

Postdoctoral Research Associate Position in Bioinformatics: Transcriptome analyses of large next-generation sequencing datasets

The Menden-Deuer and Rynearson labs at the University of Rhode Island invite applications for a Postdoctoral Research Associate in bioinformatics and computational biology.

Project Overview: This project aims to examine, quantify and understand gene expression in marine plankton. Plankton are single-celled eukaryotes that form the base of marine food webs and are therefore critical to the health and well-being of the world's oceans. This project represents an opportunity for a talented and creative postdoctoral researcher to work with sequencing data from ecologically important organisms. There will be opportunities to develop new or utilize the most recent algorithms for transcriptome assembly and mapping, particularly because most plankton genomes have not yet been sequenced. Datasets include Illumina sequencing of plankton transcriptomes from multiple species and experiments under different conditions. The successful candidate will lead the project on the de novo analysis of transcriptomic data, which includes setting up and/or using available computational pipelines for transcriptomic data processing, identifying novel 'high-responder' genes and statistical comparison of multiple single-cell transcriptomes. The first dataset is ready for analysis.

Responsibilities and Duties: The postdoctoral associate will be primarily responsible for analysis of the high-throughput sequencing component of the project (transcriptome sequence data). Responsibilities also include dissemination of results in publications and presentations and a willingness to assist with proposal preparation. The individual will be required to contribute to the functioning of the lab, assist with graduate and undergraduate student mentoring and help to develop future research projects.

Qualifications: Candidates are required to have a Ph.D. degree by August of 2013 in Computer Sciences, Statistics, Biology or a related field. Excellent command of the English language (written and verbal) and quantitative analytical skills are essential. Candidates should possess demonstrable experience with the analysis of high throughput sequencing data including strong programming skills. We prefer candidates who have an excellent background in statistics and data mining.

Appointment: The position is for 12-months initially, commencing August or September 2013 and renewable depending on performance. The successful candidate will receive training in research collaboration, presentation and publication of results, and outreach and mentoring. There will be opportunities for development of additional research projects and proposals.

To Apply: Applications must include (1) a maximum 3-page statement of experience, career goals, research vision and interests; (2) curriculum vitae, (3) reprints of relevant publications and (4) names and addresses of three referees willing to write confidential

letters of recommendation. All materials should be emailed as a single pdf document to: rynearson@mail.uri.edu with 'PostDoc Application' in the subject line. Candidates will be selected based on overall excellence, including academic qualifications, letters of recommendation, and prior skills, experience, and research goals that are compatible with the goals of the funded research. The position is compensated through a competitive salary and excellent benefits package. Please email rynearson@mail.uri.edu with additional questions about the position.

Research will take place on the shores of Narragansett Bay, RI at the URI Graduate School of Oceanography. The labs are conveniently located along the eastern seaboard with easy access to Amtrak and major airports. The candidate will benefit from existing collaborations with researchers in computational biology both nationally and internationally.

Closing date: For full consideration, applications should be received by July 1, 2013.

Further information:

Rynearson lab: <http://www.gso.uri.edu/users/rynearson>

Menden-Deuer lab: <http://www.gso.uri.edu/smdlabb>

URI Graduate School of Oceanography: <http://www.gso.uri.edu/>