



# OAC REU Site and Supplemental Program

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# Outline



## Introduction

Your institution? Your topic? How far are you in your grant?

Suggestions: how can we improve?

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Welcome applications

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## OAC REU program overview

What are we looking for?

What to include in the budget? (don't forget student travel grant)



## Questions and answers

Annual reports

A sample project for 2022 and 2023



**Highlights:**

Everyone is welcome!

**Student Travel:** <https://www.rmbf.org/students/reu-travel-grant/>



# Advanced CI & OAC Research Scope

## What is Advanced Cyberinfrastructure (CI)?

- Set of computational, data, software, networking, and security resources, tools, and services, along with the computational and data skills and expertise, that can transform science and engineering research

OAC fosters development of new knowledge in the innovative design, development, and utilization of robust research CI:

- Translational research, i.e., building on basic research results and spanning the design to practice stages
  - Possible Additional Characteristics: multi-disciplinary, extreme-scale, driven by science and engineering research, end-to-end, and deployable as robust research CI
- Systems architecture and middleware for extreme-scale systems:
  - Design, benchmarking, and analysis; storage, networks, and input/output (I/O) Resource management, monitoring, fault tolerance, and cybersecurity
- Scalable Algorithms and Applications
  - Numerical and high-performance scientific computing methods; data, software and visualization; and modeling and simulation
- Advanced Cyberinfrastructure Ecosystem
  - programming languages, libraries, and environments; Tools, sociotechnical aspects

# OAC LWD Overview

- CAREER, CRII, REU
- CyberTraining
- Travel and Workshop proposals
- SCIPE
- GRFP, CS4ALL, CSGrad4US
- DESC, MSI, and new ones coming out soon
- CORE, CSSI (partial)

Any Suggestions?

# Introducing yourself

- Your name and institution?
- REU site topic?
- How far along are you in your project? **How many more years?**
- Any Suggestions for us?



# OAC REU Site Program Overview

School hosts summer cohort for undergraduate research

- **Coherent intellectual focus** to **research topics (the best ideas)**
- At least half the students are from institutions other than the host institution
- At least half from schools with limited research potential
- Research mentoring and support
- Social activities
- Professional development, grad school prep



# OAC REU Site Budgets (pending updates)

- No indirect costs on participant costs
- Recommended \$135K per year, < \$405K for 3 years
  - \$1,350 per student per week maximum
  - Stipend raised to \$600 per week for this solicitation
  - Stipend to graduate students as cohort assistants is allowed
  - Housing costs are rising and causing significant budget challenges
- **Mentors:** NSF **expects** that research mentors will be supported with appropriate salary for their research activities, though not necessarily through the REU grant.

[Student Travel: https://www.rmb1.org/students/reu-travel-grant/](https://www.rmb1.org/students/reu-travel-grant/)

# Renewal versus New Sites

- Renewal proposals have had prior funding for a site -- If the proposal is requesting renewal of an existing REU Site or if the department or center (or similar organizational subunit) that will host the proposed Site has hosted another REU Site during the past five years
- Some have new PI but have same school and a similar focus as the prior site seeking renewal
- Sites must re-compete every 3 years for funding
  - Renewal proposals usually more complete than new sites proposals
  - Renewals have student management and logistics issues resolved and set
  - Reviewers often have a higher bar for renewals
- New site proposals are from institutions that have not had a prior OAC site or that have a new intellectual focus and faculty group if the institution had prior OAC sites
- Each year OAC tries to balance funding between new and renewal sites



# What next?

- **Students: apply to existing sites**
  - [Home | NSF Education & Training Application | ETAP](#)
  
- **Faculty and Staff:**
  - Be a panelist to gain experience
  - Contact PD with a one-page summary
  - Post your REU to the ETAP site: [etap.nsf.gov](http://etap.nsf.gov)

# Annual reports

- All students must be listed as participants
- Describe activities of participants
  - List of projects with faculty/grad mentors & student role
  - Publications and presentations
  - Website
- Describe contributions of personnel
  - Training provided for mentors
  - Continued interaction of mentors with students during academic year?
- Include Evaluation results?
  - Participant outcomes
  - Information on applicants and participants
  - **Must include *disaggregated*** data on: race, gender, ethnicity, disability status, class (1st yr, 2nd yr, etc.), type of home institution



Share Opportunity

**Program**

OTHER, REU

**Program Period**

06/05/2023 - 08/04/2023

**Application Window**

11/01/2022 - 03/01/2023  
11:59 PM ET

**Award ID**

2150390

**Research Topics**

high performance computing, computer science, data science, math, science, engineering, visualization, machine learning, biology, social, data intensive, hpc, CI, cyberinfrastructure, social change, programming, coding, computational, medicine,

**Award Title**

REU Site: Cyberinfrastructure Research 4 Social Change

**Overview**

The Research Experience for Undergraduates (REU) Site: Cyberinfrastructure (CI) Research for Social Change Research Experience for Undergraduates (REU) at The University of Texas at Austin Texas Advanced Computing Center (TACC) is engaging 10 undergraduate students each summer for nine weeks in solving real-world problems of national relevance, teaching them to not only be critical thinkers, but to be creative and reflective as well. Students gain skills in advanced programming and problem-solving and use the CI to conduct cutting-edge research in engineering, science, and computational medicine. Research projects emphasize advanced computing as a tool to power discoveries that will impact social change for future generations. EXPERIENCE AT-A-GLANCE The enriching and transformative experience at a world-class supercomputing center includes: - Training in High Performance Computing (HPC), visualization, and data intensive computing - Mentoring by researchers at The University of Texas at Austin - Social and team-building activities - Professional development and graduate school preparation - Leadership development opportunities to develop and enhance communication skills - Technical report and publication opportunities STIPEND Participants will receive a \$5,400 stipend, housing (+ meal card) at The University of Texas at Austin, and travel arranged by TACC. Additionally, travel grants to present research at an annual conference will be available to selected participants.

**Eligibility Requirements**

Applicants must be a U.S. citizen or permanent resident of the United States; be and remain an undergraduate student in good standing; plan to complete an undergraduate degree program. Selected participants must be 18 years of age at the start of the program.

**Website**

<https://www.tacc.utexas.edu/reu>

**Locations**

**The University of Texas at Austin**  
AUSTIN, TX  
  
110 INNER CAMPUS DR  
AUSTIN, TX 78712  
USA



A Sample Project

