Harvard John A. Paulson **School of Engineering** and Applied Sciences

Perform cutting-edge research in world-class laboratories

Collaborative projects in computer science, materials science, bioengineering, biology and math, physics, robotics, computational science, nanotechnology, and bio-inspired engineering

$5,000 program and $350 travel stipends

Free on-campus housing provided

Apply by February 15, 2020

reusite.seas.harvard.edu/application

Eligibility Requirements:

Citizen or Permanent Resident of the United States (Wyss and Rowland Institutes excepted)

Currently enrolled undergraduate not graduating before December 2020

Contact us at:
reu@seas.harvard.edu

RESEARCH EXPERIENCE FOR UNDERGRADUATES

June 8 – August 15, 2020

SUMMER 2020 RESEARCH AREAS

When you apply, your application will be available to research mentors for all funding sources listed below:

NSF National Nanotechnology Coordinated Infrastructure (NNCI) at the Center for Nanoscale Systems at Harvard

cns.fas.harvard.edu

Participate in research in photonics and optical computing, biomimetics, diamond-based nanoscale sensors and computing elements, and more at our world-class nanofabrication, characterization and imaging facility.

The Wyss Institute for Biologically Inspired Engineering

wyss.harvard.edu

Discover the engineering principles that nature uses to build living things, and harness these insights to create biologically inspired materials and devices to revolutionize healthcare and create a more sustainable world. Project include adaptive material technologies, bioinspired soft robotics, 3D organ engineering, bioinspired therapeutics and diagnostics, living cellular devices, immuno-materials, molecular robotics, and synthetic biology.

NSF REU Site in Biomaterials & Bioengineering (BRIDGE)

reusite.seas.harvard.edu

Conduct research in biomaterials, including drug delivery, tissue engineering, microfluidics, and cells as materials.

NSF Materials Research Science and Engineering Center (MRSEC)

mrsec.harvard.edu

Study the mechanics of films and interfaces, design and test materials for soft robotics, and engineer materials and techniques for biological studies at cellular scales.

NSF Privacy Tools

privacytools.seas.harvard.edu

Join a multidisciplinary effort to help enable the collection, analysis and sharing of personal data for research in social science and other fields while providing privacy for individual subjects. *Positions contingent on funding.*

NSF-Simons Center for Mathematical and Statistical Analysis of Biology

quantbio.harvard.edu/mathbio

This Center focuses on understanding how molecular networks in individual cells contribute to developmental decisions; discovering how proteins and cells self-organize to produce intra-cellular structures, tissues, and organs; and understanding how biological systems adapt within and beyond the lifespan of individual organisms. Projects aim to advance knowledge of complex biological systems using mathematical and computational tools, developing new mathematics and statistics for the study of biology.

Institute for Applied & Computational Science

iacs.seas.harvard.edu

Tackle team projects involving the application of computational and mathematical tools such as machine learning, data analysis, and numerical simulation to solve real-world problems in fields including geoscience, medicine, materials science, and the social sciences. *Positions contingent on funding.*

The Rowland Institute at Harvard

rowland.harvard.edu

Study experimental science over a broad range of disciplines. Research in physics, chemistry, and biology has an emphasis on interdisciplinary work and development of new experimental tools. *Positions contingent on funding.*

Additional Opportunities

Additional projects in a variety of areas may become available as funding is received. Please inquire at reu@seas.harvard.edu if you have specific interests within the Harvard Paulson School of Engineering and Applied Sciences that are not listed in this flyer.

We believe that the best science and engineering solutions come from teams with diverse experiences and backgrounds. We also believe that science and engineering research careers should be accessible regardless of culture, race, ethnicity, age, economic status, religion, disability, gender identity or expression, sexual orientation, or other dimensions such as military service. We encourage students who identify as being members of groups who have traditionally been underrepresented in science and engineering to apply!

Harvard John A. Paulson School of Engineering and Applied Sciences

Materials for BRIDGE

mrsec materials science at the interface @ harvard

The Rowland Institute at Harvard

Wyss Institute

Center for Nanoscale Systems Harvard University

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