Opportunities Week of December 14, 2018

**REU For Meeting The Grand Challenges:** The Pratt School of Engineering at Duke University is offering a National Science Foundation Research Experience for Undergraduates (REU) program during the summer. Through this program, students will have the opportunity to work on a research project relating to solving one of the Grand Challenges of Engineering for the 21st century. The Grand Challenges of Engineering are fourteen complex tasks aimed at ensuring the resiliency and sustainability of the world’s population. The challenges include reverse-engineering the brain, making solar energy cost-competitive with coal, engineer better medicines, and others. The program runs from May 28th-July 26th, 2019.

Application window is November 20th, 2018-January 11th, 2019.
For more info and to apply, see [http://gcreu.pratt.duke.edu/](http://gcreu.pratt.duke.edu/)

**Harvard T.H. Chan School of Public Health Summer Program:** The Department of Epidemiology at Harvard T.H. Chan School of Public Health is excited to announce we are accepting undergraduate student applications for our Summer Program in Epidemiology & Biostatistics! The program integrates mathematics and quantitative methods to provide students with an understanding of the skills and processes necessary to pursue a career in Public Health. This is a wonderful opportunity for undergraduate students who are interested in pursuing a career in STEM or in Public Health. For more info, see attached flyer. Please contact wamin@hsph.harvard.edu with questions.

**UCLA Amgen Scholars Program:** During the summer of 2019, UCLA will host 15 Amgen Scholars: 3 undergraduates from UCLA and 12 from other U.S. colleges and universities. Amgen Scholars will participate in research projects; attend scientific seminars, and work under some of the nation’s top academic scientists. The Amgen Scholars Program also includes a $3600 stipend, housing and some meals provided, a three-day Biotechnology Conference in Los Angeles, GRE preparation course, luncheons with faculty, workshops, scientific writing instruction, seminars, and poster presentations. Application Deadline is February 1, 2019. For more info and eligibility requirements, see [http://www.ugresearchsci.ucla.edu/amgenscholars.htm](http://www.ugresearchsci.ucla.edu/amgenscholars.htm)

**Harvard Forest Summer Program:** Harvard Forest is offering an exciting summer program for undergraduate students to collaborate with scientists conducting ecological research. Attached is a detailed program brochure as well as a few power point slides for presentation to interested students. Program runs from May 27th-August 9th, 2019. Deadline for application is February 1st, 2019 at 9:00 AM. For more info, see attached file and visit [https://harvardforest.fas.harvard.edu/other-tags/reu](https://harvardforest.fas.harvard.edu/other-tags/reu)

**Stony Brook Neuroscience MS Program Accepting Applications:** The Master’s program in Neuroscience at Stony Brook provides broad-based research training in all disciplines of neuroscience. Areas of study include Developmental Neuroscience, Cellular Neuroscience, Systems Neuroscience, Translational Neuroscience, Molecular Neuroscience and Computational Neuroscience. Deadline is March 15th, 2019. For more info, see attached flyer or [https://renaissance.stonybrookmedicine.edu/neurobiology/masters_program/information](https://renaissance.stonybrookmedicine.edu/neurobiology/masters_program/information)

**Laney Graduate School’s Summer Opportunity for Academic Research (LGS-SOAR) Program:** Emory University’s Laney Graduate School under the Diversity, Inclusion, and Community Engagement Office will be hosting the Laney Graduate School’s Summer Opportunity for Academic Research (LGS-SOAR) program. During the 10-week residential summer program, research fellows conduct full-time research and are mentored by their Faculty Mentor or Principal Investigator. LGS-SOAR provides an opportunity to build your professional network with world-renowned and diverse faculty and have an immersive research experience to help prepare you for graduate school.
Application Deadline is January 28, 2019.
For more info and eligibility, see http://www.gs.emory.edu/diversity/programming/lgs-soar/index.html

*Disclaimer: Undergraduate Biology does not endorse or take responsibility for any off-campus programs listed in Opportunities emails. While we do our best to vet any opportunity that is shared, please let us know immediately if you are suspicious of any employers/programs.
The Master’s Program in Neuroscience provides broad-based research training in all disciplines of neuroscience. Based in the Department of Neurobiology and Behavior, the training program draws on a wide range of active faculty from other departments at Stony Brook, as well as our sister institutions Cold Spring Harbor and Brookhaven National Labs. The diversity of faculty expertise, research interests, and resources provides a unique opportunity for training in neuroscience. The Neuroscience MS program prepares students to conduct, analyze and communicate Neuroscience research. Students will be exposed to advanced neuroscience research techniques, approaches and theory culminating in the MS degree. Core concepts and skills are taught through a series of required core courses, with the remaining coursework consisting of advanced electives and special topics courses selected in consultation with the student’s advisory committee.

Areas of Study:
- Developmental Neuroscience
- Cellular Neuroscience
- Systems Neuroscience
- Translational Neuroscience
- Molecular Neuroscience
- Computational Neuroscience

Program Features:
- Mentoring—a strong interaction between students and faculty is a major training focus.
- Opportunities—to participate in world-class research.
- Flexibility—training involves a solid foundation in fundamentals of neuroscience and flexibility to pursue specific topics of interest. Full and part-time options available.

Applications: All prospective MS students (domestic and international), should apply by March 15th for admission to start in the following Summer term.

APPLY ONLINE https://app.applyyourself.com/?id=sunysb-gs

For more information visit our website
http://stonybrook.edu/grad-neuroscience

or contact:
Dr. Howard Sirotkin,
MS Program Director
Dept. of Neurobiology and Behavior
Tel. (631) 632-8078
Email: neuroMS@stonybrook.edu

Stony Brook University/SUNY is an affirmative action, equal opportunity educator and employer.
Discover Public Health:

Public health protects and improves the health of individuals, families, communities, and populations, locally and globally

Are there required majors for the field of Public Health?

Public health professionals study and work in a range of fields. There is no one required undergraduate major for public health, and people in the field have backgrounds in:

- **Social sciences**: anthropology, economics, history, political science, psychology, sociology, ethnic studies, women's studies, etc.
- **Biological and physical sciences**: biology, chemistry, earth science, engineering, physics, mathematics, etc.
- **Quantitative sciences**: finance, statistics, computer sciences
- **Many other fields**, including nursing, the allied health professions, and more!

Examples of the many fields/roles in public health:

- Biostatisticians
- Community planners
- Epidemiologists
- Emergency responders
- Environmental health workers
- Healthcare consultants
- Nutritionists
- Occupational health and safety professionals
- Public health nurses
- Public health physicians
- Public policymakers
- Scientists and researchers
- Social workers
- Toxicologists

Summer Program in Epidemiology and Biostatistics

**Length**: 5 weeks

**Application Deadline**: February 8, 2019

**Program includes**: Stipend, airfare, housing, & GRE prep course

**Department**: Epidemiology

**Overview**: This program integrates mathematics and quantitative methods to provide undergraduates with an understanding of the skills and processes necessary to pursue a career in Epidemiology or Biostatistics. Successful candidates typically have strong quantitative skills.

[https://www.hsph.harvard.edu/epidemiology/diversity/summer-program-in-epidemiology/](https://www.hsph.harvard.edu/epidemiology/diversity/summer-program-in-epidemiology/)
What is the Summer Program in Epidemiology?

The summer program curriculum consists of five parts: coursework (not for credit) in Epidemiology and Biostatistics, as well as an R bootcamp; formal lectures, which are provided by Harvard T.H. Chan School of Public Health faculty members with different foci in Public Health; a group research project where students will investigate a question of public health provided by a Faculty/Postdoc Mentor; Kaplan GRE prep courses, where students will take diagnostics tests as well as work in small Kaplan led groups to improve test taking and scores; and Profession Development sessions led by Faculty/Staff on Admissions, Career Translation, Resume/Interview skills, etc. Students who participate in the program are able to meet with the Department of Epidemiology students and post-doctoral fellows at different networking events. In addition, students have the opportunity to meet with faculty and administrators individually, and explore the historic city of Boston, Massachusetts. Participants receive summer stipends, and funded housing and travel from NIH grants, NSF grants, the Center for Communicable Disease Dynamics (CCDD)/MIDAS, and from continued support by the Department of Epidemiology and their dedication to diversity and inclusion in STEM fields.

Who is Eligible To Apply?

In order to take advantage of this opportunity, applicants must meet all of the criteria below.

- Applicants must be enrolled in an undergraduate program or recently graduated from an undergraduate program and not matriculating in a graduate program during the 2019-2020 academic year
- Applicants must be U.S. citizens, U.S. nationals or permanent residents of the U.S.
- Applicants must have a GPA of 3.0 or above
- Applicants must be from a quantitative science background or have taken several quantitative classes beyond intro level courses
- Applicants must demonstrate an interest in public health
- Applicants must identify with at least one underrepresented group in biomedical research, which is defined by meeting the NIH’s criteria below:
  - Racial and ethnic groups such as Blacks or African Americans, Hispanics or Latinx,
  - American Indians or Alaskan Natives, and Native Hawaiians or other Pacific Islanders;
  - People from disadvantaged and low socioeconomic status;
  - Students with disabilities
  - Annual family income below established low-income thresholds, based on family size (this requires additional supportive documentation);
  - A rural, inner-city, or other environment that has inhibited a person from getting the knowledge, skills, and abilities needed for a research career

Exclusions: Individuals interested in pursuing a Doctor of Medicine (MD) or have already been admitted to a graduate program are ineligible to apply. The program is for students interested in pursuing the following degree types: Master of Science (MS) or Doctor of Philosophy (PhD). If you are unsure about degree types, please visit the HSPH Admissions' website.
How do I apply?

*Application and Letter of Recommendation are due February 8, 2019 at 11:59pm*

*Admission Results by end of March*

The Application will *open November* 2018 and the *deadline for applications and Letter of Recommendation will be February 8, 2019.*

All applications must be submitted electronically through this link: [Apply Now!](#)

**An application to this program requires:**

- Resume or CV
- Academic Transcript(s)
- Two letters of recommendation from professors at your current institution who can speak to your capabilities within their courses (please do **not** submit recommendations from high school teachers, or individuals who do not know you in an academic capacity).
- A personal statement describing your academic and professional interests, your reason for applying to the Summer Program in Epidemiology, the insight you hope to gain from the program, and the ways the program will influence your academic trajectory. The typed statement should be between 1 and 2 pages

**Note:** the two letters of recommendation must be from professors who can speak to your capabilities within their courses (please **do not** request recommendations from high school teachers, or individuals who do not know you in an academic capacity).

**Instructions for recommenders:**

Please tell your recommender to email harvardepisummer@hsph.harvard.edu from a professional email address with their recommendation attached as a PDF. It is your responsibility to contact your recommender with these instructions and ensure that they provide us with their recommendation letter by the deadline of February 8, 2019. We will send a confirmation email to the recommender when it is received.

**For more information:**
[https://www.hsph.harvard.edu/epidemiology/diversity/summer-program-in-epidemiology/](https://www.hsph.harvard.edu/epidemiology/diversity/summer-program-in-epidemiology/)

**Questions? Please contact:**
Caroline Huntington: chunting@hsph.harvard.edu
Warisha Amin: wamin@hsph.harvard.edu
We seek a diverse group of students from a variety of undergraduate programs across the country.

Summer Projects focus on:

• Forest Carbon Dynamics in Air & Soils
• Ecosystem Transformations: Invasive Species Impact
• Advancing Conservation
• Computer Science Solutions for Big Data
• Remote Sensing of Changing Forest Canopies
• Tree Ring Analysis: Telling Climate Stories

Students are paid a stipend of $5,775 for the 11-week session (May 27th to August 9th). Excellent on-site housing and a full meal plan are included as part of the program. Assistance with travel costs to and from Harvard Forest is also provided.

Visit https://harvardforest.fas.harvard.edu/other-tags/reu for details.

Deadline for Applications is Friday, February 1, 2019 at 9:00AM EST.
The Pratt School of Engineering is offering research experience opportunities for undergraduate students during the summer 2018. Research experiences will be available from all departments in Pratt: Biomedical Engineering, Civil and Environmental Engineering, Mechanical Engineering and Materials Science, Electrical and Computer Engineering.

Through this program, students will work on a research project related to solving the Grand Challenges of Engineering, complex tasks aimed at ensuring the sustainability of humanity. These challenges include: reverse-engineering the brain, making solar energy more affordable, engineering better medicines, providing access to clean water, improving cyber-security, advancing learning tools, among others.

**Program benefits**

- Work on an exciting research project
- Competitive research stipend
- On campus housing
- Travel allowance

**Eligibility**

Students must be rising sophomores or juniors attending an accredited college or university. Students must be U.S. citizens or permanent residents. We strongly encourage applications from underrepresented minorities groups or students with disabilities.

**Learn more and apply**

Applications open on November 20. To review descriptions of research opportunities being offered in summer 2019, visit our website: [http://gcreu.pratt.duke.edu/](http://gcreu.pratt.duke.edu/)

Applications must be received by January 11, 2019

**Contact Us**

Carmen Rawls, PhD
Program Director, [carmen.rawls@duke.edu](mailto:carmen.rawls@duke.edu)

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Every year, the Amgen Scholars U.S. Program provides hundreds of selected undergraduate students throughout the U.S. with the opportunity to engage in a hands-on research experience at many of the nation’s premier educational institutions. Currently, thirteen institutions in the U.S. host the summer research program. The Amgen Foundation has committed $74 million over sixteen years to this global initiative to make the opportunity possible for thousands of students.

Inspiring the Scientists of Tomorrow
As Amgen Scholars, students will have the opportunity to:
- Take part in important institution research projects, gain hands-on lab experience and contribute to the advancement of science;
- Interact with and receive guidance from faculty mentors, including some of the nation’s top academic scientists; and
- Participate in engaging scientific seminars, workshops and other networking events.

The Amgen Scholars U.S. Symposium
A signature component of the program is a mid-summer symposium held in California where students hear firsthand from leading scientists working in industry and academia. The U.S. symposium provides students with a valuable opportunity to discuss their research, learn about drug discovery and development, and network with other Amgen Scholars from the U.S. and Canada.
Financial Support

Financial support is a critical component of the Amgen Scholars Program. Please note that details vary by host institution. See each institution's summer research program website for more information.

Eligibility

Amgen Scholars U.S. Program applicants must be:
- U.S. citizens or U.S. permanent residents;
- Undergraduate students enrolled in accredited four-year colleges or universities in the United States, Puerto Rico or other U.S. territories; and
- Sophomores (with four quarters or three semesters of college experience), juniors or non-graduating seniors (who are returning in the fall to continue undergraduate studies).

U.S. program applicants must also have:
- A cumulative grade point average of 3.2 or above; and
- An interest in pursuing a Ph.D. or M.D.-Ph.D.

Application deadlines are determined by Amgen Scholars Program host institutions, between early February and mid-February. Check individual host institutions for details about how to apply.

For more information, check out amgenscholars.com, or please contact the Amgen Scholars Global Program Office at amgenscholarsglobal@harvard.edu or +1 617-384-6758.

Amgen Scholars is an international program funded by the Amgen Foundation with direction and technical assistance provided by Harvard University. The Amgen Foundation seeks to advance excellence in science education to inspire the next generation of innovators, and invest in strengthening communities where Amgen staff members live and work. To date, the Foundation has donated over $300 million to local, regional, and international nonprofit organizations that impact society in inspiring and innovative ways. The Amgen Foundation brings the excitement of discovery to the scientists of tomorrow through several signature programs, including Amgen Scholars, Amgen Biotech Experience, and LabXchange. For more information, visit amgeninspires.com and follow us on twitter.com/amgenfoundation.