Junior bioinformatician

Context

ENYO Pharma is a clinical stage biotech with a unique drug discovery engine inspired by viruses. Over millions of years of evolution, these obligate intracellular pathogens have perfected their ability to modulate and hijack the cell functions for their own benefit to complete their replication. ENYO Pharma's bioinformatics team has deciphered through years of expert literature curation virus-host interactions and built a unique concept based on virus biomimetism. This knowledge is currently gathered into a database integrated into a private bioinformatics platform dedicated to drug discovery and has - to our knowledge – so far no public equivalent.

The SIB Swiss Institute of Bioinformatics is a federation of research and service groups from the major Swiss schools of higher education and renowned Swiss research institutes that leads and coordinates the field of bioinformatics in Switzerland. The SIB CALIPHO group, based in Geneva, is developing neXtProt, a comprehensive and freely available platform that provides a variety of types of information on human proteins such as their function, subcellular location, expression, interactions and role in diseases.

ENYO Pharma plans to transfer this unique dataset of curated virus-host interactions to neXtProt as it would be of great benefit for the life science and bioinformatics communities (e.g. virology, knowledge associated to the human proteome, evolution, drug discovery, data mining). This transfer notably requires a semantic transformation as well as the development of an interface with high capacity queries and powerful visualization tools to fit the SIB standards.

It is expected that this project then opens further perspectives for ENYO Pharma bioinformatics platform.

Job description

ENYO Pharma is looking for an enthusiastic and energetic individual to join for a first mission the project partnered with SIB. He/She will be responsible for the integration of the dataset into neXtProt and for the development of an associated interface compliant with high level SIB standards. The execution has to be carried out from the design to the production with a user-centered approach.

The position of a pivotal role between ENYO Pharma and SIB CALIPHO development teams therefore offers a stimulating and multicultural environment.

Co-authorship in publication can be expected.

Skills & strengths

- PhD in bioinformatics
- Db/semantic skills

- o Good understanding of relational database concept and experience in using SQL language
  - o Understanding of semantic web technologies and linked open data (LOD), experience in writing SPARQL queries, RDF/OWL based ontologies and related tools
- Programming skills
  - o Backend programming: Java (Spring framework) required, Perl / Python, bash scripting suitable
  - o Frontend programming: experience in SPA web application development with JavaScript, AngularJS, Google Polymer, D3 library
- Eager to learn new technologies in interest of the best solution
- Able to communicate effectively, in both written and oral formats, in English and French, to specialist and non-specialist audience
- Rigorous, well-organized and curious
- Knowledge in virology, protein-protein interactions and more generally post genomic is a plus

Poste located in Lyon
Several travels between Lausanne, Lyon and Geneva expected.
Starting date : 2nd of May, 2019. Flexible.

Application

If you are interested in this stimulating position, please submit your application including CV, letter of motivation, references and list of publications if applicable at **recruitment@enyopharma.com**