

Discovery Postdoctoral Fellow, Spatial Transcriptomics - Neuroscience

Job ID
REQ-10084231
Jul 30, 2026
LOC_US

About the Role

Internal Job Title: Discovery Postdoctoral Fellow

Position Location: Cambridge, MA, onsite

* Novartis is unable to offer relocation support for this role: please only apply if this location is accessible for you.

* This position is not eligible for visa sponsorship. Please only apply if you are currently authorized to work in the US for the 3 year duration of the program.

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

Research Opportunity:

The Postdoctoral Fellow will leverage spatial transcriptomics, advanced bioinformatics, CRISPR engineering, and human iPSC-based functional assays to discover and validate novel therapeutic targets for amyotrophic lateral sclerosis (ALS) at the neuroimmune interface.

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 empower 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.

Start Date: 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.

duration.

Key Responsibilities:

- Establish and apply high-resolution spatial transcriptomics workflows to profile disease-relevant regions in ALS model systems and identify spatially organized gene-expression programs.
- Develop and benchmark computational pipelines for spatial transcriptomic analysis, including spatial clustering, gene-module detection, ligand–receptor interaction mapping, and integration with single-cell and human ALS datasets.
- Generate and characterize CRISPR-engineered knockout or knock-in human iPSC lines for selected spatially identified target genes.
- Collaborate closely with multidisciplinary teams across neuroscience, functional genomics, bioinformatics, genome engineering, stem cell biology, and translational research.
- Communicate research findings through internal presentations, conference abstracts, and peer-reviewed publications.

Essential Requirements:

- PhD (or equivalent doctoral degree) in neuroscience, biology or related 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 background in spatial transcriptomics, single-cell genomics, stem cell biology, functional genomics, or related areas.
- Experience with human iPSC-derived cell lines and models.
- Demonstrated ability to analyze complex omics datasets.

Desirable Requirements:

- Hands-on experience with one or more relevant experimental platforms, such as tissue processing, transcriptomic profiling, human iPSC culture and differentiation, CRISPR/Cas9 genome editing, high-content imaging, co-culture systems, or functional cellular assays.
- Familiarity with computational analysis of transcriptomic or spatial omics datasets, including use of tools or workflows such as Seurat, spatial clustering, differential gene-expression analysis, pathway analysis, or cell–cell communication analysis.

How to Apply:

Please submit your CV and cover letter by August 14th.

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 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

Why Novartis: Helping people with disease and their families takes more than innovative science. It takes a community of smart, passionate people like you. Collaborating, supporting and inspiring each other. Combining to achieve breakthroughs that change patients' lives. Ready to create a brighter future together? <https://www.novartis.com/about/strategy/people-and->

[culture](#)

Benefits and Rewards: Learn about all the ways we'll help you thrive personally and professionally.

[Read our handbook \(PDF 30 MB\)](#)

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

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