

List of some opportunities for internships in biology and natural sciences
Prepared by Olga R. Kopp

List of internships by subject.

<http://people.rit.edu/gtfsbi/Symp/summer.htm>

This is very comprehensive list of internships for biology and biotechnology organized by topic. Includes a list of internships that first year students could apply for.

American heart association (~\$4,000)

<http://www.americanheart.org/presenter.jhtml?identifier=3013196>

Students are assigned to leading biomedical research laboratories in California, Nevada or Utah for a ten week research experience. The areas of research include among others: signal transduction, gene expression, vascular wall biology, ion transport and cellular physiology. Students should have junior or senior academic status and should have completed at least four semesters or six quarters of any combination of courses in biological sciences, physics and/or chemistry. The deadline this year was December 2nd. You can apply next year.

Research experience for undergraduates

http://www.nsf.gov/crssprgm/reu/reu_search.cfm

click on the subject you are interested on: e.g. Biological sciences. Then click Control F and write down the state you want to do your internship: for example: UTAH. The U. of Utah has internships in Biology, chemistry and other subjects. Sometimes

BYU has also internships. All of them are paid, around \$4,000

Internships in diverse areas <http://www.nsf.gov/crssprgm/reu/index.jsp>

Utah Summer Undergraduate Research Program - USURP

<http://web.utah.edu/usurp/>

a 10-week research program for students considering careers in biological or biomedical research sciences. The program is limited to Utah residents.

ORAU – Oak Ridge National Laboratory.

<http://see.ornl.gov/default.aspx>

Click on undergraduates. – many opportunities.

Summer programs in Texas and other places

<http://cns.utexas.edu/hpo/summer.asp>

Bioinformatics and Computational Molecular Biology - Bioinformatics and Computational Molecular Biology - Undergraduate Summer Research Program - University of Wyoming.

Applications will be evaluated on a rolling basis starting on February 2, 2009.

<http://www.wyomingbioinformatics.org/SummerSchool/>

Research in several labs: Statistical genetics and models of adaptation and speciation; microarray analysis, comparative

genomics and molecular evolution; comparative genomics of maize; genetics of bacterial motility; microbial genomics;

environmental genetics and adaptation in plants. To apply, send a resume and statement of research interests to liberles@uwyo.edu, arrange to have 2 letters of recommendation sent directly by the letter writer to liberles@uwyo.edu, and

arrange to have an official transcript sent to: David Liberles -Department of Molecular Biology - Dept. 3944- University of

Wyoming - Laramie, WY 82071

Summer Undergraduate Research Experience: SURE.

<http://www.atmos.anl.gov/GCEP/SURE/index.html>

<http://www.atmos.anl.gov/GCEP/>

For undergraduates in their **sophomore and junior** years. Outstanding **Freshmen and seniors** will also be considered. Ten week internship. A weekly stipend of \$475.00, travel expenses. Deadlines are the first Monday of February. Some of the mentors include Dr. Dave Bowling, Steven Krueger, Jim Ehleringer from the U. Utah, so a student can do his/internship here in Utah.

Experiential program in chemistry

https://portal.acs.org/portal/acs/corg/coldfusionapp?_nfpb=true&_pageLabel=mapp_epic_page#

Internships in different institutions all throughout the U.S.

Synthetic biology –

http://www.ncsu.edu/biotechnology/?p=reu&sub=the_program

The program is open to all rising **sophomore, junior**, and senior undergraduate students with a demonstrated interest in molecular biology. Applicants will be evaluated based on their statement of interest, transcript, and letters of recommendation.

Undergraduate applications for the Summer 2009 program are due February 20, 2009. This is a summer program that will run

May 26 - July 31, 2009. The program will run until 2011 so look for this opportunity every summer. Stipends, room, board and

travel expenses are provided. Stipend \$4,000 for the 10-week session. Round trip airfare will be reimbursed. For additional

information contact Dr. Sue Carson sue_carson@ncsu.edu. Tel. 919-513-0330

American Association for the Advancement of Science –Mass media Science and Engineering fellows program

<http://www.aaas.org/programs/education/MassMedia/>

“The AAAS Mass Media Science & Engineering Fellows work for 10 weeks during the summer as reporters, researchers, and

production assistants in mass media organizations nationwide. Fellows collaborate with media professionals at radio and

television stations, newspapers, and magazines. As part of their job, the student-scientists and their host-journalists strive to

make science news easy for the public to understand. AAAS typically selects from 20-25 Mass Media Fellows each summer.

Fellows are provided a weekly stipend of \$450 as well as travel expenses to and from AAAS and their sites.”

Health Education Association of Utah – Internships

<http://www.heau.org/internships.php?section=internships>

Includes internships in Health behavior innovations, Huntsman Cancer Institute, Health education and promotion, women,

infants and children (Provo Clinic), etc. For the Fitness internships, if you want credit, that has to be done with the fitness

department, not the biology department.

REU- Case Western University

<http://bme.case.edu/reu/>

10-week summer research experience

- Stipend of \$4,900 and university housing accommodations for non-local participants
- Travel stipend of \$400 for non-local participants
- Research projects, seminars, poster session, career development, and social activities
- Project areas in biomaterials, tissue engineering, drug delivery, imaging, and neural engineering

Washington University in St. Louis

10 week summer research internship for exceptional students interested in biomedical research (MD/Ph.D. or Ph.D.)- applicants

who have challenged themselves and excelled academically (e.g. first generation college students, rural or inner city areas,

African Americans, Hispanic Americans, Native Americans, Pacific islanders). Need to be enrolled at an undergraduate

institution. The student will receive a stipend, on campus housing, travel for him/her and at the end of the summer, travel for a guest to attend the final research symposium. Online application available beginning November 1.

<http://biomedrap.wustl.edu>

NASA

http://www.nasa.gov/audience/forstudents/postsecondary/programs/Undergraduate_Student_Research_Project.html

Research at 10 NASA centers and additional facilities. Three internship sessions: a 15 week spring session, a 10 week summer

session and a 15 week autumn session. Applicants must be **sophomores, juniors or seniors** by the start of their internship.

Students must be U.S. citizens with academic majors in engineering, mathematics, computer sciences, physical or life sciences.

Summer Undergraduate Research Fellowship Program (SURF)- UT Southwestern Biomedical Sciences

<http://www8.utsouthwestern.edu/utsw/home/education/surf/index.html>

Intensive summer research training experience designed for college students preparing for careers in biological research.

Students will spend 10 weeks at laboratories of University of Texas Southwestern Graduate School of Biomedical Sciences.

Students will learn modern research techniques and will learn to execute an experimental strategy to answer a scientific

question. At the end of the summer students are required to present their research in a poster session.

Summer Undergraduate Research Program (SURP): Albert Einstein College of Medicine (New York).

<http://www.aecom.yu.edu/phd/index.asp?surp>

Students spend 9 weeks starting in mid June, working in the laboratory. Students are matched to a laboratory in their area of

interest. \$3,000 stipend and up to \$500 in transportation assistance.

Cold Spring Harbor – Long Island, NY

<http://www.cshl.org/URP/>

Undergraduate research program for students around the world. Research in cancer biology, neuroscience, plant biology,

cellular and molecular biology, genetics, macromolecular structure, bioinformatics.

Pasteur Institute (for those interested in microbiology)

<http://www.pasteurfoundation.org/zuccaire.html>

One of the world's leading biomedical research organizations. A 10-week summer internship with \$400/week allowance. Also

a \$300 subsidy to defray cost of travel. Students must be undergraduates with strong interest in biosciences and biomedical

research. Previous lab experience is highly recommended. Students should have completed two full years (4 semesters) of

college work by the time the internship commences. Open to U.S. citizens only.

Oak Ridge National Laboratory : for those interested in chemistry, Geology, Engineering...

<http://www.ornl.gov/orise/edu/ornl/gi-gugrgHERES.htm>

Higher Education Research Experiences at Oak Ridge National Laboratory for students. Science and Engineering activities

related to basic sciences, energy and the environment. For different disciplines including: computer sciences, Earth, environmental and marine sciences,; engineering; Life, Health and Medical Sciences; Mathematics; Physical Sciences.

Location: Oak Ridge National Laboratory (Tennessee).

Department of Commerce

<http://see.ornl.gov/ProgramDescription.aspx?Program=10038>

Majors: life, health and medical sciences, life sciences, physical sciences. U.S. citizens only. 10 weeks in the summer, 16 weeks

during Fall or Spring semester. Deadlines: Third Tuesday in January for Summer; July 30 for Fall semester, December 31 for

Spring semester. Weekly stipend of \$450 for undergraduates, \$125 per week housing allowance and limited travel reimbursement, accidental medical expense coverage provided.

Merck internships

<http://www.merck.com/careers/university/internships.html>

Paid positions, 10-12 weeks during the summer. Most of the internships are at West Point, PA; Rahway, NJ and Whitehouse

Station, NJ. Other internships are in Puerto Rico, Kirkland, WA; Charlotte, NC and others.

National Nanotechnology Infrastructure Network

http://www.nnin.org/nnin_reu.html

A 10 week program, \$3800 stipend with all costs for travel and housing covered. Students that complete this program are

eligible to participate in a follow up program: a second year in an international program (laboratories in Germany, Japan and others are included).

Amgen Scholars Program in Biotechnology

<http://www.amgenscholars.com/>

Biotechnology research. Open to U.S. citizens and permanent residents, **sophomores, juniors and non-graduating seniors**.

These are paid internships at different universities.

National Institute of Health - Summer Internship Program in Biomedical Research

<http://www.training.nih.gov/student/sip/>

Students will work with leading scientists in the world in an environment dedicated to biomedical research. Open for students

sixteen years of age or older who are U.S. citizens or permanent residents and are enrolled in high school, college or medical/dental school.

Summer Undergraduate Research Program – NYU school of medicine.

<http://www.med.nyu.edu/sackler/programs/summer.html>

For qualified **sophomores and juniors** who are interested in pursuing research careers as PhD or MD/PhD. Nine weeks internship.

Genetic alliance internship program

http://www.geneticalliance.org/ws_display.asp?filter=internships

Interns address policy issues and explore opportunities for both career and personal development. Areas of research include:

genetics, genetic counseling, bioethics, health policy, public education, consumer advocacy, nonprofit management, electronic

communication, and public information systems. Located in Washington D.C.

Yale BioSTEP Research for Undergraduates

<http://info.med.yale.edu/omca/programs/biostep.htm>

Biomedical Science Training and Enrichment Program: Ten week training for undergraduates, especially students from groups

underrepresented in biomedical sciences. Research opportunities in Cell biology, neuroscience, molecular medicine, vascular

biology and transplantation, molecular biophysics and biochemistry, genetics, cell and molecular physiology, immunobiology,

pharmacology.

Baylor college of medicine: Summer Medical and Research Training program

<http://www.bcm.edu/smart/>

For undergraduates exploring a career in scientific research (e.g. M.D.- Ph.D.) Up to 100 students are recruited for the SMART

program across the nation. Nine weeks in biomedically related research in different areas, career development activities,

housing at Rice University dorms.

Cincinnati Children's - Summer Undergraduate Research Fellowship

<http://www.cincinnatichildrens.org/ed/research/undergrad/surf/default.htm>

Clinical and basic science research opportunities for undergraduate students in the laboratories of Pediatric faculty in the

college of Medicine. 10 week program, stipend of \$3200 for the summer. In addition to research, students participate in

scientific writing seminars, ethics in research seminar and an introduction to bioinformatics.

Mayo clinic in Rochester – Summer Undergraduate Research Fellowship program.

<http://www.mayo.edu/mgs/surf-application.html>

Ten weeks, \$5,000 stipend. Hands on experience with “real-world” research projects at a major medical center.

Craig Venter Institute of Genomics

<http://www.jcvi.org/cms/education/internship-program/>

Research opportunities in “microbial and parasite genomics; genomic medicine with an emphasis on cancer genomics and

human genome re-sequencing and analysis; mammalian, plant and viral genomics; environmental genomic analysis with

emphasis in microbial biodiversity, ecology, and evolution; use of molecular and genomic methods to develop biological

sources of clean energy; synthetic genome development; educational outreach and policy research on the ethical, legal and

economic issues associated with genome science and technology”.

The Jackson Institute (applications due at the beginning of January)

<http://education.jax.org/summerstudent/index.html>

Students will do Biomedical research under world-renowned scientists.

National Human Genome research institute

<http://www.genome.gov/page.cfm?pageID=10000218>

Summer internship program in Biomedical Research. Students will also have the opportunity to attend the National Institutes of

Health Summer Seminar Series. Students earn a monthly stipend.

Coriell Institute for Medical Research (paid internships)

<http://www.coriell.org/index.php/content/view/67/125/>

At least 10 weeks commitment for college students. Research could be at the Tissue cultures laboratories, Nucleic acids

biochemistry laboratory, molecular biology laboratories, differential cell laboratory, cryogenics, cytogenetics and scientific data

projects.

M.D. Ph.D. programs:

List of schools with MD- Ph.D. programs.

These programs cover all your tuition plus an stipend (average \$25,000 per year) throughout your M.D. Ph.D. or your Ph.D.

<http://www.aamc.org/research/dbr/mdphd/programs.htm>

To be accepted into these programs you need research experience. An internship is basically absolutely necessary.

You may try

to do an internship with one of the schools you want to apply anyway. If you do a good job you will open additional doors there.

If you don't want an M.D., you still can do a Ph.D. at those institutions.

Summer internships in Biology

<http://www.columbia.edu/cu/biology/ug/intern.html>

A site from Columbia University with links to different internship opportunities

Smithsonian Institute:

http://intern.si.edu/internship_types_all.html

Internships in different Museum, Research Institutes and Offices of the Smithsonian Institute.

Alaska State parks: volunteer and volunteer internship positions

<http://www.alaskastateparks.org/>

Alaska Department of Natural Resources: includes volunteer positions

Minorities

Black Excel's – for undergraduate African-American students who want to become doctors.

<http://www.blackexcel.org/med-link.htm>

<http://www.mcw.edu/display/router.asp?docid=619#Q3>

Harvard Medical School – Summer Honors Undergraduate Research Program

<http://www.hms.harvard.edu/dms/diversity/shurpintro.html>

Research training in biomedical sciences. Primarily for college students belonging to minority groups that are underrepresented

in the sciences. Stipend: ~\$400 per week for 10 weeks. Students are required to participate for the full ten weeks of the program.

MIT- Department of Biology – Undergraduate Summer Research Internships in the biological sciences and related fields.

http://mit.edu/biology/www/outreach/summer_research/undergraduates.html

Ten week summer research intensive training to **advanced sophomore and junior** science majors. Preference will be given to

students from non-research intensive colleges and universities.

Genomics and bioinformatics: The Broad Institute (MIT):

<http://www.broad.mit.edu/diversity/>

programs designed to attract minority students through hands on research at the pre-baccalaureate, undergraduate and

postdoctoral levels.

NIDDK Short-term Education Program for Underrepresented Persons

<http://stepup.niddk.nih.gov/ug.htm>

The National Institute of Diabetes and Digestive and Kidney Disease's – Research experience for undergraduate students who have

completed at least one year at an accredited institution. U.S. citizens, non-citizen nationals, or legal permanent residents. \$4,000 stipend,

travel expenses.

Medical school preparation

Summer MCAT preparation – University of Utah – pays \$1,800

<http://medicine.utah.edu/diversity/premed/mcat.htm>

A Ten week Kaplan MCAT preparation program; students are placed in a research or clinical site, participate in workshops and

receive academic advising and supplemental AMCAS application instruction.

Summer Medical and Dental Education program:

<http://www.smdep.org/start.htm>

Free (full tuition, housing and meals) six week summer academic enrichment program that offers **freshman and sophomore**

college students medical and dental school preparation. Need a minimum GPA of 3.0, with 2.75 in the sciences. Be a U.S.

citizen or a permanent resident. The selection is on the first come-first served basis, so early application is highly encouraged.

Additional internships found in: <http://www.facebook.com/group.php?gid=2230597386> (lots of opportunities. Check it out).

Plant Research

Noble summer research scholarship program (for those interested in plants)

<http://www.noble.org/SummerScholar/programDescription.html>

Work with a scientist from the Noble Foundation's Plant Biology division or Forage Improvement division. The projects

include Applied genomics, biochemistry, bioinformatics, cell biology, Molecular plant pathology, molecular breeding,

developmental biology, plant transformation, viral evolution, phytochemistry, genetics of disease, etc.

Carnegie Undergraduate summer Program

<http://carnegiedpb.stanford.edu/jobs/interns/interns.php>

Summer research experiences 8-10 weeks. Applicants from primarily undergraduate institutions, women, students from

underrepresented groups are encouraged to apply.

Ecology

Internships in animal and plant biology – different locations and different internships.

<http://people.rit.edu/gtfsbi/Symp/ecology.htm>

Pharmacology

Summer Undergraduate Pharmacology Research Program (SUPER)

<http://pharm.lsuhscc-s.edu/pharm/super.htm>

Ten week summer research program for students interested in pharmacology. Research in toxicology, carcinogenesis, chemoprevention, neuropharmacology and neuroscience.

Scholarships

UNCF-Merck Science initiative –United Negro College fund and Merck

<http://www.uncf.org/merck/programs/underapp.htm>

The United Negro College fund and Merck initiative for science education research laboratories. Scholarship awards for

outstanding African American students pursuing studies and careers in biomedical research.

Alliance/Merck Ciencia (Science) Hispanic Scholars Program

<http://www.alliancescholars.org/applications/>

\$2,000 scholarships for Hispanics. The purpose of the scholarship is to improve Hispanic student access to higher education

and degrees in science, technology, engineering and math (STEM).

Hispanic College Fund

<http://scholarships.hispanicfund.org/applications/>

Multiple Scholarship programs.

http://www.collegescholarships.com/scholarships_63.html