UNIVERSITY OF CALIFORNIA, SANTA CRUZ

DEPARTMENT OF BIOMOLECULAR ENGINEERING

Software Developer and Functional Genomics Database Curator

The Department of Biomolecular Engineering at the University of California-Santa Cruz has been awarded a grant from the National Science Foundation to fully develop a model organism database and genome browser for all Archaea and extremophile bacteria, similar in purpose to SGD, FlyBase, and other important organism-specific databases. A major objective of the database is seamless integration of functional genomic data from DNA microarrays, proteomics studies, and high-throughput cDNA sequencing. A functional genomics data repository also will be established specifically for the archaeal research community based on an existing system. Under the direction of Asst. Professor Todd Lowe (http://lowelab.ucsc.edu/), the Center for Archaeal and Extremophile Genome Research is now seeking to fill several new positions immediately, including the full-time position of Software Developer and Functional Genomics Database Curator.

The Archaeal and Extremophile Genome Database (http://archaea.ucsc.edu) currently hosts 70+ archaeal and bacterial genomes, and will continue to expand in the number of genomes and sources of gene function information. As part of the Archaeal genome database team, duties will include:

- Improving and maintaining a microarray / proteomic data repository and CGI interface for submitting new data (25%)
- Helping design and implement new interfaces for functional genomic data queries and comparisons within the genome browser (25%)
- Automating gene keyword searches on scientific literature and helping automate content curation tasks (10%)
- Integrating new "tracks" of bioinformatic analyses into the genome browser (15%)
- Developing improved collaborative Wiki tools tied into the genome browser for community-based gene re-annotation efforts (15%)
- Thoroughly testing new browser features and tracks, identifying and fixing bugs or systematic errors in the database (10%)

This is an ideal opportunity for a computer scientist/programmer with strong programming skills to gain highly valued skills in an interdisciplinary biological research setting, including advanced comparative genomics and computational biology analysis. Co-authorship on scientific publications also is possible, dependent on contributions to research projects in the lab.

RANK: Junior Specialist, Step 1-2

SALARY: Commensurate with qualifications and experience

MINIMUM QUALIFICATIONS: BA or BS degree in computer science or equivalent experience; significant experience working with C in a UNIX or Linux environment; experience in CGI programming with Perl and other languages; strong familiarity with relational databases (Oracle or MySQL) and some data modeling experience; basic knowledge of bioinformatics methods and applications relating to microarray and genomics analysis; experience / familiarity with the S or R statistical packages; ability to study and assimilate technical structure, data, and requirements of genome analysis software. Ability to quickly grasp new concepts and integrate them into projects as appropriate. Ability to work well independently, as well as to interact and communicate effectively with both biologists and bioinformaticists within the team.

PREFERRED QUALIFICATIONS: One or more years of college-level biology (genetics, molecular biology, or biochemistry); prior experience setting up or maintaining genome annotation pipelines; background in analysis of functional genomic / microarray data; experience with the Bioconductor microarray software package; familiarity with Wiki systems and web content creation; strong verbal and written communications skills; two or more years post-graduate academic or industry working experience.

TERM OF APPOINTMENT: Up to three years, and possibly longer dependent on successful performance reviews and contingent upon available funding

POSITION AVAILABLE: February 2008 (as soon as possible after closing date)

TO APPLY: Applicants should submit by e-mail a letter of application, curriculum vitae, and the names and full contact information of three references* to: Assistant Professor Todd Lowe (lowe@soe.ucsc.edu) by the initial review date of **February 10, 2008.**

Alternate Mailing Address:
Assistant Professor Todd Lowe
Baskin School of Engineering
University of California - Mail Stop: SOE2
1156 High Street
Santa Cruz, CA, 95064

Please refer to position #T08-40 in all correspondence and materials.

*(*All letters will be treated as confidential. Please direct your letter writers to UCSC's Confidentiality Statement at http://www2.ucsc.edu/ahr/academic_policies_and_procedures/cappm/confstm.htm)*

CLOSING DATE: This position is open until filled. Initial consideration of applications will begin on **February 10, 2008.** Applications received after the initial review date may not be considered.

The University of California, Santa Cruz is an Affirmative Action/Equal Employment Opportunity Employer, committed to excellence through diversity. We strive to establish a climate that welcomes, celebrates, and promotes respect for the contributions of all students and employees.

Inquiries regarding the University's equal employment opportunity policies may be directed to: Equal Employment Opportunity/Affirmative Action Office at the University of California, Santa Cruz, CA 95064; (831) 459-2686. Under Federal law, the University of California may employ only individuals who are legally able to work in the United States as established by providing documents as specified in the Immigration Reform and Control Act of 1986.

If you need assistance due to a disability please contact the Academic Human Resources Office at 499 Clark Kerr Hall (831) 459-4300. This position description is available in alternate formats, which may be requested from Academic Human Resources at (831) 459-4300.

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