

Summer Research and Enrichment Programs in Biomedical and Health Sciences

There are many resources available on the Internet that announces summer programs. There are two kinds of programs - **summer enrichment programs** are usually for students who are underclassmen though juniors. Seniors may also be eligible in some cases. **Research/Internships** programs are generally for students have completed the sophomore year. Application deadlines are typically January or February, and therefore early action is encouraged. Also many of them don't wait for the deadline to decide on a candidate – if they think you are qualified, they will make you an offer.

Comprehensive listing of summer opportunities are maintained by several universities. I found the following link maintained by my colleague Professor David Thurlow of Clark University very thorough and strongly recommend going there early – preferably before mid-January and applying to as many programs as possible. <http://www.clarku.edu/departments/prehealth/undergraduate/research.cfm>

Another comprehensive site is Rochester Institute of Technology Website for Internship and Summer Research Opportunities in Biomedical Sciences: <http://people.rit.edu/~gtfsbi/Symp/premed.htm>. The website is available thanks to Dr. Tom Frederick, Professor of Biology at Rochester Institute of Technology. He also has other listings for students interested in fields other than health careers. The links can be found at the website.

The first task is to prepare a good resume as most of them will require that. Career services can help; so also faculty advisors. Good luck. – Dr. Govindan

Special Programs

UMASS Medical School - Worcester MA - Summer Enrichment Program.

<http://www.umassmed.edu/sep>

This is the Summer Enrichment Program that several of our students have participated and benefitted from. One of them became an M.D. and another is completing his dental school this year. I cannot overemphasize the important of making connections with officials there, including Dr. Hines. The application opened up on November 15th and the deadline is March 15. I would strongly encourage those of you who are sophomores or above to apply as soon as possible. Do not wait till the deadline - the positions will be filled much before that. Good luck.

UMASS Medical School Summer Research Fellowship Program - Undergraduate Research.

This is a more competitive 10-week undergraduate research project for advanced students who have an interest and have done the necessary prep work for admission to graduate or professional schools. I encourage those of you with high GPA's to apply to the program despite your status of whether you belong to minority groups or not. This is a great opportunity right next door and UMass officials (especially Dr. Deborah Hynes and her staff) are looking to receiving applications from FSU students. <http://www.umassmed.edu/schoolservices/prematriculation/srp/>

Massachusetts Life Sciences Center Internship Challenge Program

The Life Sciences Internship Challenge is a workforce development program focused on enhancing the talent pipeline for life sciences companies in Massachusetts.

The program will provide and fund internships for an estimated 300 college students and recent graduates who are considering career opportunities in the life sciences. Host companies will commit to providing a dedicated mentor and meaningful internship opportunity that relates to the academic focus of eligible students. Studies have shown the value and necessity of providing students with internships, and we hope that this opportunity to explore a career path will enhance the students' academic training.

The Center is offering to reimburse companies (with 100 or fewer employees) for intern stipends of up to \$7,200 for students selected through the program.

Any student enrolled in a Massachusetts college or university is eligible to apply, provided that they meet the following eligibility requirements:

- 4-year college or university students must have or will complete(d) at least their sophomore year the semester before the internship, or have graduated within the past year.
- 2-year/Community College students must be enrolled in an Associate's Degree or Certificate program or completed one within the past year.
- Graduate students must be enrolled in a Master's Degree program or received their Master's Degree within the past year. PhD candidates are not eligible.
- For further details regarding this program, please visit their website:
www.masslifesciences.com/grants/challenge.html

SMDEP (Summer Medical and Dental Education Program), funded by the Robert Wood Johnson Foundation and administered by AAMC and ADEA, sponsors free 6-week summer programs at over a dozen universities/research centers. See <http://www.smdep.org>

Summer Undergraduate Research Opportunities at the Case Western Reserve University School of Medicine in Cleveland, Ohio.

http://casemed.case.edu/admissions/research/summer_programs.cfm

The web site has links to numerous research opportunities at various affiliated hospitals and research centers. Specific questions about a research opportunity should be sent directly to the program's office. One of our students had gone to this program and found it very interesting and beneficial.

Des Moines University's second annual free summer enrichment program.

<http://www.dmu.edu/healthpass/>

The Ohio University College of Osteopathic Medicine (OU-COM) will again host the **Summer Scholars Program** on the Ohio University campus. The Summer Scholars Program is an outstanding six week experience that emulates what a first year medical student will encounter relative to academic course work and rigor. The six week program includes course work in gross anatomy (including cadaver dissection), immunology, biochemistry, histology, integrated biomedical science, an introduction to case based learning, and exposure to osteopathic practices and principles, as taught by the OU-COM

faculty. The program also includes clinical shadowing experiences, an overview of research at the medical school and workshops on study skills and time management. The program provides room and board, a modest living allowance, a travel allowance to assist getting to and from the program and the potential for a guaranteed interview for the next years entering class to those that are eligible. Preference is given to rising seniors and students belonging to minority or disadvantaged backgrounds. Detailed information, eligibility requirements, and application materials can be obtained by going to the Summer Scholars web site at www.oucom.ohiou.edu/SummerScholars . **The application deadline is March 1.** If you have any questions about the program, please contact the OU-COM Admissions Office at 800-345-1560.

Gateways to the Laboratory Summer Program in New York City

- Ideal for students who wish to pursue the combined MD-PhD degree (this program is run by the Tri-Institutional MD-PhD Program).
- 10 weeks of independent research at either Weill Cornell Medical College, Memorial Sloan-Kettering Cancer Center or The Rockefeller University (all in NYC).
- Present & participate in weekly journal clubs
- Scrub into surgeries at New York Presbyterian Hospital.
- Give an oral, written and poster presentation of your research in front of your family (who are flown in for the event), friends and colleagues.
- Receive on going mentorship by your "Big Sib" (a current MD-PhD student), as well as weekly meetings with the Program's leadership.
- Receive a stipend of \$4,300 (minus the cost of housing).

For further information (including eligibility) and an on-line application, please visit our website:

<http://www.med.cornell.edu/mdphd/summerprogram/>

Please note the application deadline is **February 1.**

Nebraska Summer Research Program

Nebraska Summer Research Program is at University of Nebraska-Lincoln. The program offers students an excellent opportunity to hone research skills and to experience life as a graduate student. Students will enhance their academic resume, work closely with faculty and peers, and have fun with social and professional development activities, all while receiving numerous benefits. Students historically underrepresented in graduate education are especially encouraged to apply. Due to funding restrictions, participation is limited to U.S. citizens or permanent residents.

All programs for 2015 are listed at <http://www.unl.edu/summerprogram> and include projects in Applied Mathematics, Bioenergy Systems, Biomedical Engineering, Chemistry, Earth and Atmospheric Sciences/Water Resources, Minority Health Disparities, Nanohybrid Materials and Algal Biofuels, Redox Biology, and Virology. The online application makes it easy for students to apply. Priority review of applications begin on **February 1.**

Other Pre-Medical Programs

Many of these programs give preference to minority, disadvantaged, and first-generation college students (economically and educationally).

Caltech Pasadena- Minority Undergraduate Research Fellowships (MURF)

<http://sfp.caltech.edu/programs>

Cornell Graduate School Minority Program Internship for Under-Represented Minority College Students

weill.cornell.edu/gradschool/summer/index.html

Cornell-Travelers Fellowship for Minorities (Premedical Summer Research Program)

www.med.cornell.edu/education/programs/tra_sum_res.html?name1=Travelers+Summer+Research+Fellowship+Program&type1=2Active

Harvard University: Project Success: Opening the Door to Biomedical Careers (College Program):

<https://mfdp.med.harvard.edu/dcp-programs/college>

Howard University Advanced Health Careers Enrichment Program:

<http://healthsciences.howard.edu/education/schools-and-academics/pharmacy/center-excellence/components/summer-enrichment>

<http://healthsciences.howard.edu/education/schools-and-academics/pharmacy/center-excellence/components/summer-enrichment/advanced-college>

Illinois College of Optometry: Focus on Your Future

<http://www.ico.edu/admissions/events-for-prospective-students/focus-on-your-future/>

Massachusetts General Hospital: Summer Research Trainee Program (SRTP)

<http://www.massgeneral.org/mao/education/internship.aspx?id=5>

Medical College of Wisconsin: Summer Research Training Program <http://www.mcw.edu/Diversity-Programs.htm?DocID=197951#.VHzEs7Eo7IU>

Michigan State University College of Human Medicine (MSU-CHM):

Premedical Achievement Program (PMAP) www.mdadmissions.msu.edu

The Ohio State University: I-DOC. Summer program for pre-optometry students

optometry.osu.edu/IDOC

Ohio University College of Osteopathic Medicine: Summer scholars program

www.oucom.ohiou.edu/SummerScholars

Ohio State University – SUCCESS Program. We are trying to get the word out about SUCCESS, as one of the goals of the program is to get diverse students into the biomedical research pipeline. I will attach to this note our flyer, or students can be directed to the SUCCESS website, <http://go.osu.edu/success>. Students get housing and a \$4000 stipend. Plus...we will cover the cost of up

to 2 parents to attend the end-of-summer celebration and research presentation by the students. The application for the program is already up on the website, and apps are due by March 1.

Rutgers University: Project Learn www.ihhpar.rutgers.edu/projectlearn/

Stanford University School of Medicine- Health Careers Opportunity Program (HCOP):
http://med.stanford.edu/summer_programs/

UCLA Premedical Enrichment Program (UCLA PREP)
<http://www.medstudent.ucla.edu/offices/aeo/prep.cfm>

University of California, Berkeley: Opto-Camp
optometry.berkeley.edu/opt_txtpp/admissions/admitoptocamp.html

The Ohio State University College of Optometry IDOC Program (Improving Diversity in Optometric Careers) optometry.osu.edu/IDOC

UNC-CH School of Medicine: The Medical Education Development (MED) Program
<http://www.med.unc.edu/medprogram/med-program>

Summer Academic Enrichment Program (SAEP) at Virginia Commonwealth University (VCU)
For all those pre health juniors, seniors and soon to be post baccalaureates, SAEP is an intensive, six week inter professional academic enrichment program designed to enhance the academic preparation of individuals actively pursuing enrollment in a health professions school. See: www.dhsd.vcu.edu/programs/college/saep.html. Deadline: February 15.

Other Summer Research/Internship Programs in the Sciences

University of Cincinnati College of Medicine- Summer Undergraduate Research Program.
<http://med.uc.edu/SURF>

University of Pittsburgh- Summer Premedical Academic Enrichment Program (SPAEP) deadline: March 1 of each year www.medschool.pitt.edu/future/future_03_office.asp

Albert Einstein College of Medicine- Summer Research Fellowship Program
www.aecom.yu.edu/home/community_programs.asp

Case Western Reserve- National Institutes of Health/ National Heart, Lung and Blood Institute Summer Research Program for Minorities www.nhlbi.nih.gov/funding/training/redbook/brtpug.htm

Creighton University- Summer Research Training Program
www.creighton.edu/hsmaca/summer_research_training.htm

Weill Cornell/Rockefeller/Sloan-Kettering: Tri-Institutional MD-PhD Program- Summer Program, Gateways to the Laboratory www.med.cornell.edu/mdphd/summerprogram

Dana-Farber – Harvard Cancer Center CURE Program. The DF/HCC Continuing Umbrella of Research

Experiences (CURE) program provides training experiences for high school and undergraduate students from underrepresented minority populations interested in a career in science or research. Students engage in hands-on, mentored research with basic, clinical, population science or nursing research investigators in research environments within DF/HCC. <http://cure.dfhcc.harvard.edu/>

Dartmouth Medical School (New Hampshire): Summer Undergraduate Research Fellowships
www.dartmouth.edu/~surf/

Joslin Summer Research Program: Joslin Diabetes Center, Harvard University Medical School
www.joslinresearch.org/HomeDir/summer_research_program.asp

National Institutes of Health. Undergraduate Scholarship Program.
<https://www.training.nih.gov/programs/ugsp>

New York University Minority Internship Program
www.med.nyu.edu/sackler/programs/summer.html

The Leadership Alliance Summer Research-Early Identification Program
<http://www.theleadershipalliance.org/Programs/SummerResearch/ProgramStructure/tabid/242/Default.aspx>

Community Based Dental Education: Summer Programs at various locations
www.dentalpipeline.org/au_aboutus.html

University of Michigan 10-Week Undergraduate Research Academy. The deadline is February 15. For more information and application to the academy, please click on the image below. If you have problems viewing the link, please visit: <http://www.med.umich.edu/ohei/program/research.html>

UMass Boston Summer Undergraduate Research. Here is wonderful opportunity to do research in biology and possibly get credit as well. There is a stipend of \$7600 - the largest amount I have seen for this kind of activity. Early application is encouraged as I am certain the competition would be tough. Ideally, you should apply during the winter break.
www.reu.umb.edu.

Final note: Watch the bulletin board on the 2nd Floor of Condike Science Bldg for notices on programs that come our way during the winter months.