NOVARTIS

Senior Expert Data Scientist, Human Genetics

Job ID
REQ-10090447
Oct 22, 2026
LOC_US

About the Role

Key Responsibilities

- Analyze and interpret whole exome/genome sequencing data to identify genetic variants, genes, and biological pathways associated with cardiovascular and metabolic diseases.
- Develop and apply statistical genetics and bioinformatics methods for variant annotation, association analysis, burden testing, rare-variant analysis, causal inference, and gene prioritization.
- Support the identification, evaluation, and validation of novel therapeutic targets using human genetic evidence and complementary genomic data sources.
- Contribute to patient selection and stratification strategies for research and clinical programs, including the identification of genetically defined patient subgroups.
- Integrate human genetics results with transcriptomic, proteomic, functional genomics, clinical, and other relevant data to develop disease and target insights.
- Collaborate with cross-functional project teams to define analytical strategies, interpret findings, and translate results into clear scientific recommendations.
- Develop reproducible, well-documented analytical workflows and contribute to best practices for genomic data analysis.
- Communicate results through presentations, written reports, scientific manuscripts, and internal project updates.
- Stay current with advances in human genetics, statistical genetics, genomic medicine, and computational methods relevant to drug discovery and development.

Essential Requirements

- PhD with 2-3+ years or MS with 6+ years of industry experience in human genetics, statistical genetics, computational biology, bioinformatics, epidemiology, biostatistics, or a related field.
- Postdoctoral research experience is preferred.
- Demonstrated experience analyzing whole exome/genome sequencing data, including variant quality control, annotation, filtering, association testing, and interpretation.
- Strong understanding of human genetics and statistical genetics principles, including rare-variant analysis and genotype-phenotype associations.
- Familiarity with genome-wide association studies, phenome-wide association studies, polygenic risk scores, Mendelian randomization, or functional genomics.
- Experience integrating genomic data with clinical, molecular, or multi-omic datasets.
- Programming and data analysis expertise in Python or R, along with proficiency in Linux or Unix-based computing environments.
- Knowledge of workflow management systems (Git), collaborative coding, and reproducible research practices.
- Ability to work with large-scale genomic datasets and use appropriate statistical and computational methods to derive biologically meaningful conclusions.

- Strong scientific communication, collaboration, and problem-solving skills.

Preferred Qualifications

- Experience applying human genetic evidence to target discovery, target validation, or drug development.

Novartis Compensation and Benefit Summary:

The salary for this position is expected to range between $126,000 and $234,000 per year.

The final salary offered is determined based on factors like, but not limited to, relevant skills and experience, and upon joining Novartis will be reviewed periodically. Novartis may change the published salary range based on company and market factors.

Your compensation will include a performance-based cash incentive and, depending on the level of the role, eligibility to be considered for annual equity awards.

US-based eligible employees will receive a comprehensive benefits package that includes health, life and disability benefits, a 401(k) with company contribution and match, and a variety of other benefits. In addition, employees are eligible for a generous time off package including vacation, personal days, holidays and other leaves.

Role Requirements

Division
DIV_RE
Business Unit
Research
Location
LOC_US
Site
Cambridge (USA)
Company / Legal Entity
U175 (FCRS = US175) Novartis Institutes for BioMedical Research, Inc.
Functional Area
FCT_DD
Job Type
Full time
Employment Type
Regular
Shift Work
No
Apply to Job

Job ID

REQ-10090447

Senior Expert Data Scientist, Human Genetics

Apply to Job

Source URL: *https://jobapi.novartis.com/req-10090447-senior-expert-data-scientist-human-genetics*

List of links present in page

1. https://jobapi.novartis.com/req-10090447-senior-expert-data-scientist-human-genetics
2. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Cambridge-USA/Senior-Expert-Data-Scientist--Human-Genetics_REQ-10090447-1
3. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Cambridge-USA/Senior-Expert-Data-Scientist--Human-Genetics_REQ-10090447-1