Boundaries of Life Initiative :: Scholarship Announcement

The Boundaries of Life (BoL) Initiative is a multi-year, multi-institutional research effort aimed at developing assays and protocols to aid the discovery, characterization, and classification of novel life forms on earth on beyond. As part of the initiative, a team of nearly 20 scientists at Global Viral, Stanford, Caltech, NASA/JPL and the Joint Genome Institute (JGI) are engaged in answering questions about the ecology, evolution, and biodiversity of life, such as: 1) What are the parameters and bounds of life? 2) Has life originated more than once? 3) How likely is life to exist elsewhere in the universe?

A major objective of the BoL effort is to increase participation by the scientific community, so as to develop BoL and related scientific ideas into a robust and mature field of scientific inquiry. In support of this objective, Global Viral is offering two-year scholarships to graduate students at San Francisco State University (SFSU) who are interested in pursuing BoL-aligned research.

Overview: Global Viral will award up to three (3) scholarships to nominated SFSU students, not to exceed $7000/year for two years, to be applied towards academic, research, and other related expenses. Students and mentor faculty will become part of the BoL team and will be invited to participate in BoL meetings, colloquia, and workshops. Research presentations will be expected. If mutually acceptable to both SFSU and BoL faculty, SFSU students may be able to conduct a part of their research off-campus at a collaborating institution.

Nomination: Faculty sponsors must nominate eligible SFSU students. Interested teams should submit 1) the CV of the student, and 2) a one-page description (including figures and tables, excluding references) of ongoing or proposed research that aligns with the BoL initiative, including a brief description of why the student is a good fit. Faculty working in relevant fields who have promising students but no currently planned project, and who are open to developing a new research project in coordination with BoL scientists, are also encouraged to apply (contact Jessica Lee with any questions). Submissions should be sent to Jessica Lee (jessica.lee@globalviral.org) by April 13, 2018. Awards will be announced in the subsequent two weeks following the submission deadline.

Eligibility: The scholarship is restricted to full-time students currently enrolled at San Francisco State University. To be eligible, students must have an excellent academic record and a demonstrated aptitude for research. Preference will be given to new students admitted for Fall 2018; however, current SFSU students with strong nominations may also be considered. Primary research/thesis project of the awardee should reflect the mission and objectives of the BoL initiative. Nomination of students from diverse backgrounds, and from groups that are traditionally underrepresented in science, is especially encouraged.

Suggested research focus: Examples of research topics include, but are not limited to, life in extreme environments, microbial evolution, and bioenergetics. BoL highly encourages research in XNA biology, nucleic acid detection using dye chemistry and FACS, modeling of artificial evolution, and testing metabolic potential of cell-like vesicles. Additionally, students are also encouraged to choose from topics that advance the program on Information, Complexity, and Synthetic Biology (ICS) recently initiated by Global Viral (for details, contact Jessica Lee).