Role: Research Scientist – Bioinformatics

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
- Process and analyse multi-omics biological data for various projects, including transcriptome, proteome (MS) and epigenome towards differential cellular state analysis
- Derive pathway insights using both in-house generated and publicly available database that can be implemented in wet-lab to develop differentiated product
- 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
- Derive mechanistic insights and computational models using systems level simulations using pathway-based flux simulation, and (preferred) structural simulations including energy minimization and docking
- Actively contribute to development reports, scientific publications, patents, and regulatory documents and related submissions

Wet Lab related

- Perform various wet lab related work such as, cell culture, genomic analysis, RTPCR, ELISA. Cell-based assays, histology, flow cytometry, molecular biology experiments and various microscopic techniques including confocal studies
- Process human, rabbit and murine tissues, extract cells from primary origin and establish cultures to support various studies including multi-omics

Work Location: Bangalore, India

Required Skills / Experience

- **PhD** in bioinformatics, structural biology, biostatistics, computer science, or related quantitative field (mandatory)
- 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
- Experience in RNASeq, Microarray, miRNA profiling and DGE analysis is required
- Pathway analysis experience using software like IPA will be highly regarded

- 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
- 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**