

**Claremont Colleges**

**Summer Research Fellowships**

**in**

**Neuroscience**

**Informational Packet**

**Summer 2023**

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In  
Neuroscience  
Summer, 2023**

### **General Overview**

During the summer of 2023, Neuroscience majors from the five-colleges will have the opportunity to conduct research in a neuroscience laboratory of their choice as part of the Claremont Colleges' Intercollegiate Neurosciences Summer Research Fellowship Program. Each fellowship is for the amount of \$5,000.00 and will be awarded to five students on a competitive basis. The competition is open to all neuroscience majors across the 5Cs. The benefits of conducting independent research in neuroscience over the summer are as follows:

1. Students will learn advanced techniques and procedures that are normally not offered in laboratory classes in neuroscience at the Claremont Colleges. Examples include brain imaging (PET, fMRI), single-unit recording, techniques in molecular biology such as *in situ* hybridization and PCR, immunohistochemical labeling, receptor autoradiography, cell culture, behavioral evaluation, etc.
2. Summer research may potentially evolve into a senior thesis project for the upcoming academic year. For juniors, summer research is a great way to begin a research program that culminates to a thesis project for their senior year.
3. Summer research experience in neuroscience looks very attractive on applications to graduate schools or medical schools.
4. Independent research exposes students to problems that neuroscientists deal with on a day-to-day basis that are not normally addressed in courses or textbook readings.
5. Collaboration is the hallmark of a successful research program. Students will learn how to work with other researchers in a team setting.
6. Students will learn the intricacies of scientific research including the generation of questions, the formulation of hypotheses, experimental design, data analysis and interpretation.
7. Students will be exposed to different research philosophies.
8. More importantly, science is FUN. One of the most gratifying aspects of scientific exploration is measuring or observing a phenomenon that no one else has seen or thought about. Understanding the brain is often referred to as the “final frontier of scientific exploration” You will be one of the pioneers exploring this unchartered territory called the brain.

In conjunction with the neuroscience community of Southern California and elsewhere intercollegiate neurosciences has coordinated a number of active labs for summer research placements (please see the “Placement Site List” for a detailed listing of sites that includes a short description of each placement and associated contact information). Students may choose from any one of the labs listed on the placement site list or can independently procure and coordinate their own placement provided the placement is in a laboratory whose research program is neuroscience based and approved by the intercollegiate neurosciences coordinator.

Fellowship placements are for a 10-week period, May through August, 2023. The exact start date will be determined by the placement site principal investigator and the student but should begin before the last week of June. Following completion of the fellowship students are required to present their research findings at a research symposium on campus organized by the Keck Science Department or the Pomona College Summer Undergraduate Research Program (SURP) Poster conference in early September, 2023. The nature and details of these symposia will be communicated to students sometime in July. Students will be paid in two installments (June and July)

A stipend has also been ear-marked for students from underrepresented groups. Underrepresented groups include African-American, Pacific Islander, Latinx, Native-American students and those students with documented disabilities.

### **Application Procedure**

1. Fill out the enclosed application form. Be sure to sign and date the form before turning it in. Applicants who are selecting sites from the Placement Sites List fill out Section B; applicants who have procured or plan to procure their own research placement fill out Section C. Sections A and D are to be filled out by all applicants. Submit two copies of the application.
2. One copy of your academic transcripts. Unofficial transcripts are acceptable.
3. Provide one copy of a current CV or resume highlighting any previous research experience, technical expertise or volunteer experience in neuroscience, general biology/medicine or the equivalent. Any techniques-based lab course that you have taken at the Claremont Colleges or elsewhere should be listed as well. Students that do not have experience in the above should list previous part-time or full-time employment.
4. One copy of a letter that outlines your research interests and goals. This letter should include each of the following: research interests, career goals, what you hope to learn from your summer research experience and why you should be selected for this award. The research interest letter should be a single spaced, typed document (using 12 point font) and should not exceed one page (750 words).

5. Two letters of recommendation from a faculty member or other person familiar with the applicant's work. A recommendation check-list form (provided as part of this packet) should be submitted along with the recommendation letter. The names and emails of your references must be indicated on the application form.

5C Summer Research Fellowship applications are due **Monday, February 27th, 2023**. Email the completed applications to me at [thomas\\_borowski@pitzer.edu](mailto:thomas_borowski@pitzer.edu). The results of the competition will be communicated to you around **Thursday, March 23<sup>th</sup>**. If needed, successful applicants will then be scheduled for an interview with their prospective placement principal investigator. The results of this interview will be the final determining factor for a successful placement. Interviews will take place throughout the month of April and will be organized by the either Claremont Colleges' Neuroscience Coordinator or the student. A general organizational meeting will be held with successful applicants in early May. **Please note that due to COVID-19 appropriate safeguards must be in place before students will be allowed to embark on a summer research experience. Safeguards may include research that is virtual (on-line) or any measures that ensure that direct contact in a laboratory is safe. We may request written confirmation of these safeguards.**

### **Additional Information**

If necessary students will be required to coordinate their own housing accommodations and transportation for their fellowship placement. While many of the listed placements have facilities for housing some do not. Some housing is offered at the Claremont Colleges. If you need any assistance in finding accommodations I will do my best to help you.