

**Company Name:** Sciome LLC

**Address:** 2 Davis Drive, Research Triangle Park, NC.

**Position title: Computational Chemistry Scientist**

We are a science and technology consulting company, based in RTP, NC, providing scientific consulting services to the US Federal Government, academic institutes, non-profit research organizations, and biopharmaceutical companies. We have a small team of PhD/Masters level scientists and informaticians and we are growing.

One of our main areas of expertise is biological data aggregation, mining and modeling. We utilize many types of biological, experimental and literature derived data to develop computational predictive models and data mining methodologies. We employ these methods in concert with other bioinformatics techniques to enable data and literature driven discoveries in support of life sciences research.

This is an exciting time to join our growing team. This position promises an impactful career in a fun and relaxed work environment. We provide a competitive compensation package including benefits.

Detailed position description is provided below:

**Education**

- PhD or Masters (applicants with master's degree must have 3+ years of related working experience) in Statistics/biomathematics, Cheminformatics, Computational Toxicology or related discipline.

**Responsibilities:**

- Provide computational toxicology and cheminformatics expertise for development and evaluation of new, revised, and alternative methods to identify potential hazards (e.g. chemicals) to human health and the environment, with a focus on replacing, reducing, or refining animal use.
- Use statistical and computational methods to perform analysis of varied types of chemical and biological data. This may include use of Bayesian, machine learning or network based methodologies.
- Participate in PBPK modeling, reverse toxicokinetics, adverse outcome pathway (AOP) analysis and other such data analysis activities using off the shelf or customized tools and methods.
- Investigate statistical approaches for analysis of High Throughput Screening (HTS) data. Participate in collecting, quality control, normalization, dose response modeling and other such detailed analyses of specific HTS and/or 'omics data sets.
- Participate in group activities for data analysis methods development and deployment for scientific data integration approaches. Research, implement and test informatics and statistical techniques.
- Provide quantitative, informatics and programming expertise towards development of data modeling tools, methods and analytical informatics approaches.

- Interface with scientists in the fields of environmental health and toxicology to organize, analyze and model scientific data. Analysis may be focused on assessment of high throughput screening data, in-vitro assays or other such alternative methods.

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## **Skills**

The ideal candidate would have several of the following skills:

- Thorough understanding of computational chemistry methods, algorithmic design and statistical concepts of data analysis is desired.
- Track record of use and development of data mining, machine learning and/or artificial intelligence for predictive modeling.
- Strong scripting and programming experience with R, Perl, Python or similar languages.
- Candidates with experience with analysis of high throughput screening data using open source tools and algorithms and familiarity with public resources for toxicology data and data mining concepts are preferred.
- Experience with customization of data analysis work flows and familiarity with data integration concepts.
- Understanding of the use of alternative toxicology methods for reduction of animal studies in toxicology is preferred but not required.
- A strong communicator who effectively adjusts to technical and non-technical audiences.
- Able to prioritize and deliver results with a high emphasis on quality, technical rigor, and attention to detail.
- Sound scientific proficiency, creativity, and independence in thought.
- Able to integrate feedback in a professional manner and thrives in multidisciplinary teams with members with highly diverse backgrounds.

## **Your Role:**

You will have an opportunity to participate in one or more of the following:

- Analysis of large quantities of scientific data using various open source or in-house methods.
- Researching the most appropriate ways to tackle scientific data integration and data mining and participate in discussions with your colleagues.
- Development of novel methods for data analysis, data modeling, data sharing, text mining or user interface development.
- Performing analysis of toxicology, high throughput screening, 'omics data using off the shelf methods, customized analysis work flows or in-house analysis routines.
- Algorithm improvement, development of informatics work-flows, coding/software R&D and design and development of data mining or predictive modeling methodologies.
- Discussions with your colleagues regarding project requirements, scientific analysis and interpretation.
- Participation and presentation of work at national and/or international meetings.
- Publication in peer reviewed scientific journals.

**How to Apply:**

If you are interested in applying for this position please do the following:

- (1) Send your CV/Resume to [jobs@sciome.com](mailto:jobs@sciome.com).
- (2) Make sure you refer to position title: Computational Chemistry Scientist.
- (3) Provide your contact information and a good time to reach you via phone.