

Genomics/Bioinformatics Scientist

LifeSensors Inc., a biotech company located in the suburbs of Philadelphia PA, and has an open position for bioinformatics scientist. LifeSensors is at the frontiers of biology to make breakthrough discoveries in ubiquitin proteasome pathway (UPS). Genetic and biochemical evidence suggest that dysfunction in the UPS lies at the heart of several neurodegenerative diseases, including Parkinson's disease (PD). Bioinformatics Scientists will apply/develop state of the art informatics tools to identify target genes from NGS, public or private genome data bases. He/she will work with experimental scientists to discover small molecules that will restore the gene function, providing personalized medicine.

Position:

Successful candidates will have knowledge of cell biology, molecular biology and biochemistry. UPS plays a fundamental role in neuronal system. Defects in mitochondria not only impair energy production but are also responsible for many diseases, including Parkinson's Alzheimer's diseases (PD/AD), and cardiovascular diseases. Mutations in ubiquitin ligases, such as parkin ligase are responsible for defect in mitochondria. PD is the second most common neurodegenerative disorder in the world, affecting 1-2% of the population over the age of 65. Bioinformatics scientist will establish tools to identify genes that play a role in restoring mitochondrial health thus improving muscle movement, cognition, dementia in PD/AD. He/she will write scientific articles, patents, and present data at national and international meetings. To learn more about the company, go to our website www.lifesensors.com.

Required Skills, Experience and Keys to Success:

- BS or Ph. D in biological or computational sciences
- Collaborate with research scientists in all phases of UPS genome including experimental design, bioinformatics, and data analysis
- Design, implement, and operate bioinformatics pipelines for read alignment/mapping, QC, structural variant and transcriptome analysis
- Identify, evaluate, and integrate open source and commercial bioinformatics software packages to continuously improve acquisition of mitochondrial and mitophagy genes
- Engage in cross-functional discussions, providing conceptual input in experimental and study design and improve mitochondrial function
- Summarize, visualize, and communicate bioinformatics analyses to key stakeholder
- Collaborate with the Software, Data Engineering and experimental team to translate bioinformatics pipelines into production grade, and cloud ready better myto health

Essential Duties & Responsibilities:

- Analysis of genome sequencing, platform-specific bias and errors, and data interpretation
- Hands-on experience with genome alignment, mapping, variant, and QC/annotation tools
- Excellent understanding of molecular and cell biology
- Proficiency in programming using one or more common bioinformatics languages such as Python

- Experience with using commonly used genomic databases UCSC Genome Browser, NCBI/RefSeq, Ensembl
- Expertise with commonly used bioinformatics tools such as BWA, minimap2, Samtools, BLAST, GATK suite
- Strong familiarity with core concepts in molecular biology and related lab technologies
- Track record of following best practices of coding, version control, and code documentation
- Experience with UPS and mitochondrial biology preferred
- Self-motivated to learn and develop new methodologies, manage multiple analysis pipelines
- Excellent communication skills (both oral and written)
- Experience managing external collaborations is a plus

Benefits:

LifeSensors employees enjoy an outstanding total compensation package, including excellent salaries based on qualifications and experience, and benefits including:

- Medical, dental, and vision coverage
- Generous Paid Time Off policy, in addition to standard Holidays
- 401K Retirement Savings Plan with a company match
- Bonus and Life Insurance programs
- Relocation Assistance

If you would like to play a critical role in UPS genome research, drug discovery and personalized medicine, please e-mail your resume to careers@lifesensors.com