Project Title: Neuroscience Information Framework Intern

Overall Research Project
The Neuroscience Information Framework is a dynamic inventory of Web-based neuroscience resources: data, materials, and tools accessible via any computer connected to the Internet. An initiative of the NIH Blueprint for Neuroscience Research, NIF advances neuroscience research by enabling discovery and access to public research data and tools worldwide through an open source, networked environment.

The Neuroscience Gateway (NSG) portal facilitates access and use of National Science Foundation (NSF) High Performance Computing (HPC) resources by neuroscientists. The portal offers to neuroscientists free supercomputer time acquired via the supercomputer time allocation process managed by the Extreme Science and Engineering Discovery Environment (XSEDE) Resource Allocation Committee (XRAC). It also provides a community forum for neuroscientists to collaborate and share data.

Students will work with project staff to increase and facilitate collaboration between these two projects and develop code on the NSG that will become searchable in the Neuroscience Information Framework. Former students have also interacted with the developers of Neuron from Yale, the modelling language used most frequently in neuroscience.

Number of students to be supported: One or two.

Name of Lead Person: Dr. Anita Bandrowski, San Diego Supercomputer Center, UCSD

Plan to integrate the student into the group activity:

The student will be a part of the research team working on the larger scale project that includes the project described here. He or she will attend the group meetings and communicate with the team members using other methods of communication. The student will work closely with the lead person and the other personnel involved.

Student Prerequisites:
Programming experience and a strong interest in biology is desired.

Number of hours the student(s) will be asked to work per week: 15-20 hours

Relevant Link:
http://neuinfo.org
http://www.nsgportal.org/