Role: Research Engineer – Computational Biology

Job Profile:

Dry Lab related

- Design and conduct independent research under the direction of the Senior R&D Management
- Develop detailed study plans, perform required studies, analyse data, and interpret results. Summarize experimental data timely and assist in drafting reports, figures, results, etc., for scientific and business presentations
- Acquire a thorough understanding of the present scientific literature relating to the research studies being pursued in the company
- Process and analyse multi-omics biological data for various projects, including transcriptome, proteome and epigenome towards differential cellular state analysis
- Perform mapping and building gene regulatory network (GRN) from biological data analysis using GO and other databases/ knowledge repertoires
- Correlation of sequence and structure to function
- Map cellular circuitry, using correlation and causality network and identify key cell signalling pathways
- Mechanistic insights and computational models using systems level simulations using pathway-based flux simulation, and (preferred) structural simulations including energy minimization and docking
- Develop analytical tools/codes to streamline data acquisition and analysis and interpretation.
- Actively contribute to development of reports, scientific publications, patents, regulatory documents and other related submissions

Wet Lab related

- Perform various cell culture, biochemical characterization-related studies, genomic analysis, RTPCR, assays, histology, flow cytometry, advanced imaging and various microscopic techniques including confocal studies
- Additional research studies in the lab, as required

Work Location: Electronic City, Bangalore

Required Skills / Experience

- PhD in bioinformatics, computational biology, structural biology, biostatistics, computer science, or related quantitative field
- Experience working with single-cell data and/or good understanding of the signal and noise in single-cell data. Experience with multi-omics data is a plus

- Demonstrated ability to assess assay performance and derive biological insights by evaluating single-cell sequencing results using data visualizations and statistical tests
- Functional experience coding in at least one programming language (Python, Perl, C++/C) and a statistical computing language (R, S, etc.)
- Strong experience in statistics, data analysis and pipeline development
- Demonstrated ability to troubleshoot complex problems
- Ability to contribute independently and collaboratively, and to excel in a fast-paced environment
- Excellent communication and teamwork skills to work with both experimental and computational scientists in a collaborative environment

Desirable qualifications considered as plus:
- Machine Learning, statistical analysis & data science methods development for single cell multi-omics
- Experience with NGS-based assay development and optimization
- Solid understanding of molecular and cell biology with prior experience in stem cell biology, stem cell based secreted cell modulators including exosomes and bioprocessing will be preferred

Interested candidates can email CV to **careers@pandorumtechnologies.in**