

For Undergraduate Students (graduate students - please scroll to end of list)

George Mason University:

Aspiring Scientists Summer Internship Program (ASSIP)

Program Description: Students work alongside Mason researchers using state-of-the-art technology to solve hypothesis driven questions in Proteomics, Genomics, Medicine, Neuroscience, Chemistry, Biochemistry, Biodefense, Environmental Science, Mathematical Modeling, Computer Science, Bioinformatics, Nanotechnology, Physics and Bioengineering.

- Website: <http://assip.cos.gmu.edu>
- Application opens November 15, 2019
- Internship Duration:
- Paid: No
- Location: Fairfax, VA

The Undergraduate Research Scholars Program (URSP)

Program Description: URSP is designed to give undergraduates an authentic research, creative, or scholarly experience under the guidance of a mentor. Students may receive financial support and/or academic credit for their projects, in addition to developing relevant academic and professional skills.

- Website: <https://oscar.gmu.edu/students/ursp/>
- Application Due Date for Summer 2020: Feb. 19th, 2020
- Internship Duration: June 2 – August 7, 2020
- Funding: Traditional 144 hrs – \$ 1000, intensive: 360 hrs – \$ 4000

LOCAL:

Janelia Research Campus (HHMI) – UG Scholars Program:

Program Description: 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.

- Full Description & Requirements: See below link
- Website: <https://www.janelia.org/you-janelia/students-postdocs/undergraduate-scholars-program>
- Application deadline: January 7th, 2020 @ 3:00 pm
- Internship Duration: Summer 2020, from May to August, 10-week program
- Paid: \$5000 for a 10-week period
- Location: Ashburn, VA
- **International students are eligible and visas will be supported**

Biomedical Engineering Summer Internship Program (BESIP):

Program Description: The NIBIB-sponsored Biomedical Engineering Summer Internship Program (BESIP) is for undergraduate biomedical engineering students who have completed their **junior year** of college. The internship will allow rising senior biomedical engineering students to participate in cutting-edge biomedical research projects under the mentorship of world-class scientists in NIH laboratories in Bethesda, Maryland.

- Website: <http://www.nibib.nih.gov/training-careers/undergraduate-graduate/biomedical-engineering-summer-internship-program-besip>
- Online Application Deadline: February 3, 2020
- Reference Letters Deadline: February 10, 2020
- Internship Duration: June 1st – August 7th, 2020
- Notification of selected interns: February 24, 2020
- Interns must accept or decline by: March 9, 2020
- Paid: \$5600
- Location: Bethesda, MD

Summer Internship Program in Biomedical Research (SIP): TBD_SU 2020 not live yet

Program Description: Summer programs at the National Institutes of Health (NIH) provide an opportunity to spend a summer working at the NIH side-by-side with some of the leading scientists in the world, in an environment devoted exclusively to biomedical research. The NIH consists of the 240-bed Mark O. Hatfield Clinical Research Center and more than 1200 laboratories/research projects located on the main campus in Bethesda, MD and the surrounding area as well as in Baltimore and Frederick, MD; Research Triangle Park, NC; Phoenix, AZ; Hamilton, MT; Framingham, MA; and Detroit, MI.

- Website: <https://www.training.nih.gov/programs/sip>
- Application Due Date:
- Internship Duration:
- Paid: The stipends for trainees are adjusted yearly; the level depends on education completed prior to starting at the NIH.

Opportunities at FDA for graduate and undergraduate students:

<https://www.fda.gov/AboutFDA/WorkingatFDA/FellowshipInternshipGraduateFacultyPrograms/default.htm>

Johns Hopkins University - TBD

Program Description: 2020 Computational Sensing and Medical Robotics Research Experience for Undergraduates Program at The Johns Hopkins University in the Laboratory for Computational Sensing and Robotics (LCSR). The REU program is an intensive ten-week

program of laboratory research and instruction. In the program, each REU student receives hands-on laboratory research experience under the guidance from faculty and graduate student mentors. The students may also receive classes on ethics in research and technical communication. The students will have the opportunity to tour a local government laboratory and a private company.

- Website: <http://lcsr.jhu.edu/REU>
- Application:
- Internship Duration:
- Stipend and Housing: The students will be provided housing and a stipend of \$5000 for the 10-week period will be paid

For questions please email Ms. Anita Sampath at asampath@jhu.edu.

NATIONAL:

CNF & PARADIM REU PROGRAM

Program Description: During the summer of 2020, Cornell NanoScale Science & Technology Facility (CNF) and Platform for the Accelerated Realization, Analysis, and Discovery of Interface Materials (PARADIM) will sponsor Research Experience for Undergraduates (REU) programs from June through August. Engineering and science students with broad interests across disciplines focusing on nanotechnology are eligible to apply (see restrictions and eligibility requirements below) for the ten internships. Women, minorities, and students with no previous research experience are especially encouraged to apply.

- Website for CNF REU: http://www.cnf.cornell.edu/cnf5_reuprogram.html
- Website for PARADIM REU: <http://paradim.cornell.edu/outreach/reu-program/>
- CNF & PARADIM REU Online Application: <http://www.reu.nmin.org/>
- Application deadline: *Wednesday, February 12, 2020 (5:00 p.m. Pacific, 8:00 p.m. Eastern)*

The Naval Research Enterprise Internship Program (NREIP)

Program Description: The Naval Research Enterprise Internship Program (NREIP), provides an opportunity for students to participate in research at a Department of Navy (DoN) laboratory during the summer. The goals of the NREIP are to encourage participating students to pursue science and engineering careers, to further education via mentoring by laboratory personnel and their participation in research, and to make them aware of DoN research and technology efforts, which can lead to employment within the DoN.

- Website: <https://nreip.asee.org>
- **Application Deadline: Nov.01, 2019 at 6:00 pm EST**
- Internship Duration: Summer 2020 (10 weeks May – August, 40 hrs per week)

- Paid: \$7000 for new undergrad students, \$8500 returning undergrad students, \$11 000 for grad students.
- Location: Various Locations.

National Oceanic and Atmospheric Administration (NOAA)

Program Description: The National Oceanic and Atmospheric Administration (NOAA) is pleased to announce the availability of scholarships (includes internships) to college sophomore students majoring in STEM disciplines related to oceanic and atmospheric science, research, or technology, and supportive of the purposes of NOAA's programs and mission, e.g., biological, social and physical sciences; mathematics; engineering; and computer and information sciences.

NOAA is accepting applications from students who will have Official Junior status in Fall 2019.

- Ernest F. Hollings Undergraduate Scholarship Program Website: <https://www.noaa.gov/office-education/hollings-scholarship>
- Application Due Date: January 21st, 2020
- Eligibility Requirements: US Citizen, 3.0 GPA, Sophomore in college studying a NOAA science: atmospheric science, biology, cartography, chemistry, computer science, engineering, environmental science, geodesy, geography, marine science, mathematics, meteorology, oceanography, physical science, photogrammetry, physics, etc. at the time of application.
- Paid: \$700/week for a 10-week period

University of Virginia – Summer Research Internship Program

Program Description: The University of Virginia, School of Medicine offers summer research internship opportunities to qualified college undergraduates considering a career in biomedical research. The program targets, but is not limited to, racially and ethnically diverse students in their junior and senior years. Interns receive approx. \$4,683 toward summer expenses. In addition, housing and travel to and from Charlottesville are provided. The program's goals are to expose undergraduates to laboratory research and to familiarize them with the opportunities that exist for careers in biomedical research. Presentations and panel talks from our graduate students, along with free GRE tutorials, help SRIP interns successfully navigate the graduate school application process.

- Website: <http://www.medicine.virginia.edu/education/phd/gpo/srip/home-page>
- Application Due Date: February 1st, 2020
- Internship Duration: May 22nd – July 31st
- Paid
- Location: Charlottesville, VA

SRF Summer Scholars Program

Program Description: The SRF Summer Scholars Program offers undergraduate students the opportunity to conduct biomedical research to combat diseases of aging, such as cancer, Alzheimer's, and Parkinson's Disease. Under the guidance of one or more scientific mentors, each Summer Scholar is responsible for his or her own research project. The Summer Scholars Program emphasizes development of not only laboratory skills but communication skills as well. Students participating in the program will develop writing skills via periodic reports throughout the internship and presentation skills via a poster presentation at a SRF-sponsored conference at the end of the Program. Paid positions are available at world-renowned research institutions throughout the country.

- Website: <http://www.sens.org/education/research-opportunities/srf-summer-scholars-program>
- Application deadline: January 15th, 2020
- Internship Duration: 10-12 weeks
- Paid: Stipend
- Location: Various, please check website

National Security Agency Summer Intern Program for Science and Technology

Program Description: The Summer Intern Program for Science and Technology (SIP/ST) is a full time 12-week summer internship program open to college juniors who are concentrating their studies in the disciplines of computer science, computer engineering, electrical engineering, computer systems engineering, network engineering, mechanical engineer or telecommunications.

The SIP/ST participants have an opportunity to work with leading computer scientists and engineers on the nation's toughest cyber problems while enhancing their skills in assignments related to their major. The students work closely with a project mentor on a specific, mission-focused problem while learning in an exciting high-tech environment.

Qualifications:

- Must be a U.S. citizen
- Must be eligible to be granted a security clearance
- A GPA of 3.0 or higher is preferred
- Must be available for an operational interview and other applicable processing between the month of December 2019 and March 2020
- Must be a college junior or have at least college junior status (high potential sophomores may also be considered)

- Website: <https://www.intelligencecareers.gov/icstudents.html?Agency=NSA>
- <https://apply.intelligencecareers.gov/job-description/1133498>
- Application Due Date: October 15, 2019
- Internship Duration: 12 weeks
- Paid: Yes

- Location: Fort George G Meade, Maryland

Wake Forest University REU Internship

The Biomedical Engineering Department at Wake Forest University will offer several summer research opportunities in 2020 focusing on Imaging and Mechanics-based Projects on Accidental Cases of Trauma (IMPACT) and other biomedical engineering topics. Students selected for this Research Experience for Undergraduates (REU) program will receive a stipend and on-campus housing

<http://www.wakehealth.edu/CIB/Summer-Research-Opportunities.htm>

- Undergraduate students from all institutions (Wake Forest University students are eligible)
- Students in good academic standing - U.S. citizens, U.S. nationals and U.S. permanent residents
- Under-represented students from colleges with limited research opportunities in science, technology, engineering and mathematics are encouraged to apply

Duration: from May 22 - August 1, 2020

Application deadline: February 15th, 2020

National Institute of Standards and Technology (NIST) - SURF

Details about summer 2020 to be announced late November:

<https://www.nist.gov/surf>

US citizens only

University of Michigan Frankel Cardiovascular Center (FCVC) – SURF

Application opens December 16th and closes January 31, 2020

www.tinyurl.com/fcvsummerfellowship

REU (Research Experience for Undergraduates) site for biological sciences

https://www.nsf.gov/crssprgm/reu/list_result.jsp?unitid=5047

APPLICATIONS: Students must contact the individual site or program to apply. NSF does not have application materials and does not select student participants.

ELIGIBILITY: Individual sites may have additional eligibility requirements (e.g., number of undergraduate years completed). Undergraduate student participants supported with NSF funds must be citizens or permanent residents of the United States or its possessions. High school graduates who have not yet enrolled, and students who have already received their bachelor's degrees, are not eligible.

REU in Nanotechnology for Biology and Bioengineering

<https://inbt.jhu.edu/nanobio-reu/>

Program description: The institute for Nanobiotechnology at Johns Hopkins University offers undergraduate students from colleges and universities around the country a chance to participate in research projects in the exciting and rapidly growing area of nanobiotechnology, a place where biology, medicine, engineering, and nanoscience meet.

Application open date: November 1, 2019

Deadline: February 1, 2020

The summer 2020 program dates: June 1, 2020 – August 7, 2020

Rosetta Commons REU: A Cyberlinked Program in Computational Biomolecular Structure & Design

Program Description:

- One week of Rosetta Code School (June 1 through June 5) where you will learn the inner details of the Rosetta Python code and community coding environment, so you are fully prepared for the summer!
- 8 weeks of hands-on research in a molecular modeling and design laboratory, developing new algorithms and discovering new science.
- The summer will finish with a trip to the Rosetta Conference in the gorgeous Cascade Mountains of Washington State, where you will present your research in a poster and connect with Rosetta developers from around the world. The conference will be held from August 4 through August 7.
- This program is supported by NSF. Interns will receive housing, paid travel expenses, and a \$5,500 stipend.

Application Deadline: February 1st, 2020, deadline for recommendation letters: Feb. 5th

- Include the following in the application:
 - Resume
 - Transcript
 - Personal statement - why this internship interests you - brief summary of research and computing experience - why you are an appropriate candidate for the internship (up to 4000 characters)
 - Two references (complete the reference forms with contact information)
 - Select top three labs and projects of interest from the list below.
 - Program contact: Camille Mathis: cmathis@jhu.edu.

Eligibility:

- U.S. citizens, permanent residents, and U.S. nationals are eligible.
- College Sophomores or Juniors preferred
- Major in computer science, engineering, mathematics, chemistry, biology, and/or biophysics
- Available for at least 10 weeks during the summer of 2020.
- Interest in graduate school
- While not required, we seek candidates with some combination of experiences in scientific or academic research, C++/Python/*nix/databases, software engineering, object-oriented programming, and/or collaborative development (git).

For Graduate Students –**GMU Research Fellowship – Helpful Link**

<https://gradfellows.gmu.edu/>
<https://gradfellows.gmu.edu/fellowship-opportunities/>

Janelia Research Campus (HHMI) – Graduate Research Fellowship:

<https://www.janelia.org/you-janelia/students-and-postdocs/graduate-research-fellowship>

SIP in Biomedical Research, NIH (not open yet):

<https://www.training.nih.gov/programs/sip>

Opportunities at FDA for graduate and undergraduate students:

<https://www.fda.gov/AboutFDA/WorkingatFDA/FellowshipInternshipGraduateFacultyPrograms/default.htm>