



David H. Murdock Research Institute

Metabolomics Software Developer (Job Code: IRD-203)

Job Description

The David H. Murdock Research Institute is currently seeking a Metabolomics Software Developer. Qualified candidates will have both applied software development and integration skills and a theoretical understanding of their application. The incumbent must have a strong technical background in computer science or bioinformatics; knowledge of biology is a desired. The primary role will be to identify, develop, integrate, and implement programs to provide research support for various projects within the metabolomics (supporting GC/MS, LC/MS, and NMR data) laboratory. The incumbent will be an active computer science contributor to computational projects as a bioinformatics team member. The incumbent must be comfortable with working in a dynamic, fast changing environment, and able to communicate complex informatics principles, methods, analyses and results to end users from diverse backgrounds.

Additionally, the chosen candidate will be self-motivated, able to communicate equally well with both computer and biological scientists and enhance the performance of an interdisciplinary team. The incumbent will apply his or her education, training and experience to work independently on numerous goals, including implementation of automated analytical tools necessary for the collection and analysis of data generated by various laboratories within the DHMRI including but not limited to large, high throughput metabolomics efforts.

The Bioinformatics Group within the DHMRI supports all laboratories within our facility including Genomics, Analytical Sciences, In-Vitro Sciences, and NMR. Candidates with bioinformatics experience in these areas are of specific interest.

Qualifications

Minimum Requirements

- BS with 2-3 years' experience or MS in Computer Science, Bioinformatics, or related discipline.
- Strong Statistics: SAS / R / MATLAB
- OS: Unix/Linux, Windows
- Programming: Java/C++/C# .Net. Scripting: Perl, Shell, Python
- API/Integration Development

Preferred Experience

- Experience in handling large data sets (both structured and unstructured), specifically spectral data from various MS and NMR platforms.
- Analytical pipeline development.
- Prior work in Biology / Chemistry / Proteomics / Metabolomics.
- In-depth understanding, analysis and processing of data from various metabolomic technologies and their applications (including integrating various forms of metabolomics datasets).
- Experience using relational databases and database query language. Previous experience as a database administrator. Experience using relational databases, SQL language, Unix and programming tools preferred.
- Expertise in methods and technologies utilized for integrative analysis of biosciences and clinical data, such as ontologies, semantic web technologies and data exchange standards.
- This position requires strong communication skills and the ability to communicate across domains with biologists, chemists and systems biology teams.
- Wide understanding of commercially available bioinformatics/metabolomics tools and databases.
- Excellent communication and collaborative skills working as a part of multidisciplinary teams.
- Excellent written and oral communication skills.
- Detail-oriented and organized, with strong initiative and sense of ownership when driving projects to completion.

Equal Employment Opportunity

We are proud to be an EEO/AA employer M/F/D/V.