Postdoctoral Position in Computational Neuroscience and Neuroinformatics: NeuroML Standards and Tools for Multiscale Model Specification and Exchange

Computational models based on detailed neuroanatomical and electrophysiological data have been used for many years as an aid for understanding of the function of the nervous system. NeuroML is an international, collaborative initiative to develop standards for describing models of neural systems. The NeuroML model specifications facilitate the exchange of complex neural models, allow for greater transparency and accessibility of models, enhance interoperability between simulators and other tools, and support the development of new software and databases. NeuroML is a free and open community effort developed with input from many contributors. For an outline of current efforts, see the roadmap.

We are seeking a postdoctoral researcher to contribute to further development of NeuroML. The position is somewhat flexible and can include NeuroML schema design and implementation, tool development and testing, website development and maintenance, and model database design and implementation. The position also provides opportunities for involvement in computational modeling studies. The postdoc will be located in the computational laboratory of Dr. Sharon Crook (http://math.asu.edu/~crook) at Arizona State University in Tempe, Arizona (http://www.asu.edu). Prior extensive programming experience is required, and experience with XML, website and database development, and computational neuroscience research would be beneficial. The candidate also must be able to demonstrate excellent communication skills and the ability to work as part of a team. Some international travel is required.

Locally, the postdoctoral researcher will interact with faculty, students and other postdoctoral researchers in the Center for Adaptive Neural Systems (http://ans.asu.edu) at ASU. ASU has vibrant, interdisciplinary research communities in neuroscience, biomedical informatics, and high-performance computing.

Candidates should send a curriculum vitae, a short summary of research experience and interests, and the contact information (name, address, phone number and email) for three references to: Dr. Sharon Crook at sharon.crook@asu.edu.