SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATES

MARYLAND CENTER FOR UNDERGRADUATE RESEARCH
1201 MARIE MOUNT HALL • UGRESEARCH@UMD.EDU
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.

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
EXAMPLES OF SUMMER UNDERGRADUATE RESEARCH PROGRAMS:

• 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
• And many more!!!
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

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
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