

Barcelona, July 15th, 2021

Bioinformatics software developer - Job Description

The Company

STALICLA is a patient-centric clinical-stage company on a unique mission to identify, develop and bring precision medicine to patients with neurodevelopmental disorders (NDDs). Overall, neurodevelopmental disorders are disabilities in the functioning of the brain that affect a child's behavior, memory or ability to learn, including intellectual disability, dyslexia, attention deficit hyperactivity disorder (ADHD), learning deficits and autism. NDDs affect 1 in 6 children worldwide.

STALICLA's first focus of development has been Autism Spectrum Disorder (ASD). Today, patients diagnosed with ASD account for 1-1.5% of the world population. The condition remains a high unmet medical need.

STALICLA has assembled a world-class team of experienced drug developers, clinicians, computational systems biologists, geneticists and software engineers, developing a first-in-class precision medicine platform using systems biology, machine learning & statistical modeling to accelerate drug development for patients with NDDs. DEPI, the company's first-in-class drug discovery platform, characterizes biologically similar subgroups of patients within highly variable populations of patients with neurodevelopmental disorders, and further identifies tailored treatments. To support its drug discovery platform and pipeline development, STALICLA has established strong networks within top tier research and clinical centers.

STALICLA's platform has already proven successful in expediting and de-risking a first pipeline, STP1, tailored to a subgroup of patients with autism spectrum disorder which will be entering clinical trials this year. In addition, STALICLA's DDS (Discovery and Data Science) unit in Barcelona is currently advancing new precision medicine pipelines for two additional groups of patients with ASD.

Position

Title: Bioinformatics software developer

Category: Mid-senior level

Location: World Trade Center, Barcelona

Duration: Permanent

Salary: Competitive - depending on experience and profile

Candidates living Barcelona or EU and able to relocate rapidly would be preferable.

The role

The bioinformatics software developer will work closely with the other members of the unit and contribute to the design, implementation and the analysis of computational models and algorithmic approaches towards the characterization of "targetable" molecular, genetic and

clinical features in neurodevelopmental disorders. S/he will participate in developing biomedical data analysis pipelines within the context of ongoing computational systems biology projects, ranging from the implementation & deployment of our next-generation sequencing and clinical data mining pipelines to identification of molecular & pathway level characteristics associated with ASD patient subgroups. Candidates with previous experience on sequence analysis (genomics and/or transcriptomics), workflow development, and cloud computing, or who are open to learning these skills, are preferred.

Work environment

The STALICLA DDS office is located by the sea, overlooking the port of Barcelona and it has easy access to the public transportation. Perks at the office include free coffee, tea and fresh fruits.

Desired skills & software

Must have

- Ph.D. in Bioinformatics (or in a related field) or equivalent experience in industry (5+ years after graduation)
- Linux, shell scripting, Git/Gitlab, Nextflow (or equivalent)
- Python and/or R
- NGS pipeline development and analysis (WGS and/or RNAseq)
- Use of software containers (Docker and/or Singularity)
- Experience with cloud computing (AWS preferred)

Nice to have

- Previous experience in project management
- PostgreSQL and/or MySQL
- Knowledge on molecular biology and human genetics
- Knowledge on medical ontologies and vocabularies
- Demonstrable experience in design and implementation of ETL data ingestion pipelines using relational databases and Rest APIs

In addition, the candidate is expected to have:

- A high comfort level working in a high paced start-up environment, where a pragmatic, resourceful, well organized and effective approach is required with limited resources
- A hands-on, decisive approach and a proven ability to work independently and as a team player
- Excellent verbal and written communication skills in English
- A passionate, energetic and enthusiastic personality that will ensure commitment to the company and its vision
- Knowledge or interest in NDDs or related therapeutic areas is an asset.

Desired capabilities

- Build and optimize computational pipelines to process, integrate, analyze, summarize and visualize large scale interconnected biomedical data including but not limited to genomics, transcriptomics, proteomics, metabolomics, clinical, and pharmacological data.
- Deploy existing computational pipelines on the cloud to enhance scalability, as well as data security, by using advanced security features
- Contribute to the strategical planning, management and development of new and existing projects and generate high quality documentation of materials, methods, software and analysis results.
- Support coordination of the activities of other team members working on different biomedical and clinical data analysis projects.
- Have a solid understanding of molecular data analysis (i.e., quality control, normalization, clustering, differential expression, pathway enrichment), feature engineering and prediction model validation.
- Knowledge on widely used biological data resources (such as UniProt, GWAS catalog, Reactome, UMLS) and disease ontologies is a plus.
- Previous experience on pharmacological data analysis and drug repurposing is a plus.

STALICLA promotes diversity, equal opportunity and inclusion. Female, minority and candidates with disabilities are strongly encouraged to apply.

Please submit your application to: hr-dds@stalicla.com