**Summer 2020 Research Opportunities for Chemistry & Biochemistry Undergraduates**

**DRAFT in Progress – Status of updates = Up to the Magenta line on Page 10 is where it’s been updated to for 2020, but all January deadlines have been updated for the whole document**

**Key: Dec app January app deadlines Feb. app deadlines March app deadlines Blue = ALL need 2020 Updates)**

(Opportunities are listed alphabetically.) Please check websites for the most complete and accurate descriptions.

**Links to Organizations Listing Multiple Science Research Opportunities (**check sites for application deadlines**)**

* **American Chemical Society (ACS)** - Undergraduate Research Opportunities - **The ACS International Research Experience for Undergraduates (IREU)** exchange program gives undergraduate chemical and materials science students an opportunity to pursue research at universities in Singapore, Italy, Germany, and the United Kingdom. IREU students spend 10 weeks working on chemistry research projects under the guidance of faculty members and graduate student mentors to sharpen scientific skills, develop collaborations with scientists abroad, and experience the life and culture of a foreign country. **Application Deadline: (2019 Program is contingent on funding from NSF(as of 2/19/19)**
  + <https://global.acs.org/global-programs/global-undergraduate-programs/international-research-experience-for-undergrads-ireu/> this site provides program details and online application information.
  + allows you to explore the summer research opportunities outside of the US
* **Center for Disease Control (CDC)** – Summer Undergraduate Opportunities

CDC's Office of Minority Health and Health Equity (OMHHE) supports internship opportunities for qualified undergraduate and graduate students to gain meaningful experiences in public health settings.

**Application deadlines** and program dates vary. Visit the website for more information. <https://www.cdc.gov/fellowships/short-term/undergraduate.html> **(Site was last updated in Jan. 2018)**

* **National Science Foundation - Research Experiences for Undergraduates (REU)** - The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program. To search for various REU opportunities, click on: <http://www.nsf.gov/crssprgm/reu/> (Please note: individual NSF programs sites will have application and deadline info.)
* **Pathways to Science -** *Pathways to Science* is a website which compiles hundreds of research opportunities from around the country into one place. Deadlines are varied, so check as soon as possible. [www.pathwaystoscience.org](http://www.pathwaystoscience.org)
* **Web Guru – Guide for Undergraduate Research** [**http://www.webguru.neu.edu/undergraduate-research**](http://www.webguru.neu.edu/undergraduate-research)

**Research Opportunities – sorted alphabetically by Institution / Company**

**The 2019 Amgen Scholars Summer Research Program in Science and Biotechnology** .

This national program provides participants with the opportunity to conduct research with a faculty member, communicate their science in poster and oral presentations, receive a stipend, housing, meal plan, and transportation to and from the campus. For more information about the program, please visit the following sites:

**National Amgen Scholars** Program Website at <http://amgenscholars.com>

Program dates vary

**Application deadline is February 3, 2020 (Submit Online)**

**UC Berkeley** Amgen Scholars Program Website at <http://amgenscholars.berkeley.edu>

Program dates: May 28 - August 3, 2018

**Application deadline is February 3, 2019**

**Caltech** Amgen Scholarship Program (for visiting non-Caltech students) website for more info: [*www.amgenscholars.caltech.edu*](http://www.amgenscholars.caltech.edu)

Program Dates:

**Application deadline is February 15, 2020**

**Massachusetts Institute of Technology -** Amgen Scholars Program – <http://amgenscholars.com/university/massachusetts-institute-of-technology>

***\*NOT OFFERED SUMMER OF 2019\* (Last year = Feb deadline)***

**Stanford -** Amgen Scholars Program <https://oso.stanford.edu/programs/18-stanford-summer-research-program-amgen-scholars-program>

**Application deadline is February 3, 2019**

**Washington University in St. Louis** Amgen Scholars Program at <http://dbbs.wustl.edu/divprograms/SummerResearchforUndergrads/Pages/Amgen-Scholars.aspx>

Program Dates: May 29 – August 4, 2018

**Application deadline is February 3, 2019**

**Baylor College of Medicine (Houston, Texas) (HHMI)**

The Summer Medical and Research Training (SMART) Program is a 9-week summer research program offered by the Graduate School. From its initiation in 1989, the SMART Program has provided undergraduate students from more than 240 colleges and universities an opportunity to experience research in a medical school environment. Between 80 and 90 positions are available each summer. The size of the program affords a unique chance to work closely with students from many different ethnic, educational and geographical backgrounds who share a common interest in biomedical science careers. Students become functioning members of Baylor laboratories and contribute to research efforts in more than 20 basic and clinical science departments. Students and mentors are matched based on the student's educational level, laboratory experiences and research interests. At the end of the program, students submit a short summary of their research. Daily noon seminars designed for this program help students develop their fundamental knowledge, introduce areas of biomedical research and emphasize the reciprocal relationship between basic research and clinical applications. A wide range of scientific topics, as well as career options and opportunities for participants interested in research, are explored. Seminar speakers span the range of career development from graduate students to world-renowned scientists and physicians. $5,000 is provided for salary or combination salary and allocation for housing and travel.

For additional information visit <https://www.bcm.edu/education/schools/graduate-school-of-biomedical-sciences/programs/diversity/smart>. Online Applications will be available mid-November.

Program Start Date: June 1 – July 31, 2020

**The 2020 Application is open. The application deadline is January 11, 2020.**

**Boston University (Boston, MA) (HHMI)**

The Boston University (BU) Summer Undergraduate Research Fellowship (SURF) Program is designed to promote access to graduate education for talented undergraduate students, especially those from minority groups traditionally underrepresented in the sciences. The SURF Program is supported by funds from the National Science Foundation (NSF-REU; NE-AGEP), the Department of Defense (ASSURE), and Boston University. The SURF Program is open to non-BU students who are rising juniors or rising seniors, and wish to conduct research in the sciences, technology, or engineering. The program consists of ten weeks of full-time research in a Boston University lab, mentored by a BU faculty member. Most SURF research projects are in areas related to Biology and Neuroscience. On-campus housing, a stipend, weekly enrichment activities, social events, and an October weekend trip to present findings at the BU Undergraduate Research Symposium are also included. You will need to fill out an application, provide a transcript, and submit two letters of recommendation. Information for the summer 2018 program can be found at <http://www.bu.edu/urop/surf-program/about/>. Please feel free to contact the BU Undergraduate Research office if you would like more information ([urop@bu.edu](mailto:urop@bu.edu); 617-353-2020). A stipend of $5500 is available. $500-$600 supplies allowance and up to $500 in travel expenses.

**For SURF, the application deadline is February 15, 2020, and the 2020 program dates are early June to early August.**

**California Institute of Technology (Pasadena, CA) (HHMI)**

* **SURF Undergraduate Research Fellowships:**

Caltech's Summer Undergraduate Research Fellowships (SURF) program introduces students to research under the guidance of seasoned research mentors at Caltech and JPL. Students experience the process of research as a creative intellectual activity.

SURF is modeled on the grant-seeking process:

•Students collaborate with potential mentors to define and develop a project

•Applicants write research proposals for their projects

•A faculty committee reviews the proposals and recommends awards

•Students carry out the work over a 10-week period in the summer, mid-June to late August

•At the conclusion of the program, they submit a technical paper and give an oral presentation at SURF Seminar Day, a symposium modeled on a professional technical meeting

Eligibility: •Be a continuing undergraduate student and eligible for fall term registration

•Have a cumulative GPA of at least 2.5/4.0

•Complete the second semester or third quarter at your college or university

•Not be under any disciplinary sanction

Support: Fellows receive a $6,420 award for the ten-week period. Award payments are distributed in equal installments in late June and late July.

Application: Online **applications are due February 22, 2020**

For more info, please visit <http://sfp.caltech.edu/programs/surf/application_information>

* **Amgen Scholars Program: (See above)**

**Clemson University** – **There will NOT be a Program for Summer of 2020**.

2018 program info: From Genomes to Phenomes. Individual mentored research experiences from faculty members in t [Biological Sciences](http://www.clemson.edu/science/departments/biosci/index.html) & Biochem. 10 week program from May 27 (move in) to August 4, 2018. A $6,000 stipend. Lodging (on campus dorms, Travel costs up to $500. Website: <http://www.clemson.edu/centers-institutes/culsoc/research-experience.html>

**Application deadline**: February 12, **2018**

**Cold Spring Harbor (Cold Spring Harbor, NY) (HHMI)**

The Undergraduate Research Program (URP) at CSHL provides an opportunity for undergraduate scientists from around the world to conduct first-rate research. Students learn the scientific process, technical methods and theoretical principles, and communicate their discoveries to other scientists. Approximately 25 students come to CSHL each summer for the 10-week program, living and working in the exciting Laboratory environment.

URP participants work on a real research project in one of CSHL's expert labs.  Research at CSHL focuses on:

* Molecular Biology & Cancer
* Genetics & Genomics
* Neuroscience
* Plant Biology
* Quantitative Biology

In addition to doing research in the lab, URP participants attend a series of specially designed workshops, seminars and collegial events. Workshops focus on learning particular skills, such as Python programming, while seminars cover research topics, responsible conduct of research, and career development. At the URP Symposium at the end of each summer, students present their research to the entire CSHL community.

URP participants live and work among CSHL scientists. They are invited to all Laboratory social activities - including two exclusive dinners, one with CSHL President Bruce Stillman and one with Chancelor emeritus and Nobel Prize winner James Watson. On weekends, students are free to explore nearby New York City or the sandy beaches of Long Island.

By the end of the summer, URP participants have first-hand experience of a career in scientific research.

The 2020 URP Program will be held June 8 - August 8, 2019.

Website: <https://www.cshl.edu/education/undergraduate-research-program/>

Application deadline = January 15th, 2020.

**Colorado School of Mines (Earth \* Energy \* Environment)**

Research Experience for Undergraduates (REU) –

Website: <http://research.mines.edu/ACAD-REU>

* Renewable Energy Materials Research Science and Engineering Center’s (REMRSEC) <http://remrsec.mines.edu/reu.htm>

**Application Deadline:** Info not posted as of 2/19/19 – last year was March 1, 2018

* ReNUWuit: <http://renuwit.org/education/reu-program/learn-more-apply/>
* Stipend is about $4500 with travel allowance of up to $600

**Application Deadline:** Feb 10, 2020

* [REU - Advancing Polymer Materials by Integrating Chemistry and Chemical Engineering](http://polymerreu.mines.edu/) <http://polymerreu.mines.edu/>

**Application Deadline:** Info not posted (as of 2/18/19) – last year wasMarch 9, 2018

**Cornell University**

★ Maintains a lengthy list of various summer research opportunities on and off-campus of the Cornell campus. (Most are Biology-related but, many are interdisciplinary): <https://biology.cornell.edu/research/summer>

* Cornell / Rockefeller / Sloan Kettering (Tri-Institutional MD-PhD Program) Gateways to the Laboratory Summer Experience- in Ithaca, NY <https://mdphd.weill.cornell.edu/summer-program>

**Application Deadline**: Feb 1, 2020

* Doris Duke Conservation Scholars Program <https://dnr.cals.cornell.edu/undergraduate/doris-duke-internships/>

$10,000 over two years. Program May 2019 - ?

**Application Deadline: Has passed - was Nov. 11, 2018**

* Cornell University Food Science Summer Program 2019 program runs June 3 – August 9, 2019 in Ithaca, NY <https://foodscience.cals.cornell.edu/undergraduate/summer-scholar-research-program/>

**Application Deadline: has passed – was Dec. 15, 2018.**

**Department of Energy Scholars Program**

* The DOE Scholars Program offers unique opportunities that introduce students or post-graduates to the agency’s mission and operations. Participants in the DOE Scholars Program gain a competitive edge as they apply their education, talent and skills in a variety of scientific research settings within the DOE complex.

Website for more info.: <https://orise.orau.gov/doescholars/>

**Application deadline: December 15, 2017.**

* Science Undergraduate Laboratory Interns (SULI)

Website for more information, visit <https://science.energy.gov/wdts/suli/>

**Application Deadline**: January 10, 2020

**Albert Einstein College of Medicine (Bronx, New York) (HHMI)**

The Summer Undergraduate Research Program (SURP) at the Albert Einstein College of Medicine offers a unique opportunity to work for the summer in a research laboratory at one of the world's top-ranking scientific institutions. The program is specifically designed for students considering a research career in the biomedical sciences. Summer positions are available in labs in every area of biomedical research, ranging from biophysics, structural biology, and protein chemistry, to neuroscience, developmental biology, immunology, cell biology, immunology, infectious diseases, and clinical investigation (diabetes, cardiovascular disease, cancer, etc.). Approximately 50 students from all over the country come to Einstein, live on the campus, and participate in "hypothesis-driven" research in their area of interest. Summer positions are available in labs in every area of biomedical research. SURP students also attend weekly undergraduate level seminars on “hot” research topics, and also participate in career development workshops and a forum on ethical issues in science and medicine. At the end of the summer, SURP students present a poster describing their research at the annual SURP symposium on the Einstein campus. All SURP students receive free housing, and a full range of social activities including attending a Broadway show, a baseball game, Bronx Zoo Day, student-faculty barbeques and various outings. There is a $3000 stipend and up to $500 in transportation assistance. Program Dates: June 3re –July 30th 2020. Online **application** and further information are available on our website: <https://www.einstein.yu.edu/education/phd/the-summer-undergrad-research-program.aspx>

**Application deadline is February 1, 2020**

**Emergent Behaviors of Integrated Cellular Systems (EBICS) NSF Science and Technology Center**

## "Engineering Biological Machines" Research Experience for Undergraduates (REU) program for summer 2018. The REU is a summer research program that will fund undergraduate students assigned to EBICS labs at each primary institution: Georgia Institute of Technology (GT), Massachusetts Institute of Technology (MIT), and the University of Illinois at Urbana-Champaign (UIUC). **REU Program Highlights:**

* 10 weeks of hands-onresearch at MIT, UIUC, or Georgia Tech.
* $4500 stipend per student.
* Allowance for travel expenses, housing and meals.
* Grad school prep, faculty mentoring, professional development and social engagement with other students on campus.
* Poster and oral presentation at the end of the summer.

Applications will be accepted from any student currently enrolled in a science or engineering undergraduate program (biology, chemistry, physics, materials science, bio-engineering, computer science, and related fields). United States citizenship or permanent residency is required**.**

Women and students from underrepresented minority groups are strongly encouraged to apply. For more information, visit <http://ebics.net/diversity-outreach/about-reu-program>

**Application Deadline is February 15, 2019 (Has not yet been updated for 2020)**

**Emory University (Atlanta, Georgia)**

* The Summer Undergraduate Research Program at Emory (SURE) in Natural and Biomedical Science

Student researches conduct full-time supervised research with a faculty mentor on independent research in a 10 week residential setting.. Students receive a stipend, housing is provided, and travel funds may be available.

For more information, visit <http://college.emory.edu/undergraduate-research/summer-programs/natural-biomedical-sciences/index.html>

**Program Dates: May 28 to August 2**

**Application Deadline** is January 28, 2020

* The **IRES** provides summer grants for students to work in a science research experience outside of the US. (Note: IRES is suspended for 2018, nothing updated for 2019.) <http://college.emory.edu/undergraduate-research/summer-programs/index.html>

**Fred Hutchinson Cancer Research Center (Seattle, Washington) (HHMI)**

**Summer Undergraduate Research Program (SURP)**

A 9-week summer internship designed to provide research experience and mentorship for undergraduate students between their junior and senior year of studies is established at the Hutchinson Center. The program provides financial support and instruction on a research project under the guidance of a faculty member and laboratory staff (in one of the Divisions of the Center: Basic Sciences, Clinical Research, Human Biology, Public Health Sciences or our newest area, the Vaccine and Infectious Disease Institute). Students spend the summer as part of a research team after selecting an area of interest, such as: cellular biology, developmental biology, genetics, membrane biology, molecular biology, molecular immunology, structural biology, oncogenes, or virology. Weekly student/faculty research meetings take place throughout the summer, and students are encouraged to participate in other Center colloquia and seminars. The program runs from June 15 – August 14, 2020. Students receive a $4,500 stipend and up to $450 in travel costs. Students pay housing costs of $1,800. For more information, visit <http://www.fhcrc.org/science/education/undergraduates/>

<http://www.fhcrc.org/content/public/en/education-training/undergraduate-students.html>

**Application Deadline** is has passed. It was January 10th, 2020

**Georgia Tech**

Chemistry and biochemistry majors who will be juniors or seniors are invited to apply for a ten-week (May 19 - July 26, 2019) research program sponsored by NSF-REU and 3M. Participants will receive a $5,000 stipend, a travel allowance, and housing. Each research student will carry out a research project under the supervision of a Chemistry and Biochemistry faculty. Projects are available in analytical, biological, inorganic, organic, physical, and polymer chemistry with a number of projects involving interdiscplinary research perspectives. (Note: links to other programs besides REU.)

<http://ww2.chemistry.gatech.edu/reu/>

**Application opens Nov. 15. Application deadline** is February 15, 2019 **(Not yet updated for 2020)**

**Iowa State University (REU)** [**https://www.engineering.iastate.edu/reu/**](https://www.engineering.iastate.edu/reu/)

* **Biological Materials and Processes Research Experience for Undergraduates (BioMaP REU)**

The program creates novel research experiences for undergrad students from around the country in the areas of biological materials and processes, often referred to as “BioMaP.” Students are active members of interdisciplinary groups and interact with faculty, post-doctoral researchers, graduate students and industry. Students also participate in cohort experiences such as short courses, joint seminars/meetings, workshops, tours of research facilities and field trips. <http://www.cbe.iastate.edu/research/undergraduate-research/>

Application Deadline: Feburary 15th, 2020

* [**Center for Bioplastics and Biocomposites**](http://www.cb2.iastate.edu/reu.html)

Center for Bioplastics and Biocomposites (CB2)’s Research Experience for Undergraduates (REU) program provides paid summer research experience for undergraduate students to participate in industry-directed fundamental research opportunities in the fields of bioplastics and biocomposites. The students will gain hands-on experience with synthesis, processing, and characterization of biobased plastics and composite materials. Students majored in STEM fields are encouraged to apply. <http://www.cb2.iastate.edu/reu.html>

**Application Deadline:** Feb. 22, 2019

* **Center for Biorenewable Chemicals Research Experience for Undergraduates (CBiRC REU)**

REU students will work toward achieving CBiRC’s core mission of transforming the US chemical industry by integrating biological and chemical catalysis systems to produce biorenewable chemicals. The REU students will work in CBiRC labs conducting fundamental research to address the underlying technical challenges in the development of new integrated catalytic systems for the conversion of bio-based feedstocks to industrial chemicals.

<http://www.cbirc.iastate.edu/education/university/nsf-reu/>

**Application Deadline: Not Yet Updated for 2020**

* **CenUSA Bioenergy Undergraduate Research Internship**

The Cenusa Bioenergy Research Internship Experience for Undergraduates will provide rich interdisciplinary training and engagement opportunities for undergraduate students in all areas of the bioenergy value chain to meet the workforce challenges of the emerging bioeconomy.

<https://cenusa.iastate.edu/>

* **[Electrical and Computer Engineering Research Opportunities](http://www.ece.iastate.edu/research/undergraduate-research/" \o "Undergraduate Student Research Opportunities in Electrical and Computer Engineering)**

Undergraduate students at Iowa State University have many opportunities to work alongside faculty on a variety of research projects. Working with a professor on a research project provides students hands-on, practical experience, enhances a student’s academics, and provides students a mentor.

<http://www.ece.iastate.edu/research/undergraduate-research/>

* **Microscale Sensing Actuation and Imaging Research Experience for Undergraduates**

The Department of Mechanical Engineering hosts a summer research experience for undergraduate students. The program will create [novel research experiences](http://www.me.iastate.edu/mosaic/projects/) for undergraduate students in the areas of design and manufacturing of micro/nanoscale sensors, actuators, and smart materials, as well as advanced imaging and diagnostic systems.

<http://www.me.iastate.edu/mosaic/>

* [**Summer Program for Interdisciplinary Research and Education – Emerging Interface Technologies (SPIRE-EIT)**](http://www.vrac.iastate.edu/hci/reu/)

SPIRE-EIT is a 10-week interdisciplinary summer experience for 12 undergraduates that integrates research and education in emerging interface technologies with a life-changing experience for participants. Students’ personal transformations since 2006 have been a dramatic and consistent result alongside research publications. Students are provided with classroom training and gain hands-on experience exploring people’s perception, understanding, and performance with cutting-edge technologies.

<http://www.vrac.iastate.edu/hci/reu/>

Program Dates: May 26—August 1, 2020

**Application Deadline**: Jan. 27, 2020

* [**Wind Energy Science, Engineering, and Policy Research Experience for Undergraduates**](http://www.engineering.iastate.edu/research/eri/initiatives/strategies/wei/wesep-reu/)

Iowa State University offers an intensive 10-week on-campus research program in Wind Energy Science, Engineering, and Policy (WESEP) for undergraduate students. Ten fellowships are sponsored each year by the National Science Foundation’s (NSF) Research Experiences for Undergraduates (REU) program. Students will work collaboratively in interdisciplinary teams with faculty and graduate students to receive training and get hands-on research experience in areas that address critical, long-term national needs in wind energy-related areas.

<https://www.engineering.iastate.edu/research/eri/initiatives/strategies/wei/wesep-reu/>

**Applications are not being accepted at this time**. (as of 12/11/20)

**Jackson Laboratory (Bar Harbor, Maine)**

The Jackson Laboratory has an 83-year history of engaging students in research internships in genetics, bioinformatics, and mouse models of human diseases. Students work on independent projects under a scientist mentor and live together in a waterfront mansion. The program runs from June 1 – August 9, 2019. There will be a $5,250 stipend, room and board provided (at the mansion), and round-trip travel cost provided. For more information and an application, visit

<https://www.jax.org/education-and-learning/high-school-students-and-undergraduates/learn-earn-and-explore>

**Applications** **must be postmarked by February 2, 2019**. **???**

**Janelia Farm Research Campus (Ashburn, VA) (HHMI)**

The Janelia Undergraduate Scholars program is a 10-week summer program aimed at well-prepared, independent, and committed students with significant research experience. We accept undergraduates and post-baccalaureate students who have not committed to a PhD program.

The 2018 program will run from May to August. Students are required to spend a full 10 weeks at Janelia, but we are flexible on the specific start and end dates to accommodate differing academic calendars at universities.

All Janelia undergraduate scholars live together on campus. All living expenses including housing, food, and travel to and from Janelia are covered by the program. Students also receive a stipend of $5,000 for the 10-week period.

<https://www.janelia.org/you-janelia/students-postdocs/undergraduate-scholars-program>

**Application Deadline is January 7, 2020**

**The Johns Hopkins University Medical Institutions (Baltimore, MD) (HHMI)**

The Summer Internship Program (SIP) at The Johns Hopkins Medical Institutions offers a unique opportunity to work for the summer in a research laboratory at one of the world's top-ranking scientific institutions. The purpose of the program is to give students, who are interested in pursuing careers in the biomedical sciences the opportunity to conduct research, while exposed to the excitement of an academic medical environment at a major research center. Research opportunities are available in the following areas:

* **The JHU BioREU** is a [Research Experiences for Undergraduates](http://www.nsf.gov/crssprgm/reu/) Site funded by the [National Science Foundation](http://www.nsf.gov/). The 10-week summer program is designed to provide an intensive, mentored research experience for undergraduates, especially those attending institutions with limited research opportunities. Faculty mentors are drawn from the [Cell Molecular Dev Bio program faculty](http://cmdb.jhu.edu/people/). The program runs from May 27th – August 1st, 2020

<http://www.bio.jhu.edu/BioREU/>

**Application Deadline** is February 3, 2020 (ONLINE ONLY).

* **The Summer Internship Program (SIP**) provides experience in research laboratories to students of diverse backgrounds, including underrepresented minority students, students from economically disadvantaged and underserved backgrounds and students with disabilities that have completed one - two or more years of college.  The purpose of this exposure to biomedical and/or public health research is to encourage students to consider careers in science, medicine and public health. The program runs ten weeks and a minimum stipend of $3,000 is provided. Housing is provided near our undergraduate campus; the University has a shuttle service that provides convenient transportation between the Johns Hopkins Medicine Institutions (JHMI) and the undergraduate campus.

"Partner Programs": As summer research programs are increasingly competitive, it is advisable to apply to several summer programs. We have partnerships with the following summer programs that will permit you to do your summer research at Johns Hopkins:

The program runs from May 24th – August 1st, 2020

<http://www.hopkinsmedicine.org/graduateprograms/sip.cfm>

**Application Deadline** is February 1, 2020 (ONLINE ONLY).

**Los Alamos National Laboratory** - The Undergraduate Student Internship Program (UGS)

A year-round internship program (summer available) that provides students with relevant research experience while they are pursuing an undergraduate degree. This internship program is designed to complement the students' education with work experience related to their chosen field of study. There are appointments in both the technical and professional fields

Eligibility requirements

* Provide documentation of acceptance into an undergraduate program.
* Enroll in and successfully complete a minimum of 12 undergraduate credit hours per semester. NOTE: Students must provide the program coordinator with current, official transcripts annually to remain eligible. See the Annual Transcript Review section for additional information.
* Have and maintain a minimum cumulative GPA of 3.0 on 4.0 scale. NOTE: Students must provide the program coordinator with current, official transcripts annually to remain eligible. See the Annual Transcript Review section for additional information.
* Pass a pre-employment drug test.

How to apply

* To apply, you will need to complete an online application in iRecruitment at [jobs.lanl.gov](http://jobs.lanl.gov/) <https://jobszp1.lanl.gov/OA_HTML/RF.jsp?function_id=14320&resp_id=51616&resp_appl_id=800&security_group_id=0&lang_code=US&oas=8Pc36w0qE1ygT2RubHJcuw..&params=gAzPFwjSsCgwrOuLlg1CLA98wxdCEKWUnwtp19M6yvuqVVJWmV3VXQ9J3bO8cuS5>
* Students are required to upload a cover letter, resume, and transcript. NOTE: Student who fail to upload all of the requirement documents will not be considered. For step-by-step instructions visit [How to Apply](http://www.lanl.gov/careers/career-options/jobs/apply-information.php#students) and read the Student opportunities section. If you have problems with the online application, visit [Application Process Issues](http://www.lanl.gov/careers/career-options/jobs/issues-resolution.php) for assistance.

Website for more information: <http://www.lanl.gov/careers/career-options/student-internships/undergraduate/index.php>

**Massachusetts Institute of Technology (Cambridge, MA)**

* **MSRP** seeks to identify talented sophomores, juniors, and non-graduating seniors who might benefit from spending a summer on MIT’s campus, conducting research under the guidance of MIT faculty members, postdoctoral fellows, and advanced graduate students. Students who participate in this program will be better prepared and motivated to pursue advanced degrees, thereby helping to sustain a rich talent pool in critical areas of research and innovation.

Eligibility Requirements:

* Must be enrolled full-time in a degree-granting program at a US institution located in the US or its territories
* Attend an undergraduate institution other than MIT
* Must be an undergraduate:
* Sophomore (who has completed four semesters of actual college course work) by June or
* Junior or
* Senior who will not be graduating in the spring or summer of 2019
* Have a genuine interest in research and obtaining a PhD
* Have a grade point average of 3.5 (on a 4.0 scale) or higher
* African American, Hispanic, Native American, Native Hawaiian & Pacific Islander, first-generation students, and students from low socioeconomic backgrounds are strongly encouraged to apply
* International students enrolled full-time in a degree-granting program at a US institution are eligible to apply

Program Dates: June 7 – August 8, 2020. Website for more info and online application: <https://odge.mit.edu/undergraduate/msrp/>

**Application Deadline (PRIORITY)** is January 1, 2020

**Application Deadline (REGULAR)** is February 1, 2020

* **Biological and Brain Cognitive science (MSRP Bio) (HHMI)** is a 10-week summer research training program for highly motivated undergraduate sophomores and juniors who are ready for an intensive research experience at a top notch research institution which offers cutting edge technology and multidisciplinary approach to modern biology and brain cognitive research.

The 2019 program dates are June 2 to Aug 9. A weekly stipend and campus housing will be provided. For more information and for application materials go to: <https://biology.mit.edu/outreach_initiatives/UG_summer_internship>

**The** **application process opens Nov. 30. Application deadline for the program is January 30, 2019**.

* **Amgen Scholars program at Massachusetts Institute of Technology (Cambridge, MA) (See Amgen above)**

**The Mayo Summer Undergraduate Research Fellowship (SURF) Program**

Sponsored by Mayo Graduate School, provides skill building and an opportunity to explore interest in a biomedical career.

Each year, approximately 130 undergraduate students from around the U.S. come to Mayo Clinic's campus in Rochester, Minnesota, to work beside both young and established scientists on a broad range of biomedical research questions.

A select number of fellowships are also available at the Mayo Clinic campuses in Jacksonville, Florida, and Scottsdale, Arizona. The 2020 program will run from June 1, through Aug. 7, 2020.

Website to learn more info: <http://www.mayo.edu/mgs/programs/summer-undergraduate-research-fellowship>

**The** **application deadline is February 1, 2019**. ???

**MCHC / RISE-UP**

As a part of the CDC Rise grant, undergraduate students from underrepresented racial and ethnic groups have a chance to work with research mentors on a wide range of public health, prevention, treatment, and epidemiological studies. The training is provided at one of three sites: Kennedy Krieger Institute/Johns Hopkins University, University of Southern California/California State University Los Angeles, or University of South Dakota/Sanford School of Medicine. The program dates vary. A stipend is available, and housing and round-trip travel is provided for out-of-state-students. To apply, visit: <http://www.kennedykrieger.org/professional-training/professional-training-programs/rise-programs/mchc-rise-up>

**Stipend: $3,500**

**Program Dates:** June 1st—July29th, 2020

**The application is now closed - January 31, 2020.**

**NASA Student Airborne Research Program (SARP) (Southern California)**

The NASA Student Airborne Research Program (SARP) is a summer internship for advanced undergrad STEM majors (rising seniors) offering research in the Earth & Atmospheric Sciences from onboard a NASA aircraft. It is an 8-week summer 2017 (June 14 – Aug. 7, 2020) internship program in Earth system science using its C-23 Sherpa and ER-2 flying laboratories. SARP is funded by the NASA Ames Cooperative for Research in Earth Science and Technology (ARC-CREST) and managed by the National Suborbital Education and Research Center ([www.nserc.und.edu](http://www.nserc.und.edu)). SARP 2017 will take place in Southern California with research locations based at the University of California, Irvine and at the NASA Dryden Aircraft Operations Facility in Palmdale. Participants will acquire hands-on-research experience in all aspects of a scientific campaign, including flying onboard a major NASA resource that is used for studying Earth system processes

Applicants must have a strong academic background in any of the physical, chemical, or biological sciences, or engineering, and an interest in applying their background to the study of the Earth system. Travel and housing will be provided along with a stipend and travel costs during the program. Applications can be found at the SARP 2019 website: <https://earthscience.arc.nasa.gov/nsrc/sarp>

**Application is available Nov. – January 29th, 2020.**

**The National Institute of Standards and Technology (SURF) in Gaithersburg, MD and Boulder, CO**

The National Institute of Standards and Technology (NIST) offers the SURF program for students majoring in science, mathematics, or engineering.

Boulder - Opportunities are available in the fields of:

* Chemical Engineering
* Electrical Engineering
* Information Technology
* Materials Science

For more information see: <https://www.nist.gov/summer-undergraduate-research-fellowship-surf>; info about

about the Gaithersburg, MD lab, see <http://www.nist.gov/surfgaithersburg/> or for the Boulder, CO lab see <http://www.nist.gov/surfboulder/>

Program Dates: 11 week program (Boulder = May 20 – August 2, 2019)

**Application Deadline: Feb. 3rd, 2020.**

Note: Gustavus will have an earlier deadline since applications are required to be submitted to NIST as a group by the University, as the application includes a portion completed by a Gustavus representative and a set of materials provided by student applicants. Check with Pam Kittelson [pkittels@gustavus.edu](mailto:pkittels@gustavus.edu) (Fellowships)

**SAID THE APPLICATION DEADLINE WAS TO BE ANNOUNCED, NOT SURE IF BEING OFFERED IN 2019**

**North Dakota State University (NDSU) Fargo**

Growing up STEM is an excellent opportunity for students interested in STEM education at the undergraduate level to engage in an immersive, 10-week summer research experience. Potential projects are diverse and interdisciplinary, an immersion in discipline-based education research.

Program dates: May 28 – August 2, 2019 Our program includes on-campus housing, a $5000 stipend.

Website for more information: <http://www.ndsu.edu/cpm/summer_undergraduate_research_experience/sure_admissions/>

**The application and reference letter deadline is February 2, 2019**

**Northern Illinois University – Dept. of Chemistry and Biochemistry - REU**

NIU's 10‐week REU program will provide novel research experiences for undergraduates and faculty/undergraduate student teams. Research opportunities include a broad range of chemistry and biochemistry areas, such as chemical synthesis, drug discovery, nanomaterials, protein engineering and computer modeling. Matched with an NIU faculty mentor, participants will gain vital interdisciplinary research skills using state‐of‐the‐art instrumentation within the Department of Chemistry and Biochemistry. Activities will also include workshops on scientific communication, lab safety, responsible conduct in research, as well as student research seminars and an end of program student poster session

Program dates: June 2 – August 10, 2019 Stipend of $5,000 and housing

Website for more information: <http://www.niu.edu/chembio/reu/index.shtml>

**Application deadline:** February 28, 2019

**Northwestern University**

* **Materials Research Science and Engineering Center** Research Science & Engineering Center offers a Research Experience for Undergraduates (REU) program over a 9-week period each summer. The NU-Materials Research Science and Engineering Center is an interdisciplinary program focused on multi-functional nanoscale material structures. Over 30 faculty from 7 different departments are involved.

REU students will have the opportunity to contribute to a research project led by a center faculty member and will participate in interdisciplinary research group meetings, expanding their science and engineering experience into a range of fields.

At the end of the REU program, the participants will write a technical paper and give a 15-minute oral presentation on their research at a symposium open to the public. Other program activities include a field trip to a national or industrial lab, a beach party for social networking, a panel discussion on graduate school admissions, and seminars by Northwestern faculty and graduate students.

Program dates are June 17 – August 16, 2019, stipend of $4,500, plus on-campus housing and a travel allowance

Website for more info. <https://mrsec.northwestern.edu/undergraduate-opportunities/>

**Application deadline** is February 15th, 2019.

* **Nanotechnology REU**

IIN REU participants engage in full-time research over a nine-week period in the summer. They attend regular group meetings that provide an opportunity to share their progress and gain a broad overview of a wide array of scientific projects. Additional activities include special lectures, a field trip to Argonne National Laboratory, an individual writing workshop, a public speaking seminar, and a summer picnic. At the end of the summer, each student completes a substantive research paper and presents their research accomplishments at a Closing Symposium.

Program Dates: June 24 – August 23, 2019, Stipend of $4,500, rt airfare, housing

Website for more info.: <https://www.iinano.org/northwestern-university-nanotechnology-reu>

**Application deadline** is February 11th, 2019.

**Purdue Summer SURF Program**

Engage in research this summer on Purdue's West Lafayette, Indiana campus. SURF matches undergraduates with a faculty member and graduate student mentor who introduce them to the research tools used on the cutting edges of science, engineering, and technology. (Open to Purdue students and undergraduate students enrolled at U.S. colleges and universities.) Average GPA of student participants = 3.5

Program Dates: May 20 – August 2, 2019. Stipend of $4,500 and housing (upon completion of program)

Website: <https://engineering.purdue.edu/Engr/Research/SURF/Programs/Campus>

**Application Deadline**: February 26th, 2019.

**Rutgers** **The State University of New Jersey**

Rutgers The State University of New Jersey offers several different summer undergraduate research programs.

Website with more information. <https://aresty.rutgers.edu/resources/summer-research-at-rutgers>

Some of the programs include:

* Aresty Summer Science Program

<https://aresty.rutgers.edu/programs/summer-science-program>

**Applications are now closed** (as of 2/19/19)

* **Green Energy Technology Undergraduate Program (GET UP)** provides summer undergraduate research opportunities for undergraduate science and engineering students interested in green energy. GET UP is funded by the NSF and is designed to bring external students to Rutgers for the summer.

Students will have opportunities for cross disciplinary exploration through seminars in Engineering Ethics and Energy and Environmental Policy, and tours to facilities that generate power or produce "green" devices. Students will also participate in Industrial Spotlights where engineers and scientists from local companies present on ongoing product and system research/development, which will foster STEM research and industrial entrepreneurship.

GET UP research projects focus emerging energy and power issues that center around three research thrusts: nanotechnology and materials for energy storage and conversion, renewable and sustainable fuels, and devices and energy management systems for energy generation, conversion and storage.

**Application deadline** ? Only 2018 Program info is listed March 15, 2018.

* **RISE (Research In Science and Engineering)** chooses 50 outstanding undergraduates from across the U.S. and its territories to participate in 10 weeks of cutting-edge research in the biological, physical, and social sciences, math, engineering, and exciting interdisciplinary areas under the guidance of a carefully matched faculty mentors. By applying to RiSE, you will automatically be considered for our sister National Science Foundation REU (Research Experience for Undergraduates) and other [partners at Rutgers](http://rise.rutgers.edu/rk_partners.php).
* **Project L/EARN's** summer program is an intensive ten-week internship opportunity for qualified students from economically disadvantaged backgrounds, first generation college attenders, and those from racial/ethnic minority groupswho would like to obtain research skills and "hands-on" experience in health services research under the guidance of a distinguished faculty mentor.
* [**Rutgers Energy Institute (REI) Summer Internship**](http://rei.rutgers.edu/education-outreach-mainmenu-37/rei-summer-internship) offers summer internships to a select group of motivated undergraduate students. They are intended to help students understand the breadth of the energy challenge, from the environmental impacts that motivate the transition, to the technological innovation needed to create a viable new system and the socio-economic, policy and energy system frameworks necessary to enable wide-spread deployment.
* [**Summer Research Fellowship Program at the Ernest Mario School of Pharmacy**](https://surf.rutgers.edu) is intended for highly motivated undergraduates interested in a research career in the pharmaceutical and environmental sciences. Students are provided with an opportunity to conduct full-time research in areas related to Pharmacology and Toxicology, Environmental Health Sciences, Pharmaceutics, Medicinal Chemistry, Chemical Biology, and Clinical Pharmacy.

**Program dates and application deadlines vary. Please check the website.**

**Sanford Program for Undergraduate Research (SPUR) (Sioux Falls, SD)**

The Sanford Program for Undergraduate Research provides an opportunity for undergraduates to participate in laboratory research, with the hopes of recruiting talented individuals into careers in research. Students will work under the supervision of a Sanford Research team or Augustana College principle investigator. The program runs from June 3 – August 9, 2019, and a $5,750 stipend is available. Housing in dormitory.

Website for more information: <http://www.sanfordresearch.org/education/undergraduates/spur/>

**Application deadline is February 1, 2019.**

**The Smithsonian Institute - The National Museum of Natural History** (NMNH)

Natural History Research Experiences (NHRE) is a 10-week summer internship program hosted at the National Museum of Natural History, Smithsonian Institution in Washington D.C. (May 29 – August 3, 2018). NHRE interns work closely with scientific mentors to complete independent research projects in Earth science, Biology, and Anthropology.

NSF-funded Research Experience for Undergraduates Site: Natural History Research Experiences (NHRE). The 10 week paid ($6,000 overall) research internship for undergraduates. Housing will be provided in a dormitory at George Washington University. Interns are selected through a competitive process. Information and applications can be found at <http://www.mnh.si.edu/NHRE/>.

**Application and Reference letter Deadline is** January 22, 2020

**Southwestern Medical Center – University of Texas**

All chemistry students have the opportunity to apply for research in the biomedical, molecular and microbiology, and physical chemistry fields through the SURF program at Southwestern. Two separate opportunities available (one for physical and quantitative chemistry students, the other for students interested in biochemistry). SURF provides a look into the applications of chemistry in the medical field, with 85 research positions available. QP-SURF will provide a look into how physical and quantitative chemistry can be applied in the medical field, especially in biophysics and biomedical engineering (10 available positions). UT also provides optional classes in Immunology and Genetics, as well as seminars, social events and an end-of-year poster session for researchers. Both internships run ten weeks. A $4000 stipend is included, and housing is provided. [www.utsouthwestern.edu/SURF](http://www.utsouthwestern.edu/SURF) and [www.utsouthwestern.edu/QP-SURF](http://www.utsouthwestern.edu/QP-SURF)

**Application Deadline is** February 9, 2019.

**St. Jude Children's Research Hospital (Memphis, TN) (HHMI)**

Top science students are invited to apply for our NIH/NCI-funded (5 R25CA023944) Pediatric Oncology Education (POE) Program <<http://www.stjude.org/poe>>. The program offers a unique opportunity for students preparing for careers in the biomedical sciences, medicine, and pharmacy to gain biomedical and oncology research experience. Undergraduate POEs participate in basic oncology research, clinical and basic research conferences and a daily core lecture series designed specifically for POEs. All participants make a PowerPoint presentation on their research project and submit a report on their research project written in the style of a journal in which their mentor publishes.

A primary goal of the POE program is to encourage students to pursue a career in cancer research. Thus, we are particularly interested in highly qualified students with a serious career interest in cancer research, either as a clinical scientist or laboratory-based research scientist.

The tenure requirement is 11 weeks (10 weeks for returning students). All POE applicants must have an undergraduate GPA of at least 3.40 (on a 4.0 scale) in math and science (biology, chemistry, and physics) AND at least a 3.40 overall. The stipend is $4,000. Fully furnished group housing adjacent to our campus is provided at no cost for non- local students.

Program details and online application are available at: <http://www.stjude.org/poe>.

**Application Deadline (for all materials) is** February 1, 2019. Early application is highly recommended – opens Oct. 1.

**SURF Gaithersburg / SURF Boulder See: The National Institute of Standards and Technology (NIST) above.**

For more information contact/visit: <http://www.nist.gov/surfgaithersburg/>

**University of California Berkeley**

* **Amgen Scholars Program (See above)**

**University of Colorado at Boulder (Boulder, CO) (HHMI)**

The Summer Multicultural Access to Research Training (SMART) Program at the University of Colorado at Boulder is a 10-week research internship that prepares undergraduates for graduate programs in science, technology, engineering and math (STEM) fields. Each summer, 25 students from institutions nation-wide participate in research under the guidance of faculty mentors and attend weekly workshops on scientific writing and presenting, GRE preparation, and the application process for graduate school. SMART interns earn three (3) hours of upper-division undergraduate credit in independent study, and receive a competitive stipend, room and board, round-trip travel, and the opportunity to participate in a variety of cultural and outdoor activities.

Program dates: 10 Weeks between June and August (schedule adjusted for students on quarter system)

For the 2018 SMART Program, applicants must apply through the Leadership Alliance Summer Research Early Identification Program (SR-EIP). <http://www.theleadershipalliance.org/programs/summer-research>

**Application opens Nov. 15 Application deadline**: **February 1, 2020**

**University of Delaware, Dept. of Chemistry & Biochemistry – REU Science & Engineering Leadership Initiative** (SELI)

Motivated by the realization that people with disabilities are significantly underrepresented in Science, Technology, Engineering, and Math (STEM), SELI strives to position today’s students with disabilities to become tomorrow’s leaders in academia and industry.

Program dates: June 10 – August 9, 2019

Website for more information: <http://sites.udel.edu/seli-ud/>

**Application deadline**: February 1, 2019

**University of Georgia Summer Undergraduate Research Opportunities (SURO)**

<https://www.chem.uga.edu/undergraduate-research-summer>

**Undergraduate inquiries:** [chemreg@uga.edu](https://www.chem.uga.edu/chemreg@uga.edu)

$5,000 stipend. Programs run from May 20 – July 26, 2019 in a variety of sub-disciplines, such as:

* Analytical
* Biological Chemistry,
* Chemistry Education
* **Computational Quantum Chemistry**

The Summer Research Program at the Center for Computational Quantum Chemistry is designed to provide outstanding undergraduate chemistry, physics, and mathematics majors an opportunity to explore quantum chemistry at a world-class research institute. The program includes independent research under guidance from a senior group member, access to the center’s computational resources, lectures in molecular quantum mechanics, programming projects which introduce the implementation of quantum chemical methods and scientific programming.

* Environmenta/Atmospheric
* InOrganic
* Materials/Nano
* Organic
* Physical

**Application deadline: Feb. 1, 2019.**

**University of Illinois at Urbana-Champaign (Champaign, IL) (HHMI)**

The University of Illinois at Urbana-Champaign offers a cross-discipline summer research program that provides undergraduate students from populations underrepresented in graduate study at Illinois with an opportunity to explore careers in research. The program at Illinois provides each student with an experience that will help strengthen his or her knowledge, skills, and understanding of graduate school. The many activities offered through the Summer Research Opportunities Program will afford participants an opportunity to establish important relationships with faculty in their respective fields of study, conduct graduate-level research under the supervision of a University of Illinois renowned faculty member, become acquainted with the culture of graduate school, and to learn what is needed and expected of them as graduate students in their discipline at the University of Illinois. The official start date for the 2019 SROP is May 28 - July 26, 2019. $3,500 stipend plus room, board, and travel expenses. For more information about the Illinois SROP, visit our website at <http://www.grad.uiuc.edu/srop>.

**Application DUE February 10, 2019**

**University of Kansas (NSF-REU program)**

The summer NSF-REU program will be integrating research, education and career development in an interdisciplinary environment. The 10 week program runs from May 20-July 26, 2019. The program is for Sophomores and Juniors planning a career in chemistry. Engage in full-time cutting-edge research on your choice of one of twenty projects planned in all areas of Chemistry. Receive a compensation worth a total of $8,800 including a $5000 stipend, room and board, travel allowance and one hour academic credit at KU. For more information and online application visit the website at <http://www.chem.ku.edu/reu>

**Application Deadline is Feb., 15, 2019.**

**University of Michigan**

* **UM-SMART Undergraduate Summer Research Program**

UM-SMART is designed for undergraduate students who have an interest in obtaining a combined MD/PhD degree leading to a career in academic medicine as a physician-scientist performing basic research relevant to human health and disease. As a UM-SMART summer research fellow, students work full-time in a basic research laboratory under the mentorship of a research faculty member.

The goal of the UM-SMART program is to help students decide if a career as a physician-scientist is right for them, and to enhance competitiveness when applying to MD/PhD programs.  The UM-SMART has helped 77 undergraduate participants learn about MD/PhD training since 2008.  After graduation, 76% of past participants entered MD/PhD, PhD, or MD programs.

This 10-week program is aimed at students who have some amount of basic and mechanistic research experience related to medicine and are interested in gaining more experience to advance their career goals.  UM-SMART is not intended for students seeking clinical research experience on human subjects.  Additionally, we do not offer opportunities in public health, the social sciences, or humanities.

Program Dates: May 26—August 2, 2020

Stipend: $4,400

Application Deadline: January 17th, 2020

**University of Minnesota, Twin Cities**

The Office of Undergraduate Research maintains information on summer research opportunities on the U of M campus and off.

For more information: [**http://ugresearch.umn.edu/opportunities/summer-programs**](http://ugresearch.umn.edu/opportunities/summer-programs)

* **Summer Lando NSF / REU**

Our Summer Lando/NSF REU is for outstanding national and international undergraduate students. It is designed to encourage students in the chemical sciences to learn more about research in chemistry, and provide them with the opportunity to work in a lab under the direction of a faculty member. We offer a variety of professional and social events for participants throughout the summer. Apps. are accepted from sophomores and juniors.

Program Dates: June 1 – August 7, 2019, Stipend of $7,400

Website for more info: <https://chem.umn.edu/lando>

**Application deadline is:** February 3, 2020.

* **CSP**

The CSP will provide up to 13 full-time research positions to undergraduate students during the summer of 2019.  Positions may be available at the University of Minnesota, the University of California–Berkeley, Northwestern University, Cornell University, the University of Chicago, Washington University in St. Louis, and the University of South Dakota.

<https://csp.umn.edu/summer-undergraduate-research-program/>

2020 Application Deadline February 1, 2020.

* **Summer Undergraduate Theoretical Chemistry Research Fellowship Program**

sponsored by the [Chemical Theory Center](http://ctc.chem.umn.edu/) (CTC), [Inorganometallic Catalyst Design Center](http://www1.chem.umn.edu/icdc/) (ICDC) and the [Nanoporous Materials Genome Center](http://www1.chem.umn.edu/nmgc/) (NMGC) in the [Department of Chemistry](http://chem.umn.edu) at the University of Minnesota in Minneapolis. The program is open to all national and international undergraduate chemistry majors who will be entering their senior year in Fall 2019. <http://www1.chem.umn.edu/icdc/research/research-opportunities/summer-undergraduate-research-fellow/>

Program is a ten-week period between June and August 2019. Stipend is $7000, must provide own housing. $500 for Nat’l conf is possible:

**Application deadline is:** February 1, 2020.

**University of Nebraska-Lincoln**

10 week Nebraska Summer Research Programs in:

* Chemistry,
* Materials Science,
* Nanohybrid Functional Materials,
* Nanotechnology

Program from June 2 to August 8, 2019 with a stipend range $5000-$6000.

Website for more information: <https://www.unl.edu/summerprogram/>

**Application deadlines are February 1, 2019 (priority) OR March 1, 2019 (for all materials)**

**University of North Texas (Chemistry Department) Summer NSF-REU Program.**

(The REU site is located in Denton, TX at the northern outskirts of the Dallas-Ft. Worth area.)

The summer NSF-REU is a ten-week program TBD (beginning last week May/First week June.) Participants will be given a $5,000 stipend, plus housing. Funds are available to help defray travel costs to and from the REU site.

Possible research areas include:

Light-Harvesting Organic/Metal-Organic Materials \* Computational Catalyst Design Transition Metal Catalysis for Organic Synthesis \* Electrochemical Characterization of Semiconductor Materials \* Porous Materials for Environmental Remediation \* Gas-Sensing Materials \* New Materials from Soft-Landing Mass Spectrometry \* Pharmacological Modeling of Illicit Substances \* Organometallic Precursors for Electronic Materials \* Computational Biochemistry \* Corrosion-Protective Materials

Website for additional information <https://chemistry.unt.edu/nsf-reu-program>

**Online Application deadline is February 15, 2019**

**University of Southern California (USC) Department of Chemistry**

“Snapshots of Chemistry**: Visualization at the Molecular Level.** NSF- Research Experience for Undergraduates (REU) program Broad selection of research groups in alternative energy, chemical physics, chemical biology, drug discovery, inorganic, materials/polymers, nanoscience, organic, physical, and theoretical chemistry. Open to sophomores or juniors who are US citizens or permanent residents. Participants will receive $5000 stipend for the program. Housing, student health insurance, and travel costs will also be covered. Women and underrepresented minorities are encouraged to apply.

Program dates are May 28 – August 3, 2019

Fill out an application online. <http://chem.usc.edu/undergraduate/summer_prog.html>

**Application deadline is Feb. 15, 2019.**

**University of South Dakota Department of Chemistry**

Research Experience for Undergraduates (REU) program is sponsored by the National Science Foundation (NSF). Student participants will spend ten weeks during the summer (begins May 28, 2019) conducting research.

Stipend of $5,000 and housing

Website for additional information <http://www.usd.edu/arts-and-sciences/chemistry/reu>

* **Undergraduate Research in Fluorine Chemistry** - One-on-one research experiences with USD faculty members in the laboratories of USD chemistry faculty mentors at the Vermillion, SD campus will be augmented by educational workshops, meetings with experts in fluorine chemistry, a weekly seminar series and social activities, including a canoe trip down a stretch of the Missouri River, and support to conduct and present research results at regional or national scientific meetings will be available.

**Application Deadline is** March 1, 2019

* **The** [**SPACT NSF Research Experience for Undergraduates**](http://spact-center.org/reu) **site at South Dakota School of Mines and Technology,** USD and South Dakota State University provides undergraduate students a chance to conduct cutting-edge research focused on security printing and anti-counterfeiting technology. Counterfeiting is a growing issue in the U.S., posing serious economic, safety and national security concerns. The REU program is a multi-disciplinary program with research opportunities in materials science and engineering, materials chemistry, electrical/computer engineering, chemistry and computer science.

**University of Texas – Austin**

<https://ugs.utexas.edu/our/find/srsp/programs>

* **Chemistry – Frontiers in the Chemistry of Materials**

Program dates: June 10 – August 17, 2019, stipend = $5,000

Website: <https://fits.cm.utexas.edu/>

Application Deadline is February 15, 2019.

* **Nanotechnology** - **The NSF Nanosystems Engineering Research Center (NERC) for Nanomanufacturing Systems for Mobile Computing and Mobile Energy Technologies (NASCENT)**

Program runs: early June – early August, 2019

Website: <http://nascent-erc.org/education/research-experience-for-undergraduates-program/>

Application Deadline is early February, 2019

**University of Texas Southwestern Medical Center (Dallas, Texas)**

The Summer Undergraduate Research Fellowship (SURF) program at UT Southwestern is an intensive, 10 week summer research training experience designed for college students who are preparing for careers in biological research.  Fellows gain experience in modern research techniques, and have a chance to plan and execute an experimental strategy to answer a scientific question. The program introduces students to the sorts of projects encountered during postgraduate research training and leads to an understanding of the planning, discipline, and teamwork involved in the pursuit of basic answers to current questions in the biological sciences. Over two hundred and fifty participating faculty offer training in genomics, cancer biology, computational biology, developmental biology, molecular genetics, structural biology, cell biology, chemistry, systems biology, pharmacology, microbiology and infectious diseases, neurosciences, immunology, and mechanisms of disease. To be eligible, applicants must be in a science degree program and have completed their sophomore year.

The program runs ten weeks = June 3 – August 9, 2019 and there is a $4,000 stipend.

For more information, visit <https://www.utsouthwestern.edu/education/graduate-school/research-opportunities/surf/>

**Application deadline is February 9th, 2019.**

**University of Texas Southwestern** - **The Quantitative and Physical Science Summer Undergraduate Research Fellowship (QP-SURF)** program at is an intensive, 10 week summer research training experience which leads to an understanding of the planning, discipline, and teamwork involved in the pursuit of basic answers to current questions at the interface of quantitative science and basic biomedical research. Fellows gain experience in modern research techniques, and have a chance to plan and execute an experimental strategy to answer a scientific question. The program introduces students to the sorts of projects encountered during postgraduate research training and leads to an understanding of the planning, discipline, and teamwork involved in the pursuit of basic answers to current questions in the quantitative/biological sciences. Applicants must be enrolled in a physics, computer science, mathematics or chemistry degree program at the undergraduate level, have completed the sophomore year, and be a U.S. citizen. Forty-five participating faculty offer training in biophysics, computational biology, and quantitative and analytical chemistry.

This is a 10 week summer program which runs from early June – mid-August, 2019 and there is a $4,000 stipend.

Website for more info: <https://www.utsouthwestern.edu/education/graduate-school/research-opportunities/surf/qp-surf.html>

**Application deadline is February 9, 2019**

**University of Utah – Summer Program for Undergraduate Research (SPUR) (Salt Lake City, Utah)**

The purpose of SPUR is to provide undergraduate students with an intensive 10-week research experience under the mentorship of a University of Utah faculty member. The program provides opportunities to gain research experience in a variety of disciplines.

The program emphasizes a collaborative research experience under the supervision of a University of Utah faculty member. At the time of application, students will indicate to which available projects they are applying. Final student placement will be determined by the Selection Committee. Details regarding expectations and/or requirements of the research are negotiated between the student and the faculty mentor, following program guidelines. The program also emphasizes a cohort experience via welcome and closing receptions, peer advising, weekly education events, bi-weekly program meetings, and optional on-campus housing.

Program dates: May 22nd and August 1, 2019. Stipend of $4,000

Website for more information: <https://our.utah.edu/spur/>

**Application deadline is January 29, 2020.**

**University of Wisconsin – Madison**

Integrated Chemistry, Chemical Engineering, and Materials Science Research Experience for Undergraduates Programs

In this integrated program, students interested in chemistry-related sciences and engineering have the opportunity to pursue summer research in three themed summer programs. The participants in all three REU programs form a larger community of chemistry related researchers and have an opportunity to see the breadth and depth of the chemical sciences and engineering research being conducted on the UW–Madison campus. A description of each of the three programs is below.

* **REU in Nanotechnology**

The REU in Nanotechnology program was established by ICE in 2006 on behalf of two UW–Madison research centers: the Nanoscale Science and Engineering Center (NSEC) and the Materials Research Science and Engineering Center (MRSEC). This REU in Nanotechnology attracts highly qualified undergraduates from across the nation who spend a 10-week paid internship in the laboratory of a faculty member who is a part of the NSEC or MRSEC where they work on a nanotechnology-related research project. There they are exposed to cutting edge interdisciplinary research and are able to join a larger community of science and engineering researchers for social as well as professional development activities.

* **REU in Chemistry and Chemical and Biological Engineering**

ICE hosted the inaugural University of Wisconsin–Madison REU in Chemistry program during summer 2008, but it has since expanded to include opportunities in the Department of Chemical and Biological Engineering. The summer program attracts highly qualified undergraduates from across the nation who spend a 10-week paid internship working in the laboratory of a faculty member in Chemistry or Chemical and Biological Engineering. There students are exposed to cutting edge chemistry-related research and are able to be a part of the larger science and engineering community for both social and professional development.

* **REU in the Chemistry of Materials for Renewable Energy**

ICE proudly announces a REU in the Chemistry of Materials for Renewable Energy, its newest REU program. Thanks to a generous grant from the National Science Foundation, ICE can now provide research experiences for 10 talented students who are interested in participating in cutting edge research that investigates the creation of materials to support renewable energy. Students will spend 10 weeks working on an energy-related project in the lab of a faculty member in the Department of Chemistry or Department of Chemical and Biological Engineering and have the opportunity to be part of a larger community of science and engineering researchers for social and professional development.

Program dates: May 29 – August 4, 2019

A $5,000 stipend is provided as well as travel, housing, and food costs.

Website for more information visit:. <http://ice.chem.wisc.edu/REU.html>

**Application deadline is February 15, 2019**

**Virginia Tech (Blacksburg, VA)**

[**Food-Energy-Water Systems (FEWS) REU**](http://thiner.wix.com/mii2#%21surp/c1ezv)

Future scientific leaders must effectively communicate across disciplinary boundaries relating to food, energy, and water, with a “molecules to manufacturing” perspective for recognizing commonly shared and unique challenges, discoveries, and solutions. Our primary objective is to nurture students to pursue graduate studies and academic and industrial careers in FEWS fields, establishing the pool of educated and energetic talent to fuel the competitiveness of our nation. REU MII-FEWS research will provide enabling polymeric materials for food distribution, water efficient crop production, real-time monitoring devices, advanced manufacturing concepts to print the next generation of membranes for water purification, and novel synthetic methods to understand predictable transport and diffusion through materials. Working in teams, effective communication across the population, and igniting passion for discovery remain cornerstones. REU publications will serve as a key indicator for our success. The REU students will emerge as scientific leaders in a critical area for our nation; the students will initiate an interdisciplinary network of scientists with a spirit of entrepreneurship and a passion for societal impact. Students will understand the social complexities of translating technologies to international communities.

Program dates: May 28 - August 9, 2019 Stipend of $5000, rising seniors preferred.

Website for more information: <http://www.mii.vt.edu/research-experience-for-undergraduates-reu/>

**Application review and selections begin February 15, 2019** (Students are encouraged to send in applications earlier.)

**Washington University (St. Louis, Missouri)**

* **The BioMedRAP** is designed to recruit exceptional students interested in careers in biological and biomedical sciences with an intensive 10-week laboratory experience at one of the top research institutions in the nation. Participants will engage in an independent research project under the mentorship of faculty at Washington University in St. Louis. Students who have had prior research experience and are currently enrolled in a U.S. undergraduate program are encouraged to apply to BioMedRAP.

Program activities include seminars, individualized career counseling, workshops on applying to Ph.D. and M.D. /Ph.D. programs, social activities and much more. The program will conclude with a symposium featuring research presentations by participants.

The program runs from May 28 – August 2, 2019. Stipend is $4,200 stipend and travel and housing are provided.

Website for more information <http://dbbs.wustl.edu/divprograms/SummerResearchforUndergrads/Pages/BiomedRAP.aspx>

**Application deadline is February 1, 2019**

* **Amgen (See above)**

**Weill Cornell Graduate School of Medical Sciences (New York, NY)**

The Weill Cornell Graduate School of Medical Sciences, centrally located on Manhattan’s Upper East Side, has established the ACCESS Summer Internship Program for training under-served college students in the biomedical sciences. The aim of the internship is to awaken and foster an interest in biomedical research and education. It is open to students who are interested in getting a Ph.D. degree and who have excelled in their sophomore or junior years in college. During the 10-week program students receive: (1) hands-on experience in a research laboratory under the mentorship of an experienced scientist; (2) attend lectures and discussions aimed at enhancing an understanding of the current status of biomedical research, and the range of career opportunities available. A mandatory intensive GRE preparatory course was implemented in the summer curriculum. At the end of the program the students give oral and poster presentations on their research.

The ACCESS program is not designed for students pursuing professional training for careers in clinical medicine.

Program dates: June 3-August 9, 2019. Stipend of $4,000 and up to $500 is provided for travel expenses. On campus housing is provided.

Website for more information:

<https://gradschool.weill.cornell.edu/student-experience/diversity-and-inclusion/summer-undergraduate-research>

**Application deadline is February 1, 2019**

**INTERNSHIPS / Jobs / Volunteering**

**Environment Minnesota** is a statewide citizen based environmental advocacy group.

We’re about clean energy, clean air, clean water, and protecting open spaces – right now our top priority is doing our part to stop global warming. Environment Minnesota is part of the Environment America federation, a federation of 29 state-based groups with nearly 100 professional staff and more than 1 million members, activists and allies across the country.

Each year, we **hire graduating seniors** with the passion, the commitment and the talent it takes to stand up to polluting industries, fight for a green future and do what it takes to win. The Environment America Fellowship Program is a two-year crash course in the nuts and bolts of environmental activism, organizing, advocacy and the type of institution-building that can sustain long-term battles.

***Non-seniors may apply to be an Environment Minnesota intern*** – you’ll learn how to make an impact on critical environmental issues, and there’s no better way to get the experience to launch your career with us.

To learn more and apply, visit <http://jobs.environmentamerica.org>

**GoEco** – volunteer abroad

To learn more and apply, visit <https://www.goeco.org/>

**Minnesota Pollution Control Agency - 2019 Green Chemistry & Engineering Summer Internship Grant**

Information is available through <https://www.pca.state.mn.us/waste/green-and-safer-product-chemistry-grants>

**Application Deadline for Intern candidates is April 30th or whenever the position is filled.**

*(chemistry/reports/Summer Research Opport 2020–b.doc)*

*12/12/2019*