



**National Climate Adaptation Science Center and Regional Climate Adaptation Science Centers
Climate Adaptation Scientists of Tomorrow (CAST) Program
Undergraduate Research Experience**

The mission of the U.S. Geological Survey Climate Adaptation Science Centers is to deliver science to help fish, wildlife, water, land, and people adapt to a changing climate. We work in partnership with climate experts at universities, state and federal agencies, Tribal governments, and non-profit organizations.

The global climate is changing rapidly, already impacting both human and natural systems. Over the next few decades, changes in temperature, precipitation, and climatic variability are expected to drive even more change. As impacts become more pervasive, human and natural systems will accelerate adaptation. To face these challenges, the world needs a diverse group of leaders versed in the challenges of climate adaptation, aware of the multi-disciplinary nature of impacts, representative of the nation, capable of strong communication, and interested in policy-relevant science.

Program Goals:

The goals of the Climate Adaptation Scientists of Tomorrow Program are to:

- to increase Diversity, Equity, and Inclusion in Science, Technology, Engineering, and Math (STEM)
- cultivate the next generation of climate scientists
- foster climate science programs at Minority Serving Institutions (Historically Black Colleges and Universities, Tribal College and Universities, Hispanic-Serving Institutions, Asian American and Pacific Islander Serving Institutions)

Undergraduate Research Experience, Features and Benefits:

- Build your climate science skills, training, and development for two years
- Join a cohort of 12 undergraduate students with common interests across the U.S.
- Lead an undergraduate research project, in your area of interest, at a leading university
- Build strong professional partnerships with a scientist-mentor, graduate students, and faculty scholars
- Engage in university programs to foster diversity, equity, and inclusion
- Participate in trainings to prepare for a career in climate adaptation science

Eligibility:

- Participants must be enrolled as a student, full-time, at an accredited academic institution (community college, college, or university)
- Participants must be rising sophomores or juniors
- Participants must be in good academic standing (GPA 3.0 or higher)
- Students from populations historically underrepresented in the sciences are especially encouraged to apply

Financial Considerations:

- Program provides 10 weeks of room and board for two summers
- Program provides a stipend for two summers (depends on location, minimum of \$3,500 per summer)
- Program provides funds for round-trip travel to site
- Medical/health insurance is not provided

Participant Expectations:

- Full dedication to learn and build skills in two, 10-week summer research experiences (Summer 2022 and Summer 2023)
- Regular and meaningful interaction with your mentor, clarifying responsibilities, expectation, timelines, and communication preferences
- Active participation in development and training events: multiple during the Summer program and two during the academic year
- Foster a culture of respect, integrity, collaboration, and inclusion
- Produce a final report and deliver an oral presentation of your research and program experience
- Participate in program evaluations during and after program completion
- Maintain at least a 3.0 GPA for the duration of the program

Program Dates (exact dates/times to be provided at least 30 days in advance of the event):

April 2022	Participant Engagement Event: Program Launch (2 hours, Virtual)
May/June – July/August 2022	Students on campus (10 weeks)
October 2022	Participant Engagement Event (2 hours, Virtual)
March 2023	Participant Engagement Event (2 hours, Virtual)
June – August 2023	Students on campus (10 weeks)
October 2023	Participant Engagement Event: Program Close (3 hours, Virtual)

Program Locations:

- Auburn University: Located in Auburn, Alabama, participants in this program will focus on climate impacts on water systems in the Gulf of Mexico upland watersheds. Each student will be paired with two faculty mentors and a graduate-student mentor to provide guidance throughout the summer. In addition to undertaking their own research, participants will share programming with participants at Louisiana State University and participate in a culminating research symposium.
- Louisiana State University: Located in Baton Rouge, Louisiana, participants at this location will focus their research on climate impacts on the water systems of coastal environments. Mentoring will be provided by faculty scholars and a cohort of graduate students. In addition to undertaking their own research, participants will share programming with participants at Auburn University and participate in a culminating research symposium in Auburn, Alabama.
- University of Colorado, Boulder: Located in Boulder, Colorado, participants at this location will partner with regional Tribal Colleges and Universities to advance inclusion of Indigenous perspectives in climate adaptation science. Undergraduates will receive one-to-one mentorship from an on-campus graduate student and faculty member. The participants will work with identified mentors to identify relevant research projects and engage with other on-campus programs to gain experience in the field.
- University of Massachusetts Amherst: Located in Amherst, Massachusetts, participants will join a center with existing programs to expand the perspectives in climate adaptation research. The undergraduates will receive mentoring from other undergraduate programs, dedicated graduate students, and faculty scientists. In consultation with faculty, the participants to contribute to existing research projects focused on invasion ecology, biogeography, coastal hazards or climate change ecology.

How to apply:

Applications can be submitted via webform located here: [Application Link](#)

The application will include questions about your interest and three short essays (200-300 words). We strongly recommend drafting a response to the essays outside of the submission system and then, when complete, copying into the submission system.

Please be prepared to upload a resume and unofficial transcript. Please also be prepared to submit the names and contact information for two references.

Applications must be submitted by 5:00PM EST on Monday, December 20, 2021.

Application Process and Timeline

November 01, 2021	Call for undergraduate applicants
November 12, 2021	Informational Webinar, 2pm EST
November 18, 2021	Informational Webinar, 4pm EST
December 20, 2021	Student applications due
Week of February 07	Notification to applicants

To attend an informational webinar, please complete the registration form located [here](#).

For questions, please contact: Olivia LeDee (oledee@usgs.gov)

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