Student Enrichment Opportunities Office

NEWSLETTER

Meetings, Scholarships and Educational Opportunities

The University of Michigan Samuel & Jean Frankel Cardiovascular Center is pleased to announce our 2020 Summer Undergraduate Research Fellowship (SURF) Program is now accepting applications! The SURF program provides full-time research opportunities at the University of Michigan for 30 talented undergraduate students interested in cardiovascular research and medicine. The program starts **Tuesday, May 26, 2020** and ends the first week of August.

We ask that you please forward this information to excellent undergraduate students interested in research, especially those that might be interested in pursuing biomedical research as a part of their long-term career plans. This a highly competitive program drawing students from across the country. To access the application, click here, or visit our website at [https://tinyurl.com/fcvcsurf](https://tinyurl.com/fcvcsurf).

The application deadline is **Friday, January 31, 2020**.

We would like to thank the Frankel CVC Directors, American Heart Association, and Esperance Family Foundation for their continued financial support of this thriving program.

For questions, please visit [https://tinyurl.com/fcvcsurf](https://tinyurl.com/fcvcsurf), or email [FCVC-SURF@med.umich.edu](mailto:FCVC-SURF@med.umich.edu).

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This summer the [University of Rochester](https://www.rochester.edu), an R1 research university in Upstate New York, is offering four Research Experience for Undergraduate (REU) programs for rising sophomores, juniors and seniors graduating after December 2020:

- **Advancing Human Health, From Nano to Network (January 27th deadline)** - applicants should have prior experience that matches their individual research projects of choice, no specific major requirements

- **Computational Methods for Understanding Music, Media, and Minds (February 9th deadline)** - applicants must have at least two computer science courses or equivalent programming experience and can studying in any major relevant to their research projects of choice.

- **Nano-, Bio-, and Quantum Photonics (February 15th deadline)** - applicants must be majoring in the physical sciences or engineering.

- **Physics (February 15th deadline)** - applicants must have at least four semesters of college physics and math and be majoring in engineering or physics. Computer programming coursework and/or experience is a plus.
REU students who engage in one of these research programs will present their research at a national undergraduate research conference that will take place at the University of Rochester from July 30th - August 1st, 2020. This is a tremendous opportunity that is unique to the University of Rochester.

Be sure to secure your recommenders early as this is the primary reason that students fail to complete their REU applications each year.

If you'd like to talk about your interest in one or more of these programs, please reach out to Cris Murray, REU Coordinator, at cris.murray@rochester.edu or 585-275-5032. She has been in contact with our office and is happy to set up a time to talk with you individually.

Application Link

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**Cornell University LSAMP-REU**

**Deadline:**
February 15, 2020

**To Apply:**
- Submit completed online application
- Submit official transcript(s)
- Submit two (2) letters of recommendation
- Submit an essay via online application

**Eligibility:**
- Must be a U.S. Citizen or Permanent Resident and African American, Hispanic, American Indian/Alaska Native, or Native Pacific Islander
- Must be in good academic standing with a GPA of 3.0 or higher
- Have completed at least two (2) semesters of college
- Have at least two (2) semesters remaining of undergraduate education at the start of the summer program
- Participants may not take courses during CU LSAMP-REU.

CU LSAMP-REU Participants have the Opportunity to:
- Develop a meaningful research agenda and conduct research with a faculty/research mentor
- Present a scientific research talk
- Design a research poster and discuss research his/her research focus at a symposium on campus
- Submit an abstract at the end of the summer research activity that may lead to a publication

**Application Link**

dpeng@cornell.edu
607.255.6403

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**Louis Stokes Alliance For Minority Participation**

**Summer Research Experience for Undergraduates**

**June 7 – August 7, 2020**

**Apply by February 15, 2020**

**What is Cornell University LSAMP-REU?**

The Cornell University Louis Stokes Alliance for Minority Participation Research Experience for Undergraduates Summer Program (CU LSAMP-REU) is a paid summer research opportunity that provides undergraduate participants with the opportunity to work with distinguished faculty and staff as well as network with others in their field of interest through weekly luncheons.

Undergraduate students interested in gaining a deeper understanding in an engineering-related field, have the opportunity to conduct and present research over a ten-week duration under the auspices of a faculty or research mentor at Cornell University.

Through this one-on-one partnership, participants will gain theoretical knowledge and practical training in academic research and scientific experimentation. CU-LSAMP-R was developed to aid in the retention of traditionally underrepresented minority groups in the sciences, technology, engineering and mathematics (STEM).

**What more does Cornell University LSAMP-REU offer?**

- A stipend of $4,000
- A round-trip travel stipend of up to $300*
- A double room in a residential hall
- A campus bus pass or a campus parking pass
- Access to state-of-the-art laboratories, libraries, computer/study lounges, etc.
- *For students living outside the Ithaca area

**A Proud Partnership**

The Upstate New York Louis Stokes Alliance for Minority Participation (ULSAM) formed by Clarkson University, Cornell University, Monroe Community College, Rensselaer Polytechnic Institute, Rochester Institute of Technology, SUNY Onondaga Community College, and Syracuse University is supported by the National Science Foundation under Grant No. 1202480. Together, these partners develop and implement collaborative models for recruiting, mentoring and retaining underrepresented minority students in STEM disciplines through successful completion of their bachelor degrees.
The PREP application at the University of Iowa is currently open. Deadline to apply is February 28, 2020.

https://medicine.uiowa.edu/prep/

SfN will begin accepting applications for the award-winning Neuroscience Scholars Program (NSP) January 15.

This two-year program is open to underrepresented neuroscience graduate students and postdoctoral fellows. NSP Fellows will have access to a mentor, complimentary registration and travel to Neuroscience 2020 and 2021, and financial support for additional professional development activities.

Get a head start on your NSP application by following the checklist below:

- **Summer Internship Program in Biomedical Research (SIP):** The SIP provides interns with a summer of intensive research in an NHLBI laboratory on NIH’s main campus in Bethesda, MD. Interns receive a competitive stipend based on their education level. Students will attend monthly summer lectures and career development events including Summer Poster Day and the Graduate School Fair. The SIP is open to current college, graduate, or medical school students with a minimum 3.0 GPA. Selections are made on a rolling basis therefore early submission is highly recommended.

- Oregon Health & Science University is a premier research institution for biomedical research in the Pacific Northwest that operates multiple research centers and institutes, including the Vollum Institute, the Jungers Center for Neurosciences Research, and the Oregon National Primate Research Center.

  The postbac is a great opportunity for recent graduates or graduating seniors who identify with an NIH underrepresented group. Attached is a flier with more detailed information about the program. The deadline is March 1 and the application can be accessed from our website starting on January 1: ohsu.edu/neuro-postbac

The summer research program is geared to current undergraduates who have a strong interest in pursuing a PhD in neuroscience. Housing and travel expenses are covered and a stipend is provided. The application is currently open and the deadline is February 1: https://www.ohsu.edu/school-of-medicine/neuroscience-graduate-program/vollum-ngp-undergraduate-summer-research-program
ONE Month Left to Apply to DSHREP at MCW-Milwaukee.

All DSHREP fellows have an opportunity to interact with a number of MCW-Milwaukee faculty, administrators as well as graduate and medical school students. Student performance will not be counted for college credit. DSHREP is free for all participants. Fellows are paid a salary of $10.00 per hour based on a 40 hour work week. Programs are competitive so don't wait! Apply NOW.

Where can I get an application and when can I apply?
Applications will be accepted through February 1, 2020 at 5pm CST. Please visit our website to access the online application: bit.ly/DSHREP2020.

* Applications are submitted online
* Recommenders complete online form
* Official college transcripts must be mailed to

Medical College of Wisconsin
Office of Student Inclusion & Diversity
Attn: Program Manager
8701 Watertown Plank Road
Milwaukee, WI 53226

Open Course!

BIOL 627: Biophysics

Instructors: Drs. Lam-Kiu Fong & Ray Esquerra
Class time & place TBA; M/W 2:00-3:15
Office hours W (4-5)

Overview
This course introduces the field of biophysics to students interested in the biological sciences. Biophysics extends a vast and complex landscape of cell and molecular biology, and this course seeks to train science students in the distinctive perspective of biophysical biology. To accomplish this task, the course will develop a student's physical tools, mathematical skills, and physical intuition. The main goals of the course are three-fold: 1) to show how simple physical models can describe complex biological systems, 2) to show how mathematical methods are powerful tools to describe biological systems, and 3) to develop quantitative intuition of biological processes. We will use simple physical models and thermodynamics to describe a variety of complex biological systems. Topics may include protein folding, interactions of biomolecules, diffusion transport and signaling, protein, DNA and membrane structure, cooperative binding, membrane potentials, regulation of gene expression, and the internal
environment of the cell. A portion of the course will include experimental methods in biophysics, focusing on fluorescence spectroscopy and microscopy. In addition, the course will include external guest lectures from research in current areas of biophysics research.

My name is Carina Mireles-Romo and I am a medical student at the University of CA Irvine School of Medicine. I serve as the Vice President of Conference for the Latino Medical Student Association West Region. Our chapter is recruiting students, pre-medical, undergraduate and recent graduates with interests in health sciences and Latino health to attend our LMSA West regional yearly conference hosted by UC Irvine School of Medicine on March 13-14, 2020. This conference is geared towards undergraduate students for mentorship.

The annual conference inspires students to enter into healthcare professions and provides career development and leadership skills to current health care professional students. The theme of this year’s conference is: “Potenciar el cambio: Empowering Interconnection in Healthcare to Create Change”. The theme speaks to the unique role we as future physicians have in advocating for our patients.

Events include a residency fair for medical students and physicians on Friday evening and workshops for pre-health students on Saturday on the healthcare needs of the Latino community, student leadership training, health care policy, and various forms to take action, and a graduating Senior Gala. Please find conference information and link attached below.

We have limited funding available for students needing assistance traveling who can reach out to us. Additionally, MiMentor graciously sponsors the “Get on the Bus” campaign to transport students to and from the conference from set locations in Northern CA to Irvine free of charge.

Thank you and we hope to see you present at the conference.

Register at: 36th Annual LMSA West Conference Eventbrite Registration Link

We are planning an event at UCSF to match historically underrepresented students with UCSF faculty for research experiences funded through NIH diversity supplements. The event will take place on January 24th from 2pm-4pm at UCSF (Event details and RSVP: http://bit.ly/rsvp-students). We will have a speed mentoring session with faculty and students, testimonials from previous diversity supplement awardees, and other useful information. Although all training levels are welcome to attend, at this event, we will be particularly focused on recruiting at the Junior Specialist level. This level is intended for recent graduates from undergraduate or Masters programs who are looking for a full time research position. Trainees at this level often work in a lab for 1-2 years to gain additional research experience before applying for graduate or professional school (e.g. medical school, dental school, etc.).

To participate, students need to fill out a form that asks about career goals and research experience, and has a link for uploading a CV/resume and contact information for references. This information will be part of a database that will also be utilized for virtual matchmaking, so students are welcome to fill out the form even if they cannot attend the matchmaking event on the 24th. For more information, see FAQs here.

I would like to bring to your attention an exciting research training opportunity at the University of Massachusetts Medical School (UMMS). The Postbaccalaureate Research Program (PREP) is a NIH-funded post-baccalaureate training program that prepares students with a Bachelor’s or Master’s degree in the Physical or Life Sciences (if interested in Basic Biomedical Science study) or a Bachelor’s or Master’s
degree in Public Health or related social science degree (if interested in Clinical and Population Health Research) for doctoral study in the biomedical sciences.

During the 12-month PREP training period, program participants take a curriculum of graduate courses relevant to their area of focus (basic science or clinical and population sciences) and a simultaneous year-long, mentored, research experience. This allows trainees to focus on developing their research skills and acquiring the foundational academic knowledge that is necessary to undertake leading-edge biomedical research. Program participants also receive advising from an assigned faculty advisor and peer mentor.

PREP participants are required to develop an Individual Development Plan that identifies areas for development during the program, strategies for maximizing development, and the identification of PhD training programs that are "best fits" for the trainee. Trainees also participate in a bi-monthly series of professional and career development activities with PhD students participating in the UMMS Initiative to Maximize Student Development. These sessions focus on several critical topics, including: research presentations, time management, effective oral communication skills, and networking skills. These sessions also help to build a sense of community.

PREP trainees also receive:

1. Financial support to attend and present at national scientific and career development meetings
2. Networking events with UMMS leaders, as well as other local and regional leaders in academia and industry
3. Close interaction with the UMMS Center for Biomedical Career Development

The result is a graduate who is competitive for admission into top-tier graduate programs. Of note, program participants are presented to the relevant UMMS PhD admissions committees in the spring for consideration for admission into the PhD program in the fall.

All PREP participants receive a salary, health and dental benefits, and coverage of tuition and fees. To be eligible, applicants must be US citizens or Permanent Residents and have completed their undergraduate studies no more than 36 months prior to matriculation into the PREP. The application deadline is February 28. There is no application fee.

More information regarding the PREP can be found at the PREP website.

General News and Updates

A link to seminars at the UCSF Hellen Diller Comprehensive Cancer Center for January are here.