NIH Summer Research Program Poster Day. Poster Day gives students the opportunity to present their summer research before the NIH scientific community. Students also participate in meetings and seminars in their individual laboratories. In addition, students attend formal lectures and symposia dealing with the newest advances in health research.

[National Institutes of Health \(NIH\) Summer Internship Program In Biomedical Research \(SIP\)](#) - MD

SIP provides an opportunity to spend a summer working at the NIH side-by-side with some of the leading scientists in the world, in an environment devoted exclusively to biomedical research. Internships cover a minimum of eight weeks, with students generally arriving at the NIH in May or June.

[Stanford Institutes of Medicine Summer Research Program \(SIMR\)](#) - CA

The program is an eight-week program in which high school students from diverse backgrounds are invited to perform basic research with Stanford faculty, postdoctoral fellows, students and researchers on a medically-oriented project.

[University of Minnesota Lillehei Heart Institute Summer Research Scholarship Program](#) - MN

Annual summer research scholarships in cardiovascular medicine. These highly competitive, prestigious scholarships are designed to expose highly qualified students to several disciplines within cardiovascular medicine. Each scholar will be supported by a named research scholarship. The major focus will be intensive basic or clinical research as each scholar will be assigned a laboratory and a faculty mentor. In addition, scholars will be introduced to clinical, industrial, and academic medicine through a variety of field trips, seminars and hands on experiences. Weekly seminars by faculty and industry leaders will be given to offer the scholar a window into career opportunities in cardiovascular science and medicine. The goal of these scholarships is to encourage medical and scientific careers in Cardiovascular Medicine.

[Vanderbilt University Research Internship Program](#) - TN

The Research Experience for High School Students (formerly Research Internship Program) is an intense 6-week scientific research internship at Vanderbilt University, centering on full immersion in a Vanderbilt University or Vanderbilt University Medical Center research lab. Students engage in an independent research project under the mentorship of a research faculty member at Vanderbilt.

ENGINEERING, TECHNOLOGY, COMPUTER SCIENCE

LOCAL:

[Camp Euclid - A Mathematics Research Camp](#)

Camp Euclid is a mind-tingling mathematics research program for middle school and high school students. Participants will encounter solution-defying math problems (which have never been solved before). Mull over and grapple with tantalizingly difficult math problems within a circle of fellow researchers. The program is associated with the University of Georgia.

[Center for Education Integrating Science, Mathematics, and Computing – Georgia Institute of Technology \(CEISMIC\)](#)

CEISMIC Summer P.E.A.K.S. (Programs for Enrichment and Accelerated Knowledge in STEM) are hands-on, interactive learning experiences. Summer P.E.A.K.S. give participants the chance to enhance learning during the summer in experiential activities on campus at Georgia Tech. P.E.A.K.S. cover many different Science, Technology, Engineering, and Mathematics (STEM) concepts.

[Engineering Career Conference \(ECC\) – Georgia Institute of Technology](#)

The Georgia Tech Women In Engineering (WIE) Program presents the Engineering Career Conference (ECC) for current Sophomore, Junior and Senior high school students. This is a 2-day investigation of engineering majors and careers.

[Exploring Engineering Academy - Georgia Institute of Technology](#)

Engineering-themed summer camp at Georgia Tech for youth to explore hands on engineering activities. Sponsored by the Atlanta Area Council Summer Camp focusing on activities related to a particular engineering discipline (electrical, industrial, transportation, mechanical, civil, architecture, aeronautical).

[Hands-On-Tech - HOT Days @ Georgia Institute of Technology](#)

Hands-On-Tech - HOT Days @ GT is a one-week long summer enrichment program designed to introduce metro Atlanta high school students to Electrical and Computer Engineering (ECE) concepts. Program attendees will be exposed to a wide variety of hands-on activities, including building a computer, working with robots, using music synthesis technology, building simple digital logic circuits, constructing a speaker from common household parts, and tours of various research labs. Program is open to rising sophomores and juniors.

NATION / WORLDWIDE:

[Alaska Summer Research Academy \(ASRA\) - AK](#)

ASRA offers engaging and in-depth experiences in science and engineering. During the summer, ASRA offers an intensive, two-week learning experience for students with an interest in science, technology, engineering and math. Students study one subject (module) and work in small teams participating in project based learning in a college-like environment. Students live in dorms on the UAF campus for this two week program. Some modules take students off campus to remote areas of Alaska for field work.

[C-Tech2 - Computers and Technology at Virginia Tech - VA](#)

Virginia Tech's College of Engineering program designed to help develop and sustain the interests of women in engineering and the sciences. The program allows you to explore applications of engineering, math, and science in a way that is fun and exciting. You will spend the majority of your time involved in hands-on activities designed to increase your interest in and knowledge of applications of engineering, math, and science to real world situations. The target population for the program is rising junior and senior high school girls.

[Carnegie Mellon Summer Academy for Mathematics and Science - PA](#)

The Summer Academy for Mathematics and Science is a rigorous residential summer experience for good students who have a strong interest in math and science and want to become excellent students. Students who are entering their junior or senior year and are considering careers in engineering, science and other math-based disciplines are eligible to apply. Students must be at least 16 years old to participate in this program. The program will focus on creating interest in technical disciplines and building academic and personal skills to better prepare you for the college application process.

[Cornell University CURIE Academy](#) - NY

The CURIE Academy is a one-week summer residential program for high school girls who excel in math and science. The focus is on juniors and seniors who may not have had prior opportunities to explore engineering, but want to learn more about the many opportunities in engineering in an interactive atmosphere.

[Johns Hopkins Engineering Innovation Summer Program](#) - MD

Through Engineering Innovation, high school students put engineering concepts to the test. Applying their knowledge of math and science to labs and hands-on projects, concepts they've learned in their high school classrooms are suddenly linked to real-world practice. Students' confidence grows as they attend college-level lectures, tackle problems, test theories, and ultimately learn to think like engineers.

[Massachusetts Institute of Technology \(MIT\) Research Science Institute](#) - MA

Each summer, 80 of the world's most accomplished high school students gather at the MIT for the Research Science Institute (RSI). Participants experience the entire research cycle from start to finish. They read the most current literature in their field, draft and execute a detailed research plan, and deliver conference-style oral and written reports on their findings. RSI scholars first participate in a week of intensive STEM classes with accomplished professors. The heart of RSI is the five week research internship where students conduct individual projects under the tutelage of mentors who are experienced scientists and researchers. During the final week of RSI, students prepare written and oral presentations on their research projects.

[Michigan Math and Science Scholars Program](#) - MI

MMSS is a program designed to introduce high school students to current developments and research in the sciences and to encourage the next generation of researchers to develop and retain a love of mathematics and science. MMSS features small 15-student classes taught by University of Michigan professors, as well as other outstanding instructors from across the country. The small class size allows the student to receive a deeper exposure to a particular subject and to evaluate the University of Michigan not only as a summer program, but also as a place for future studies. Students take only one class per session and spend the majority of the day working on the class

[NC State Engineering Camp](#) - NC

The College of Engineering at NC State University offers High School students the opportunity to experience engineering, science and technology at NC State. They offer a multidisciplinary week-long day camp for rising 9th and 10th graders and discipline-specific residential camps for rising 11th and 12th graders. The residential program allows students to explore a particular field of engineering in more depth while also experiencing college life at NC State University.

[Smith College Summer Science and Engineering Program \(SSEP\)](#) - MA

SSEP is a four-week residential program for exceptional young women with strong interests in science, engineering and medicine. Each July, select high school students from across the country and abroad come to Smith College to do hands-on research with Smith faculty in the life and physical sciences and in engineering.

[St Cloud University Scientific Discovery Program](#) - MN

This is a special program for high ability, high potential 9th and 10th grade students who demonstrate a strong interest in science and/or mathematics. Participants will experience biological, chemical, computer sciences, mathematical, social and statistical sciences through laboratories, special demonstrations, presentations, field trips and lectures related to water quality and solid waste management. Participants will use the knowledge

and skills they develop to conduct research on topics that have social and environmental significance in their communities. University and practicing scientists will work closely with the student in identifying, designing, developing and implementing the research project.

[St Cloud University Advanced Program in Technology and Science](#) - MN

This is a special program for high ability, high potential 10th and 11th grade students who are seriously interested in a future in technology, science, mathematics or engineering. The three-week residential program will focus on scientific research for students from historically underrepresented groups and expose them to career options in technology. They will meet positive role models in these fields. Sessions will encourage professional mentor/mentee relationships. Students of color and female students are encouraged to apply.

[Summer Academy in Applied Science & Technology \(SAAST\) School of Engineering at the University of Pennsylvania](#) - PA

Summer Academy in Applied Science & Technology (SAAST) offers a unique opportunity for a selective group of highly motivated and talented high school students to experience rigorous and challenging college-level coursework. The Academy's intensive, three-week programs combine sophisticated theory with hands-on practical experience in cutting edge technologies.

[Summer Academy in Applied Science and Technology \(SAAST\) - School of Engineering & Applied Science at the University of Pennsylvania](#) - PA

A unique program for a selective group of high school students to experience rigorous and challenging college-level coursework. The three-week SAAST combines sophisticated theory with hands-on practical experience in cutting-edge technologies. Students can earn college credit in the five programs offered: *Biotechnology, Computer Graphics, Computer Science, Nanotechnology, & Robotics*.

ENVIRONMENT, ECOLOGY, CONSERVATION, WEATHER, CLIMATE

LOCAL:

[Arabia Mountain National Heritage Area](#)

The Arabia Mountain National Heritage Area in DeKalb County includes the Davidson-Arabia Nature Preserve and Panola Mountain State Park. These areas offer hiking, biking and AWARE, the Atlanta Wild Animal Rescue Effort rescues sick or injured wild animals, rehabilitates them at their facility and returns them to the wild. Volunteers needed for a variety of activities.

[Chattahoochee River National Recreation Area](#)

The Chattahoochee River is a National Recreation Area (NRA). The NRA offer opportunities to float, fish, or play in 48 miles of river as it flows through the northern suburbs of Atlanta. The NRA also offers 15 land units and miles of trails. Volunteers needed for a variety of activities.

[Dunwoody Nature Center](#)

Dedicated to inspiring a love of nature and cultivating environmental understanding and stewardship by. Volunteers needed for service-day projects (Hands On Atlanta day, etc) and ongoing service activities.

[Fernbank Museum of Natural History FUN Program](#)

The Fernbank Ultimate Naturalist program, also known as the FUN volunteer program, is an opportunity for youth ages 12-17 to be directly involved public events at Fernbank Museum. FUN volunteers staff discovery carts that teach museum visitors about dinosaurs, ancient sea life and archaeology. FUN volunteers also assist with special family event days, assist with educational programming and help with other special projects.

[Georgia Organics](#)

Non-profit dedicated to promoting sustainable foods and local farms in Georgia. Focus on organic farming techniques, local food system development and farm to school. Volunteer opportunities in a variety of areas.

[Piedmont Park Conservancy](#)

The nonprofit organization, working with the City of Atlanta, to preserve historic Piedmont Park as a vital urban green space and as a cultural and recreational resource that enhances the quality of life for all Atlantans. Volunteer opportunities in a variety of areas.

[TLW Center for Natural Urban Agriculture](#)

Non-profit urban farm that works to engage the community in developing local food systems through education and sustainable food production. Volunteer opportunities in a variety of areas.

[The Wylde Center](#)

Engages youth, families, and individuals in their environment and health within communities. Focuses on sustainable urban living, organic gardening, health and nutrition. The youth program is one of the largest youth service organizations in the metro-area and provides extensive youth education programs year-round focusing on developing creative skills in organic gardening as well as health and nutrition. Volunteer opportunities in a variety of areas.

NATION / WORLDWIDE:

[EarthWatch](#) - Various Locations

Earthwatch Teen Expeditions are designed specifically and exclusively for 15 to 18 year olds, and are completely different to any other experience teenagers can have. Working with projects all around the world, they're hands-on, engaging and meaningful - providing unrivalled opportunities to undertake vital, peer reviewed scientific field research under the supervision of skilled research teams in a professional setting.

[Florida A&M University - School of the Environment Summer Camp](#) - FL

The Florida A&M University School of the Environment Summer Camp is sponsored by the National Oceanic and Atmospheric Administration (NOAA) Environmental Cooperative Science Center (ECSC). The camp is a three-week day camp for current eight through eleven grade students with an interest in NOAA related STEM (Science, Technology, Engineering and Math) disciplines.

[National Park Service Youth Conservation Corps \(YCC\)](#) - Various Locations

The Youth Conservation Corps (YCC) is a summer work youth program in federally managed lands. The [National Park Service](#), [US Forest Service](#), [US Fish and Wildlife Service](#), and [Bureau of Land Management](#) employ teens each summer to participate in the YCC experience. The YCC has introduced young Americans to conservation opportunities in public lands since the program was created in 1970. Since its inception, the YCC

has worked with many conservation agencies throughout the country to provide educational and team building skills to young people through participation in work projects. Parks with residential programs include [Yellowstone](#) and [Yosemite](#) National Parks.

[NOAA Center for Atmospheric Sciences \(NCAS\) CAREERS Weather Camps](#) - Various Locations

Channeling Atmospheric Research into Educational Experiences Reaching Students (CAREERS) is a national program. CAREERS consist of a network of summer science camps with a primary focus on Atmospheric/Weather and Climate Sciences for middle school (MS) and high school (HS) students. The weather camp is supported by funds from the NOAA Educational Partnership Program for Minority Serving Institutions (EPP/MSI) through the NOAA Center for Atmospheric Sciences (NCAS) at Howard University. NCAS CAREERS Weather Camps are free of charge. Camps held in various cities.

[The Nature Conservancy LEAF Program](#) – Various Locations

The Leaders in Environmental Action for the Future (LEAF) program provides paid summer internships for students in nature preserves across the nation. The program provides students with both career development and a hands-on environmental stewardship experience. Working with mentors and scientists, LEAF interns are well-supported and guided to gain work and life skills within a context of connecting with nature.

MARINE BIOLOGY, OCEANOGRAPHY

LOCAL:

[Georgia Aquarium](#)

The world's largest aquarium, featuring more animals than any other aquarium in more than ten million gallons of water and sixty exhibits. The Georgia Aquarium Youth Volunteer Program is a four month program that gives 14 & 15 year olds the chance to learn more about the oceans, their animals, & the Georgia Aquarium.

NATION / WORLDWIDE:

[Acadia Institute of Oceanography](#) - ME

A Summer Camp Program for Marine Science Studies based in Seal Harbor, Maine - study tidepool diversity, observe whales, seals and porpoises, explore careers in marine science, hike Acadia's mountains, collect tank specimens, snorkel in the ocean, and more! AIO offers a limited number of scholarships for each session.

[BroadReach Marine Biology Programs](#) – Various Locations

Broadreach marine biology experience is a full-on, hands-on learning adventure, under the guidance of some of the world's top oceanographers, marine scientists and conservationists. Middle school and high school students get to study marine biology in a way that few can, hopping from one island to the next on a live-aboard yacht, or living and working at renowned research centers. Programs in Costa Rica, Peru, the Caribbean and Fiji.

[Dolphin Research Center](#) - FL

The Teen Basic DolphinLab is a seven-day program that surveys a wide range of knowledge, theories and ongoing research concerning dolphins, the marine environment and related issues. Students meet DRC's resident dolphin population, learning to respect each dolphin as an individual through observation of their unique behavioral and physical characteristics.

[Lawrence Hall of Science Marine Biology Research Camps University of California Berkley](#) - CA

Lawrence Hall of Science Wildlife and Marine Biology Research Camps are unique, intensive programs where students engage in wildlife study and conduct experiments at a college level. The Marine Biology Research Camp helps students develop investigation skills used in marine biology at the University of California Bodega Marine Lab, located at Bodega Bay on the Sonoma County coast, surrounded by rocky tide pools, mudflats, estuaries, coastal dunes, and sandy beaches. Students conduct research projects of their own design with guidance from Hall instructors and scientists. Supervised evening activities offer time to relax, make friends, and play volleyball on the beach.

[MarineQuest-University of North Carolina Wilmington](#) - NC

Providing hands-on marine science academic enrichment camps for ages 5-17, including the OCEANS residential camp for ages 15 and up designed to help students explore career options and gain first-hand experience using a variety of field equipment to collect data and monitor the marine environment. Students participate in a full day research cruise trawling to collect specimens and learning how to use aboard ship instruments. Discover how underwater remotely operated vehicles support ocean exploration and try your hand at flying our Video Ray. Students can elect to participate in a PADI Discover SCUBA diving course - no prior experience necessary!

[Mote Marine Laboratory High School Intern Program](#) - MA

The Mote High School Internship Program provides high school students with a dynamic, hands-on marine science experience that complements their traditional academic studies. It's perfect for students who are excited about marine biology, curious about Mote's exhibit animals, interested in ocean conservation, and ready to participate in a structured research project. The application process is competitive and the internship requires a significant commitment of time and energy, but participation has many rewards. Interns become a valued part of the Mote staff as they assist with marine research, animal care, and the delivery of our education programs.

[Oceanography of the Gulf of Maine \(OGM\)](#) - ME

OGM is an 18-day program open to rising high school juniors, seniors, and college freshmen who have successfully completed two high school science courses. SEA and Cornell University's Shoals Marine Lab have partnered to offer this course focused on the marine environments of the Gulf of Maine. The program includes a shore component at Shoals Marine Lab on Appledore Island, Maine, and a sea component aboard one of SEA's sailing research vessels, the SSV Corwith Cramer. During the shore component, students study near-shore coastal ecology and oceanography specific to the region. During the sea component, students study offshore ocean-ography, nautical science, and act as members of the ship's crew. Students earn three (3) undergraduate college credits from Cornell University upon successful completion of the program.

[Ocean for Life: One World, One Ocean](#) - CA

Ocean for Life is a two-week field study marine biology and cultural exchange program that selects students from the U.S. and middle east to study in Santa Barbara, California and on Santa Cruz Island. The program is a

partnership between the National Oceanic and Atmospheric Administration's Office of National Marine Sanctuaries, The GLOBE (Global Learning and Observations to Benefit the Environment) Program and the National Marine Sanctuary Foundation. It is presented in collaboration with Jean-Michel Cousteau's Ocean Futures Society and American University's Center for Environmental Filmmaking. The next proposed Ocean for Life field study will take place in summer 2015. **Free.**

[REEF Marine Conservation Internships](#) - FL

The Reef Environmental Education Foundation offers four month internships with housing provided. Duties include a wide range of environmental nonprofit activities with four days in the office and one day diving each week. First Aid, CPR, and SCUBA certification required. The Internship provides an in-depth look into nonprofit operations and marine conservation programs. The internship is geared to college-age individuals (Juniors, Seniors, recent graduates & graduate students) and provides diverse experiences through REEF's marine conservation programs and opportunities to participate in the programs of REEF's partners. During the internship you'll have many opportunities to dive and volunteer with partner organizations, as well as implement community outreach/education programs focused on reef fish identification and lionfish handling/collection. Please explore the information below for details and application instructions.

[USC Sea Grant Program](#) -CA

Weeklong Summer Science Programs provide middle school and high school students the opportunity to visit the USC Phillip K. Wrigley Marine Science Center on Catalina Island, and other coastal sites. Over the course of a week, students get amazing opportunities to work with local researchers, conduct their own research projects, learn about careers in marine science, build their own ROVs and explore the marine protected areas around the island. Check out the video below of the 2012 Summer Science Week!

[Science at SEA](#) - MA

Science at SEA is a 17-day program for high school sophomores, juniors, and seniors focusing on the coastal and offshore marine environment around Cape Cod, Massachusetts. The program includes a shore component on the SEA campus in Woods Hole, MA, and a sea component aboard one of SEA's sailing research vessels, the SSV Corwith Cramer. During the shore component, students study the marine environment from a variety of perspectives: scientific, historical, literary, and nautical. This is an academic program complete with written assignments and tests. During the sea component, students study offshore oceanography, nautical science, and act as members of the ship's crew. Students are evaluated on achievement and effort.

[Oceanography of the Southern California Bight](#)

Oceanography of the Southern California Bight (OSCB) is an 18-day program for high school sophomores, juniors, and seniors focused on the marine environments of the California coast. The program includes a shore component at the University of Southern California's Wrigley Institute for Environmental Studies, and a sea component aboard one of SEA's sailing research vessels, the SSV Robert C. Seamans. During the initial sea component, students study offshore oceanography, nautical science, and act as members of the ship's crew. The subsequent shore component at Wrigley allows students to study near-shore marine biology and ecology specific to the region.

[WhaleCamp at the Fundy Marine Science Institute](#) -

The Fundy Marine Science Institute goal is to use hands-on, discovery-oriented marine science activities to increase awareness and understanding of these living systems and by extension the living systems of our oceans and planet. The Whale Camp is dedicated to providing marine biology experiential educational

programs and facilities for learning about the dynamic marine ecology of the Bay of Fundy as well as the coastal, terrestrial and human ecologies of Grand Manan Island.

[Woods Hole Science Aquarium \(WHSA\)](#) - MA

The Woods Hole Science Aquarium (WHSA) offers three and five week summer programs for high school students. Programs include a five-week internship and two two-week seminars devoted to careers in marine science. All three programs are designed for students who are interested in marine science and marine animals, aquarium operations, and marine education and conservation. Interns in the five-week program will spend approximately 25 hours per week in the aquarium helping to care for animals. The interns will learn about animal husbandry and will be trained as assistant naturalists for shore-side collecting trips for the public. Interns are expected to help with cleaning tanks, preparing fish food, and other animal husbandry chores that can be messy and smelly.

MATHEMATICS

LOCAL:

[Camp Euclid - A Mathematics Research Camp](#)

Camp Euclid is a mind-tingling mathematics research program for middle school and high school students. Participants will encounter solution-defying math problems (which have never been solved before). Mull over and grapple with tantalizingly difficult math problems within a circle of fellow researchers. The program is associated with the University of Georgia.

[Center for Education Integrating Science, Mathematics, and Computing – Georgia Institute of Technology \(CEISMC\)](#)

CEISMC is a partnership uniting the Georgia Institute of Technology with educational groups, schools, corporations, and opinion leaders throughout the state of Georgia. CEISMC Summer P.E.A.K.S. (Programs for Enrichment and Accelerated Knowledge in STEM) are hands-on, interactive learning experiences. Summer P.E.A.K.S. give participants the chance to enhance learning during the summer in experiential activities on campus at Georgia Tech. P.E.A.K.S. cover many different Science, Technology, Engineering, and Mathematics (STEM) concepts.

NATION / WORLDWIDE:

[AwesomeMath Summer Program](#) - TX

A three-week intensive summer camp at the University of Texas- Dallas, for mathematically gifted students from around the globe. An initiative in response to parents and teachers of bright students who have not yet shone at the Olympiad level, as well as of those who would like to expand what they have learned in programs such as MATHCOUNTS. These talented students wish to hone their problem solving skills in particular and further their mathematics education in general. Many of our participants seek to improve their performance on contests such as AMC10/12, AIME, or USAMO.

[Cornell University CURIE Academy](#) - NY

The CURIE Academy is a one-week summer residential program for high school girls who excel in math and science. The focus is on juniors and seniors who may not have had prior opportunities to explore engineering, but want to learn more about the many opportunities in engineering in an interactive atmosphere.

[Hampshire College Summer Studies in Mathematics \(HCSSiM\)](#) – MA

HCSSiM is a six-week summer program for mathematically talented high school students that is both demanding and expanding. Participants are expected to spend a major portion of each day actively engaged in learning, doing, and sharing mathematics. The daily schedule includes 4 hours of class meetings each morning, Monday-Saturday, the Prime Time Theorem in the afternoon, and problem sessions in the evening. Afternoons are devoted to rest, recreation and informal study. Participants have unparalleled access to faculty members in both formal and informal settings, and many form lifelong friendships and collaborations with fellow students and faculty.

[Mathworks Honors Summer Math Camp \(HSMC\)](#) - TX

HSMC is an intensive multi-summer program at Texas State University for high school students who are excited about doing mathematics-- the goal of the program is to develop talented youth of all backgrounds by an immersive and in-depth experience in a unique learning environment. Students develop important skills for future degrees and careers in math, science, engineering, and many other fields.

[Michigan Math and Science Scholars Program](#) - MI

MMSS is a program designed to introduce high school students to current developments and research in the sciences and to encourage the next generation of researchers to develop and retain a love of mathematics and science. MMSS features small 15-student classes taught by University of Michigan professors, as well as other outstanding instructors from across the country. The small class size allows the student to receive a deeper exposure to a particular subject and to evaluate the University of Michigan not only as a summer program, but also as a place for future studies. Students take only one class per session and spend the majority of the day working on the class

[Program in Math for Youth Scientists \(PROMYS\)](#) - MA

PROMYS is a six-week summer program at Boston University designed to encourage strongly motivated high school students to explore in depth the creative world of mathematics in a supportive community of peers, counselors, research mathematicians, and visiting scientists.

[Ross Mathematics Program](#) - OH

The Ross Program at the Ohio State University is an intensive summer experience designed to encourage motivated pre-college students to explore mathematics. During those six weeks, students are immersed in a world of mathematical discovery.

[Rutgers Young Scholars Program in Discrete Mathematics](#)

A summer program for mathematically talented high school students. It provides a mathematically rich environment to high school students interested in mathematics, and is designed to encourage them to consider careers in the mathematical sciences. Selected students participate in an intensive four-week residential academic program that provides a challenging introduction to discrete mathematics -- a new and growing area of the mathematical sciences with many applications on the cutting edge of modern research.

[Stanford University Mathematics Camp](#) - CA

SUMaC brings mathematically talented and motivated high-school students from across the United States, and from around the world, to Stanford University for four weeks of serious mathematical pursuits. SUMaC includes an intensive course in higher mathematics; a guided research project that allows students to individually pursue a focused area of interest, related to the course; a guest lecture series covering a range of topics, given by internationally-known research mathematicians; group problem-solving sessions and individual tutoring; and social events and outings.

[St Cloud University Scientific Discovery Program](#) - MN

This is a special program for high ability, high potential 9th and 10th grade students who demonstrate a strong interest in science and/or mathematics. Participants will experience biological, chemical, computer sciences, mathematical, social and statistical sciences through laboratories, special demonstrations, presentations, field trips and lectures related to water quality and solid waste management. Participants will use the knowledge and skills they develop to conduct research on topics that have social and environmental significance in their communities. University and practicing scientists will work closely with the student in identifying, designing, developing and implementing the research project.

[St Cloud University Advanced Program in Technology and Science](#) - MN

This is a special program for high ability, high potential 10th and 11th grade students who are seriously interested in a future in technology, science, mathematics or engineering. The three-week residential program will focus on scientific research for students from historically underrepresented groups and expose them to career options in technology. They will meet positive role models in these fields. Sessions will encourage professional mentor/mentee relationships. Students of color and female students are encouraged to apply.

[Stony Brook University Mathematics Summer Camp](#) - NY

The program is designed for students who will be entering their junior or senior year in high school and who have an interest in enriching their mathematics education. During the two-week program students will explore several branches of mathematics. In addition students will learn to use MAPLE, an invaluable tool for anyone who is interested in studying Mathematics, Physics, Engineering, or Economics at the college level or beyond.

[Summer Math and Science Honors Academy](#) - CA

SMASH scholars spend five weeks each summer at a SMASH site on a college campus (currently located at UC Berkeley, Stanford, UCLA and USC) immersed in rigorous STEM classes. SMASH Scholars live on campus for five weeks each summer (after their 9th, 10th and 11th grade years) with other high potential Black, Latino/a, Native American, Southeast Asian or Pacific Islander high school students. SMASH scholars also receive year-round academic support including access to SAT prep online materials, college counseling, financial aid workshops and other activities to ensure continued academic success. SMASH is expanding to additional college campuses NATION / WORLDWIDE in the future.

[UCLA's Science Mathematics Achievement and Research Technology for Students Program \(SMARTS\)](#) - CA

Six-week summer college preparation program at UCLA designed to engage traditionally underrepresented students in rigorous science, technology, engineering and math instruction and training. SMARTS participants engage in a number of activities, including math courses (Introduction to Statistics and AP Calculus Readiness), SAT preparation, research, and college and career planning workshops. A hallmark of SMARTS is the Research Apprenticeship Program (RAP). Through this unique opportunity, approximately 10 - 15 students are able to add

research assistant to their portfolio, as they successfully complete six weeks of research in UCLA labs. Research projects, mentored by graduate students, are conducted in frontier engineering, science and computing areas which range from Nanotechnology to Molecular Genetics.

PUBLIC HEALTH, EPIDEMIOLOGY, SOCIAL SERVICES

LOCAL:

[AID Atlanta](#)

AID Atlanta provides services to people living with HIV/AIDS and their loved ones through volunteer support, case management, emergency assistance, health services, housing support and education. Client services, the base of the case management program, supports the communities clients live in through programs like Pediatrics, Street Home, and Women in Partnership. AID Atlanta has over 10 education programs to educate the public about HIV/AIDS. Youth 13-24 years are needed to serve as peer health educators.

[Atlanta Community Food Bank](#)

Atlanta Community Food Bank (ACFB) distributes over 30 million pounds of food and other donated grocery items each year to more than 600 nonprofit partner agencies in 29 counties in Metro Atlanta and North Georgia. Volunteers needed to help sort and package food at the Product Rescue Center (PRC) where all food drive and salvaged food items are brought to be inspected and packaged by volunteers for distribution to more than 600 nonprofit partner agencies.

[Centers for Disease Control and Prevention \(CDC\)](#)

The Centers for Disease Control and Prevention (CDC), a part of the U.S. Department of Health and Human Services, is the primary Federal agency for conducting and supporting public health activities in the United States. CDC offers a Student Summer Employment Program (SSEP) that provides training and work experience for individuals during summer months. The work ranges from office support to trades and labor occupations to positions in professional fields.

[CDC Disease Detective Camp](#)

This one-week camp gives rising juniors and seniors an inside look at how the CDC works to protect public health. The program is selective. The field of applicants is narrowed based on an essay, and those who pass the essay phase are entered in a lottery for available spaces. The camp is free. Because of regulations, students must be 16 or older on the first day of camp.

[The Frazer Center](#)

THE FRAZER CENTER is a private, non-profit organization for the rehabilitation of pre-school children and adults at all levels of developmental and physical abilities. Volunteer opportunities in a variety of areas.

[Georgia Lions Lighthouse Foundation](#)

The Lighthouse Foundation provides vision and hearing loss services to the uninsured and low-income Georgians. Volunteer opportunities in a variety of areas.

NATION / WORLDWIDE:

[Global Public Service Academies](#) – Various locations

The Global Public Service Academies were founded with an understanding that students from high school through college can make a difference in the world. All of the academies are experiences in the developing world formed around a educational collaboration with faculty from Duke University, Harvard University and other universities around the country. As a participant, you'll work along side a faculty member in the classroom and in a developing world setting. Every day, you'll be working to improve health care for the poor. You'll get to know what their life is like firsthand. Most importantly, you'll be making a difference. Each academy is limited to 30 students or less per location, so it is important to get your application in on time.

ZOOLOGY, VETERINARY SCIENCES, ANIMAL HUSBANDRY

LOCAL:

[Atlanta Zoo](#)

The zoo is Atlanta's oldest cultural destination and is one of the oldest continuously operating zoological institutions in the United States. The Zoo Volunteer program focuses on growing leadership, interpersonal, and job skills while fostering responsibility, customer service and commitment. New Volunteers provide hands-on activities and answer questions about select animal exhibits. Over the course of the first year volunteers can get involved in areas such as Summer Safari Day Camp, Horticulture, and Special Events, including Boo at the Zoo and Party for the Planet.

[Fur Kids](#)

A non-profit organization that provides a cage-free, no-kill shelter for rescued animals where they can experience the best care in a loving environment until they are adopted. Each year they rescue, shelter, sterilize, rehabilitate, and place hundreds of animals in permanent, loving homes. Furkids is one of the only shelters in Georgia that welcomes people of all ages to volunteer.

[Georgia Aquarium](#)

The world's largest aquarium, featuring more animals than any other aquarium in more than ten million gallons of water and sixty exhibits. The Georgia Aquarium Youth Volunteer Program is a four month program that gives 14 & 15 year olds the chance to learn more about the oceans, their animals, & the Georgia Aquarium.

NATION / WORLDWIDE:

[Natural Leaders Network](#) - WA

Organization dedicated to empowering a worldwide youth movement to strengthen the bond between children and nature. Offers leadership and camp counselor/leadership opportunities. The Natural Leaders Legacy Camp is supported by: REI, U.S. Fish and Wildlife Service, and The North Face.