SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATES FROM UNDERREPRESENTED GROUPS

MARYLAND CENTER FOR UNDERGRADUATE RESEARCH
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WHY DO UNDERGRADUATE RESEARCH?

• Get hands-on experience in your field
• Learn new skills, procedures, and computer programs
• Develop professional contacts and friendships, useful for later recommendations and networking
• Great experience for graduate school & medical school
IF YOU DON’T HAVE RESEARCH EXPERIENCE YET....

• Get started here at UMD while considering outside programs

• Talk with your major advisor, grad student TAs, and course professors about what research is being done in your major

• Contact people you might like to work with several weeks before the start of the semester

• Use the Maryland Student Researchers database of campus opportunities here
MARYLAND STUDENT RESEARCHERS (MSR)

- The MSR database lists on-campus research projects that are actively looking for undergraduate student assistance
- Many MSR projects are open to beginners and provide training; others specify any required skills or background
- About 150+ projects are listed on the MSR database each semester
- You can search for opportunities in your subject of interest [here](http://www.ugresearch.umd.edu)
APPLYING FOR SUMMER RESEARCH PROGRAMS:

• **Read guidelines carefully!**

• Formal application process including essay(s), CV, transcripts, and letters of recommendation (usually 2)

• Deadlines usually are in January or February

• These programs are competitive: Apply to at least 5-6 options

• Some programs require prior research experience, a minimum GPA (usually 3.0 or above), and course prerequisites

• Most programs target current sophomores and juniors; some are open to qualified freshman or graduating seniors
COMMON FEATURES OF SUMMER RESEARCH PROGRAMS:

• Many larger programs take place at multiple locations
• Research full-time for 8-10 weeks
• Take part in an established research project supervised by professional researchers, usually as part of a team of 10-12 summer researchers
• Sizeable stipends ($3,000-$6,000), many cover room/board and travel costs
• Main purpose is to help students, especially underrepresented students, prepare for PhD and MD programs
SUMMER RESEARCH OPPORTUNITIES FOR MINORITIES AND UNDERREPRESENTED STUDENT GROUPS:

- Programs seek to diversify the students who participate in research and graduate study
- Underrepresented students includes
  - Women in STEM
  - Diverse racial/ethnic background
  - First-generation college students
  - Low-income applicants
  - Military veterans
  - Students of non-traditional age
  - Students with physical disabilities
  - and others
SUMMER RESEARCH OPPORTUNITIES FOR MINORITIES AND UNDERREPRESENTED STUDENT GROUPS:

• Leadership Alliance
• BTAA SROP (Big Ten Academic Alliance Summer Research Opportunities Program)

…and many more opportunities listed on the MCUR website!!!!
THE LEADERSHIP ALLIANCE
THELEADERSHIPALLIANCE.ORG

• Includes: hands-on summer research, a national symposium, and ongoing skill building and mentorship afterwards
• Research areas: applied math, computer science, education (UVA only), engineering, humanities, life sciences, math, physical sciences, psychology, and social sciences
• Submit: 1 application with resume, statement of purpose, two recommendation letters, official transcripts, and list of preferred research sites

Eligibility:
Have completed at least two semesters and have at least one semester remaining of their undergraduate education by the start of the summer
GPA of 3.0 or above
Interest in pursuing graduate study (PhD or MD-PhD)
U.S. citizen or permanent resident

Deadline: February 1

Benefits: Stipend, and travel/housing expenses from the research institution

Participating Institutions:
Brown University
Columbia University
Cornell University
Dartmouth College
Harvard University
Howard University
Johns Hopkins University
New York University
North Carolina A&T State
Stanford University
Tufts University
University of Chicago
University of Colorado Boulder
University of Maryland, Baltimore County
University of Miami
University of Pennsylvania
University of Virginia
Vanderbilt University
Washington University in St. Louis
Yale University
BIG TEN ACADEMIC ALLIANCE – SUMMER RESEARCH OPPORTUNITIES PROGRAM
BTAA.ORG/STUDENTS/SROP/INTRODUCTION

• Includes: hands-on research, workshops about research skills and graduate school preparation, end-of-summer symposium, and enrichment activities

• Research areas: include STEM, social sciences, and humanities

• Application requirements vary by school. Not all institutions accept shared BTAA application

Eligibility:
- U.S. Citizen/permanent resident
- Enrolled full-time
- GPA of 3.0 or above
- Completion of at least 2 semesters of UG with at least 1 semester left
- Strong interest in pursuing a PhD

Deadline: February 10

Benefits: Stipends of $3,000-$6,000 plus housing and travel; some institutions also pay for meals

Participating Institutions:
- University of Illinois at Urbana-Champaign
- University of Iowa
- University of Maryland
- University of Michigan
- University of Minnesota
- University of Nebraska-Lincoln
- Northwestern University
- Ohio State University
- Pennsylvania State University
- Purdue University
- Rutgers University
- University of Wisconsin-Madison

Maryland Center for Undergraduate Research
www.ugresearch.umd.edu
SUMMER UNDERGRADUATE RESEARCH PROGRAMS OPEN TO ALL STUDENTS:

• National Science Foundation (NSF) Research Experiences for Undergraduates
• National Institute of Standards and Technology (NIST) Summer Undergraduate Research Fellowships (SURF)
• Amgen Scholars
• Lawrence Livermore National Laboratory Summer Internships
NATIONAL SCIENCE FOUNDATION
RESEARCH EXPERIENCES FOR
UNDERGRADUATES (REU’S)
NSF.GOV/CRSSPRGM/REU/REU_SEARCH.JSP

Eligibility: U.S. citizens or permanent residents

Deadlines: Vary depending on the research site – usually in January or February for the following summer

Benefits: Students receive stipends and for most sites, housing and travel expenses also

- Hundreds of opportunities in most STEM and Social Science fields
- NSF-funded researchers receive extra funds to bring in 10-12 students each summer
- Students apply directly to each REU site – separate application for each!!!
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY: SUMMER UNDERGRADUATE RESEARCH FELLOWSHIPS
NIST.GOV/SURF

• Open to students in physics, material science, chemistry, applied mathematics, computer science, or engineering
• Students should be considering graduate school
• NIST Research Campuses in Gaithersburg, MD and Boulder, CO
• Hundreds of students at 7 facilities—30+ UMD students annually
• Application is through USAJobs.gov

Eligibility:
Must be a U.S. citizen or permanent resident to apply
Must have a 3.0+ GPA

Deadline: February 3 on USAJobs.gov

Benefits: $5,500 stipend and allowances for travel and housing
AMGEN SCHOLARS
AMGENSCHOLARS.COM

• Students conduct research in Life Sciences and Related Fields, attend seminars and socials, and meet at an end-of-summer symposium
  • Includes biology, bioengineering, genetics, medicine, neuroscience, statistics, chemistry and more
• Hosts about 200 students at 10 major U.S. research universities
  • Including Caltech, Columbia, Harvard, MIT, NIH, and others

Eligibility:
U.S. citizens or permanent residents
Sophomores, juniors, or non-graduating seniors
Cumulative GPA of 3.2 or above
Strong interest in pursuing a PhD or MD-PhD

Deadline: February 3, with the exception of Cal Tech, which is mid-February

Benefits: $3,600-$6,000 plus housing and some meals and travel. Varies by institution
LAWRENCE LIVERMORE NATIONAL LABORATORY SUMMER INTERNSHIP PROGRAMS
INTERNSHIPS.LLNL.GOV

Eligibility:
Minimum GPA of 3.3 with 3.5+ preferred
Most programs require U.S. citizenship

Deadline:Varies

Benefits: Competitive salaries
Students must make housing arrangements; housing opportunities are listed on the program's website.

• Federal national defense laboratory in Livermore, California hosts 300+ undergraduate and graduate interns each summer
• Opportunities in engineering, physics, computer science, and other physical and life sciences, as related to counterterrorism, energy, and biosecurity
SUMMER RESEARCH DATABASE

• Database of funded research opportunities at multiple institutions
• Can search by institution, discipline, and region
• Includes NSF REU, Big 10, and many other opportunities

THERE ARE MANY, MANY MORE SUMMER RESEARCH OPPORTUNITIES THAN THE ONES WE FEATURED!

- Pay attention to department listserv messages and postings on bulletin boards
- Ask your advisor if he/she can recommend summer research opportunities and programs, particularly those that former students have completed.
- Check out these links on the MCUR Website:
  - Research in the DC Area
  - Research in the U.S.
- Lastly, please feel free to make an appointment with the MCUR office by emailing ugresearch@umd.edu

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