NOVARTIS

Data Science & AI Innovation Postdoctoral Fellow

Job ID
REQ-10084589
Aug 25, 2026
LOC_US

About the Role

Internal Job Title: Discovery Postdoctoral Fellow

Position Location: Cambridge, MA, onsite #LI-onsite

* This position is not eligible for visa sponsorship.
* Please note that relocation support is not available for this position.
* This is a full-time training position of up to three years in duration.

The start date for the 2026 Novartis BR Postdoctoral Fellowship Program cohort is October 1, 2026. Please confirm your availability to meet this date in your cover letter.

Research Opportunity

Cardiovascular disease remains a major unmet medical need and a strategic focus for Novartis. This fellowship offers a unique opportunity to develop and apply cutting-edge AI methods to integrate ECG, genomic, and proteomic data at an unprecedented scale. The Fellow will work with large, multimodal datasets from population biobanks, clinical studies, and real-world data to discover novel biomarkers, uncover disease mechanisms, and improve patient stratification. Through close collaboration with experts in data science, human genetics, and cardiovascular medicine, the Fellow will gain hands-on experience translating advanced analytics into insights that can inform the development of future therapies.

Key Responsibilities

As a Data Science & AI Innovation Fellow, you will:

- Develop and apply multimodal AI/ML models and statistical methods to integrate ECG, genomic, and proteomic data for cardiovascular disease research.
- Analyze large-scale multimodal datasets from biobanks, clinical studies, and real-world data sources to identify novel biomarkers and disease mechanisms.
- Design, implement, and evaluate predictive and interpretable models linking physiological signals with molecular and genetic variation.
- Collaborate with a multidisciplinary team of data scientists, geneticists, clinicians, and cardiovascular researchers.
- Communicate findings through publications, conference presentations, and internal scientific seminars.

Why Join the Program?

The Novartis Biomedical Research Postdoctoral Fellowship Program is designed to develop the next generation of scientific leaders and power the future of medicine through rigorous research, and immersive learning experiences, including the implementation of AI tools in biomedical research.

Postdoctoral Research Fellows benefit from:

- Guidance from accomplished scientific leaders and subject matter experts
- Access to advanced technologies, platforms, and research capabilities
- Collaboration across disciplines and organizational boundaries
- A global and diverse community of postdoctoral fellows

- Dedicated programming designed to help fellows thrive throughout their careers.
- Personalized experiential learning opportunities through a Postdoc Practicum that empowers fellows to explore new scientific domains, build cross-functional expertise, and expand their impact beyond their primary research project.
- Opportunities to present research, publish in leading journals, and build an international scientific network

We are entering a new era of biomedical research breakthroughs through the convergence of biology, technology, and artificial intelligence tools, and fellows are also supported in engaging with these emerging approaches.

This is a full-time training position of up to three years in duration.

Reimagining Medicine Together

At Novartis, our purpose is to reimagine medicine to improve and extend people's lives. Through this program, you will grow as a scientist and future leader while contributing to discoveries that may ultimately benefit patients worldwide.

Essential Requirements

- PhD (or equivalent doctoral degree) in a relevant scientific discipline completed prior to the fellowship start date. The program is intended for scientists immediately following their PhD training (PhD conferred in 2026 only).
- Demonstrated record of scientific achievement (publications, presentations, patents, or equivalent)
- Strong commitment to learning, innovation, and professional development
- Strong quantitative background in data science, statistics, machine learning, bioinformatics, computational biology, computer science, biomedical engineering, or a related field.
- Programming proficiency in Python and/or R and experience working with large-scale datasets.
- Hands-on experience applying statistical or machine learning methods to biomedical, clinical, imaging, signal, omics, or other complex high-dimensional data.
- Experience developing and evaluating predictive models using modern data science approaches.
- Ability to work independently while thriving in a collaborative, multidisciplinary research environment.
- Strong communication skills, including the ability to explain complex analytical concepts to diverse scientific audiences.

Desirable Requirements

- Experience in statistical genetics or multi-omics analysis
- Experience analyzing physiological signals such as ECG, with deep learning and foundation models for biomedical data

Desirable Requirements

- Experience in statistical genetics or multi-omics analysis
- Experience analyzing physiological signals such as ECG, with deep learning and foundation models for biomedical data

How to Apply

Please submit your CV and cover letter by August 21, 2026.

In your cover letter, please describe your research interests, career aspirations, and how participation in the Novartis Biomedical Research Postdoctoral Fellowship Program will support your long-term development.

Compensation & Benefits

The starting salary for this position is 87,000 USD per year.
US-based employees are eligible for a comprehensive benefits package including health, life, and disability coverage, a 401(k) plan with company contribution, and a generous time-off package.

This position is not eligible for visa sponsorship.

Please note that relocation support is not available for this position.

The start date for the 2026 Novartis BR Postdoctoral Fellowship Program cohort is October 1, 2026. Please confirm your availability to meet this date in your cover letter.

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_RD
Job Type
Full time
Employment Type
Regular
Shift Work
No
Apply to Job

Job ID
REQ-10084589

Data Science & AI Innovation Postdoctoral Fellow

Apply to Job

Source URL: *https://jobapi.novartis.com/req-10084589-data-science-ai-innovation-postdoctoral-fellow*

List of links present in page

1. https://jobapi.novartis.com/req-10084589-data-science-ai-innovation-postdoctoral-fellow
2. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Cambridge-USA/Data-Science---AI-Innovation-Postdoctoral-Fellow_REQ-10084589-1
3. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Cambridge-USA/Data-Science---AI-Innovation-Postdoctoral-Fellow_REQ-10084589-1