

NSF Chemistry Office Hour

Today's Topic: CHE REU Sites

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REU Sites Program

Solicitation: [NSF 19-582](#) (Due August 25th, 2021)

Research experience is one of the most effective avenues for attracting students to, and retaining them, in science and engineering and for preparing them for careers in these fields. The REU program, through both Sites and Supplements, aims to provide appropriate and valuable educational experiences for undergraduate students through participation in research... REU projects feature high-quality interaction of students with faculty and/or other research mentors and access to appropriate facilities and professional development opportunities.

Take a student-centered approach



REU Sites in CHE

Typical CHE Site:

- Between 8 and 12 students/summer (10 is typical)
- Onsite 10-week experience
- ~80% of participants are external
- Typically, 3-year awards

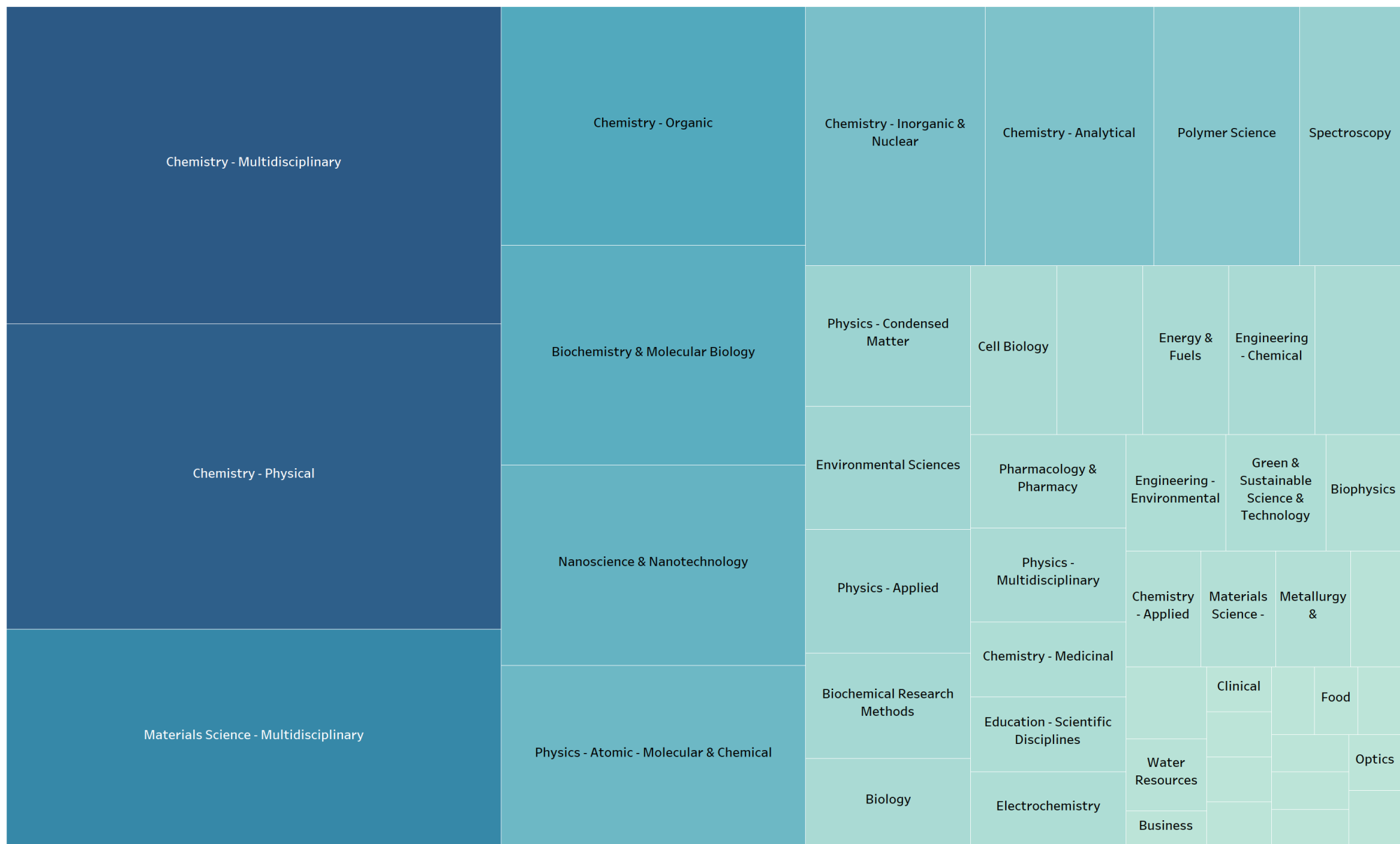
Different REU Site models and themes are encouraged!

- International Sites
- Distributed Sites or Faculty Partnerships
- Sites that engage students with disabilities
- Community college engagement
- Virtual sites

NSF CHE Active REU Site Awards



Publications Acknowledging CHE REU Site Awards by Subject



REU Sites Program Solicitation

Nature of Student Activities:

- Detailed descriptions of example projects including
 - Significance
 - Framework
 - Hypothesis
 - Research Questions
- Plan that ensures student-faculty interaction and student-student communication
- *Describe students' role in projects and desired student outcomes*
- *Typical proposals include 1-2 paragraphs for each of 5-10 example projects*

Research Environment:

- Experience and record of PI and mentors in undergraduate research
 - Publications
 - Professional development
- Sustained mentoring plans

*Italics = program officer tip



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Student *and* Mentor Professional Development:

- Plans for student professional development, including responsible and ethical research conduct
- Training, mentoring or monitoring for research mentors
- REU Site's plans for communicating information on expectations of behavior to ensure a safe and respectful environment for all participants
- For additional information, see the NSF policies at <https://www.nsf.gov/od/odi/harassment.jsp> and the "Promising Practices" at https://www.nsf.gov/od/odi/promising_practices/index.jsp.

Student Selection & Recruitment:

- Institutions where students will be recruited from
- Recruitment efforts to attract underrepresented groups
- Majority of students must be recruited from institutions with limited STEM research opportunities
- Significant fraction of students should come from outside institution
- *Include quantifiable goals and describe how you will meet them*

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Project Evaluation and Reporting:

- Plan to measure qualitatively and quantitatively the success of the project
 - May include periodic measures to ensure project is proceeding to plan
 - May involve pre-project and post-project measures to determine degree of student learning that has been achieved
- Structured means to track students beyond graduation
- Site can engage educational research specialist
- *Approach assessment like a scientist*
- *Other resources: <https://salgsite.net/> or <https://www.evaluate.org/resources/doc-2010-nsfhandbook/>*

Results from Prior NSF Support:

- 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, the Project Description must include a subsection entitled "Results from Prior NSF Support..."
- Describe earlier REU site outcomes
 - Project evaluation
 - Recruitment efforts
 - Student career paths
 - Publications

Questions?

