Opportunities Week of November 8, 2019

**Undergraduate Research Assistant Needed in the Nye Lab:** Dr. Janet Nye's lab, at the School of Marine and Atmospheric Science, is looking for an undergraduate student to help with a graduate research project to quantify the physiological effects of salinity on blue crab metabolism. The research involves dissecting crab gills under a microscope to take pictures of stained gill tissue, so ideally interested students have stable hands because the dissection procedure is very delicate. For more info, see attached document. Interested students should email Adelle.Molina@stonybrook.edu

**Society for Women in Marine Science: Resumé Workshop:** Are you starting to think about upcoming internships? Jobs? Grad school? If you have a resume/CV, please bring it with you. If you don’t have one yet, let's get you started! Event is Wednesday, November 13, 2019, 1:00PM, Chemistry Building Room 370

For more info, see attached flyer

**Pre-Health Workshops for 2021 Applicants:** For students applying to Medical, Dental, Optometry, Podiatry, and Veterinary Schools for the 2021 academic year. Attendance is required in order to schedule a committee letter interview in 2020.

**Workshop 1 is Wednesday, November 20, 2019, 1:00PM, Humanities Room 1006**

**Workshop 2 is Friday, December 6, 2019, 1:00PM, Humanities Room 1003**

For more info, see attached flyer

**South Shore Neurologic Associates Research Internship:** South Shore Neurologic Associates is a private practice that spans three branches across south eastern Long Island. Spanning multiple diseases, the research department in the Patchogue location specializes in using objective digital metrics to uncover patterns in disability progression. Besides the traditional sponsored clinical trials, SSNA also participates in investigator-initiated trials. An example of an IIT would be retrospectively looking at a drug’s impact on patients’ cognitive abilities over 5 years. Interns who work at SSNA will be given their own individual project to see to completion with the goal of it being presented at a conference and eventually written as a paper.

For more info, see attached document.

**Microbial Friends & Foes Research Experience for Undergraduates (REU) Summer Program at Cornell:** The program will provide training in the concepts and experimental approaches central to understanding microbial interactions with eukaryotic hosts. Students will learn about broad diversity of microbe-eukaryote interactions through conducting independent research projects, participation in weekly research group meetings, seminars presented by CIHMID faculty, Microbial Friends & Foes Synthesis Panels, CIHMID Summer Symposium, and Microbial Friends & Foes Poster Session. Emphasis will be placed on appreciation of the scientific method and developing effective strategies for conducting research as well as on the synthesis of concepts important to interspecific interactions across diverse systems. In addition, workshops in electronic database literacy, science citation software, research ethics, science communication, and planning for graduate study will be offered to the Microbial Friends & Foes program participants. Students will receive a stipend of $6000, travel subsidy, meal allowance and on-campus housing.

**Application Deadline is February 1, 2020.**

For more info, see attached flyer and visit [https://cihmid.cornell.edu/cihmid-opportunities/cihmid-opportunities-for-undergraduates-outside-cornell/](https://cihmid.cornell.edu/cihmid-opportunities/cihmid-opportunities-for-undergraduates-outside-cornell/)

**CLIMP UP Undergraduate Program for Summer Research at UB:** This is an outstanding summer research experience for undergraduate students to excel in biomedical, STEM, and health science research and explore career opportunities. Now entering its 12th summer, the overall goal is to introduce you to research opportunities, facilitate understanding of recent advances in the STEM disciplines, and mentor you towards graduate and professional careers. As a CLIMP UP Fellow, you will be guided through novel and exciting research projects and mentored by faculty, graduate students, and postdoctoral fellows through the summer and beyond. You will spend 10 weeks in the laboratory of your
research mentor, whom you will be paired with based on your interests. We will train you in various areas necessary to safely and efficiently perform your research and related activities.

**Application Deadline is February 1, 2020**
For more info, visit [http://www.buffalo.edu/climb/apply/undergraduate.html](http://www.buffalo.edu/climb/apply/undergraduate.html)

**Advanced Inquiry Program with Miami University:** In the Advanced Inquiry Program from Miami University’s Project Dragonfly, students join a growing network of conservation leaders while gaining unprecedented opportunities not found in more traditional master’s programs. Online, at the zoo / botanical garden, and in their own backyards and neighborhoods, each student creates and engages in projects that affect positive social and ecological change to improve their communities, the environment, and the human condition.

**Application Deadline is February 28. Classes begin in May.**
For more info, visit [https://projectdragonfly.miamioh.edu/advanced-inquiry-program/?utm_source=merge&utm_medium=email&utm_campaign=AIP_city_specific](https://projectdragonfly.miamioh.edu/advanced-inquiry-program/?utm_source=merge&utm_medium=email&utm_campaign=AIP_city_specific)

*Disclaimer: Undergraduate Biology does not endorse or take responsibility for any off-campus programs listed in Opportunities emails. While we do our best to vet any opportunity that is shared, please let us know immediately if you are suspicious of any employers/programs.*
THE PRE-HEALTH ADVISING OFFICE

2021 Applicant Workshops:
For those applying to Medical/ Dental/ Optometry/Podiatry / Veterinary School

Attendance is required in order to schedule a committee letter interview in 2020.

NOVEMBER 20, 2020 • 1 P.M. HUMANITIES 1006
DECEMBER 6, 2020 • 1 P.M. HUMANITIES 1003

Pre-Professional Advising is located in E-3310 Frank Melville Library
P: 631-632-7080 E: prehealth@stonybrook.edu

Spring workshops will be announced on January 1st @ www.stonybrook.edu/prehealth
Research
• Work with a faculty mentor on an independent research project relevant to a specific host-microbe study system
• Learn and use tools in molecular biology, bioinformatics, evolution, ecology, population genetics, and applied systems management

Synthesis
• Participate in conceptual synthesis panels with other students and research mentors
• Share the findings of your research at CIHMID- and Cornell campus-wide symposia in undergraduate research

Professional Development
Participate in workshops covering topics including:
• Research ethics
• Science communication
• Planning for graduate study

Duration:
June 8, 2020 - August 14, 2020

Students Receive:
Stipend of $6000, travel subsidy, meal allowance, and on-campus housing

Who Should Apply:
• All undergraduate students interested in understanding microbial interactions with eukaryotic hosts
• Members of minorities underrepresented in science, undergraduates from small colleges, and first generation college students are strongly encouraged to apply
• Applicants must be United States citizens or permanent residents and at least 18 years old.

Application deadline:
February 1, 2020

For information on the program, and how to apply, please visit:

The Microbial Friends & Foes REU program is funded by the NSF award DBI-1852141.
The Nye lab is seeking an undergraduate research volunteer to assist with a blue crab physiology project. The project consists of dissecting individual sheets of lamellar tissue from previously dissected and stained blue crab gills, photographing the tissue with a microscope camera, and assisting in analyzing the results. Ideally, the student has previous microscope skills, stable hands, and a willingness to learn a new technique. They would be working closely with the graduate student and a former undergraduate student, who developed the nuances of the microdissection technique. This research involves a delicate dissection process that is done under a microscope with a camera that is hooked up to the computer. The student will have many opportunities to practice the technique before processing the actual samples. All research activities will take place in the Nye lab in Dana Hall (south campus). The student can also choose to participate in the analysis portion of the project, where they would learn to use Image J software to process and analyze the photos they take, but it is not necessary. Many of the skills they would learn can be directly applicable in other laboratories and in other fields of research.

Interested students please e-mail Adelle.Molina@stonybrook.edu

Example image of a stained and dissected gill that the student would be further dissecting.
Example image of what the finished product will look like.
South Shore Neurologic Associates Research Internship:

South Shore Neurologic Associates is a private practice that spans three branches across south eastern Long Island. Spanning multiple diseases, the research department in the Patchogue location specializes in using objective digital metrics to uncover patterns in disability progression. Besides the traditional sponsored clinical trials, SSNA also participates in investigator initiated trials. An example of an IIT would be retrospectively looking at a drug’s impact on patients’ cognitive abilities over 5 years. Interns who work at SSNA will be given their own individual project to see to completion with the goal of it being presented at a conference and eventually written as a paper. Intern responsibilities include:

- Mining patient charts for relevant information
- Data Entry
- Spreadsheet organization and management
- Basic univariate statistical analysis
- Abstract write-up/poster creation

For more information please reach out to okaczmarek@southshoreneurologic.com.
SWMS Resume Workshop

STARTED THINKING ABOUT UPCOMING INTERNSHIPS?

-BRING YOUR RESUME AND/OR QUESTIONS TO OUR WORKSHOP TO POLISH UP YOUR RESUME/CV.

-DON’T HAVE ONE YET? LET’S GET YOU STARTED!

Wednesday, November 13 | 1PM | Chem. 370

SBUSWMS@gmail.com | Kayla.clauson@stonybrook.edu | Facebook.com/sbuswms