Phenomics Health Inc. is a start-up company located at the technology incubator of the University of Michigan. We are developing a commercial bioinformatics platform that combines genomic, metabolomic, and patient data using our proprietary machine/deep learning processes for predictive pharmacogenomics, pharmaceutical discovery, and drug repurposing. Led by an expert team of proven innovators, working with Phenomics Health Inc. will provide frontline exposure to cutting-edge advances in the field of data science and machine learning.

The successful candidate will be responsible for the collection, analysis, and curation of bioinformatic data sets under the guidance of senior scientists, as well as supporting the development of our deep learning algorithms. Specific projects include the development of the PHI Phenome Analytics Platform (PAP), a multi-scale data integration and predictive pharmacogenomics AI-enabled platform and its refinement through the addition of new data, and validation through comparison to real-world outcomes and experimental results. Associate scientists will also assist with the implementation, training, and optimization of novel machine learning paradigms to refine the PAP.

Responsibilities may include:
- Predictive modeling with a focus on pharmacogenomics
- Model training via deep/machine learning
- Testing of Artificial Intelligence system sub-modules
- Scientific literature review, analysis, comparison, and presentation
- Data curation, including (epi-)genomic and multi-omic database annotation and classification
- Quantitative analysis of diverse data sets
- Systems biology-based gene network modeling

Requirements:
- M.S./Ph.D. in computer science, bioinformatics, mathematics, molecular biology, genetics, information science(s), statistics, computational medicine and/or equivalent
- Familiarity with UNIX command line programming, especially Python, PERL and/or R
- Experience manipulating CSV files
- Experience and/or willingness to learn manipulation of genomic formats, including VCF, BCL, BED, SAM, FASTA, FASTQ, WIG, GFF/GTF
- Exposure to quantitative data analysis or predictive modeling, academic or work setting;
- Basic understanding of cellular physiology or neuroscience
- Interest in machine learning and life-science diagnostic/pharmaceutical development
- You must have a fully functioning personal computer
- United States citizenship or permanent resident status

Qualified candidates should submit their current C.V. and cover letter outlining their availability and compensation requirements to info@phenomicshealth.com.