NOVARTIS

AI/ML for Biology Scientist

Job ID
REQ-10089087
Oct 15, 2026
LOC_US

About the Role

Internal Job Title: Senior Expert I/II Data Science

Position Location: San Diego, CA Hybrid

About the Role:

Aging is the biggest risk factor for chronic diseases. The new AI for biology scientist will advance DARe's mission to discover novel transformative therapies for diseases of aging by integrating at scale human pathobiology, experimental science and machine learning.

The role will develop, evaluate and apply machine-learning approaches across human genetics, longitudinal EHR cohorts, high resolution multi-omics technologies, cellular imaging and functional data to uncover disease mechanisms and drive therapeutic target identification, prioritization and validation. The successful candidate will combine strong biological insight with expertise in modern machine learning, including representation learning, multimodal methods, biological foundation models and reproducible model-development workflows.

Working in a global, multidisciplinary environment, the new team member will partner with biologists, disease experts and data scientists to shape experimental strategies, build scalable analytical workflows and translate complex biomedical data into testable hypotheses and actionable evidence for drug discovery.

Key Responsibilities:

- Partner closely with experimental scientists to understand biological questions and design data-driven approaches to answer them.
- Apply expertise in computational biology, human genetics, machine learning and AI approaches to support target identification, prioritization and validation for disease of aging.
- Contribute to the design of large-scale experiments and data-generation strategies across genetics, multi-omics, imaging and functional biology.
- Integrate diverse biological datasets to uncover disease mechanisms and generate therapeutic hypotheses.
- Help establish reproducible and scalable computational workflows and analytical approaches that accelerate discovery across DARe.

Essential Requirements:

- PhD in Computational Biology, Human Genetics, Bioinformatics, Data Science, Machine Learning, Systems Biology or a related quantitative discipline.
- 3+ years of experience applying computational and ML approaches to biomedical research, translational science or drug discovery.
- Hands on experience with modeling and analyzing diverse biomedical data types including genetic, single cell, perturbation datasets, spatial transcriptomics, and cellular imaging.
- Experience evaluating, adapting, and applying biological foundation models to biomedical research, particularly RNA, DNA, single-cell, or spatial data.
- Experience with Model deployment (MLops) and agentic frameworks Strong programming skills in Python and R and proficient in working in modern data-science environments and developing reproducible workflows.
- Experience integrating complex biological datasets and translate into actionable insights.
- Ability to collaborate effectively with experimental scientists.
- Demonstrated curiosity, learning agility and willingness to work across disciplines.

Desirable Requirements:

- Strong experience in human genetics, including GWAS, rare variant analysis, Mendelian randomization, colocalization or fine mapping.
- RWE experience including longitudinal human cohorts, EHRs and disease progression modelling.
- Familiarity with biomedical knowledge graphs, representation learning or multimodal learning.
- Familiarity with biomedical ontologies, FAIR data principles and data harmonization.
- Experience with biological aging clocks.

Compensation & Benefits:

The salary for this position is expected to range between $126,000 and $234,000 USD annually for Senior Expert I, Data Science, and $138,600 and $257,400 USD annually for Senior Expert II, Data Science. 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.

To learn more about the culture, rewards and benefits we offer our people click here.

Role Requirements

Division
DIV_RE
Business Unit
Research
Location
LOC_US
Site
LaJolla/SD
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
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Job ID
REQ-10089087

AI/ML for Biology Scientist

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