ASSOCIATE COMPUTATIONAL BIOLOGIST (Cancer Program)

The Broad Institute is looking for exceptional candidates to join the Connectivity Map project. This position affords the exciting opportunity to join an innovative and ambitious approach to drug discovery. The Connectivity Map aims to generate a detailed map that links gene patterns associated with disease to patterns produced by drugs. The successful candidate will join an interdisciplinary team of molecular biologists, computationalists, chemists and software engineers in this endeavor.

We are looking for an individual who is enthusiastic about taking a hands-on approach and collaborating with scientists and engineers in a collegial work environment characterized by informality and intellectual rigor. We are less interested in a particular degree or technical experience than in hiring an extraordinarily capable individual who is likely to make significant contributions to our efforts.

Successful candidates will play key roles in developing algorithms for the next generation of the Connectivity Map, including methods of data factorization, regression, multidimensional scaling and classification/visualization techniques including Support Vector and Kernel Methodologies, graphical models and Ensemble approaches.

The Broad Institute provides a vibrant research environment with close links to top academic institutions across the Boston area and provides the potential for your contributions to be used and recognized worldwide.

Requirements: Bachelor’s or Master’s degree in Computer Science, Engineering, Statistics, Physics, or any quantitative discipline. Candidates should have outstanding academic records; a demonstrated history of developing algorithms; demonstrated proficiency with statistical and programmatic tools needed for the exploration of high-dimensionality datasets; be innovative and analytical thinkers with strong communication skills; and work well in an inter-disciplinary team.

Significant experience with at least some of the following is required:

- Analytical programming using MATLAB and/or R.
- Computational methods, including algorithm development, data analysis, and statistics.
- Developing prototypes for data visualization.
- Implementing algorithms for search, information retrieval and machine learning.

A background in Biology is not necessary and well-qualified applicants will be considered from backgrounds including Engineering, Computational Biology, Statistics, and Software Engineering.

Characteristic Duties

- Develop data analysis strategies, write algorithms, and deploy computational tools for the exploration of high-dimensionality datasets.
- Conceive, implement and test statistical models; work with wet-lab researchers to translate these models into testable experiments; analyze data from experiments.
- Explore novel data representation modes with emphasis on integrating diverse data types.
- Help implement analysis methodologies into software tools for publication and distribution to the genomics research community.

To apply: visit http://www.broadinstitute.org/lincs/jobs.html