

## Data Science & AI Innovation Postdoctoral Fellow Immunology

Job ID  
REQ-10082425

7月 01, 2026

Switzerland

Available in: English

### 摘要

We are excited to invite applications for the Novartis Biomedical Research Postdoctoral Fellowship Program, a unique training opportunity designed for exceptional early-career scientists eager to tackle some of the most challenging problems in biomedical research and drug discovery.

Location: Basel, Switzerland

Duration: 3 years

Program start date: October 1, 2026

Application deadline: July 15, 2026 EOB

### About the Role

As a Postdoctoral Research Fellow, you will join Immunology in Basel and pursue an innovative

research project at the forefront of biomedical science and drug discovery. You will work alongside leading scientists in a highly collaborative, multidisciplinary environment while gaining exposure to the broader ecosystem that translates scientific discovery into medicines.

Our fellows are empowered to ask bold scientific questions, apply cutting-edge technologies, and develop approaches that have the potential to transform patient care.

## Research Opportunity

You will work at the intersection of immunology, AI, and pathology performing advanced spatial analyses of spatial transcriptomics, multiplexed proteomics, and histology data across inflammatory diseases. The goal of the project is to understand how spatially organized immune niches contribute to immune-mediated inflammatory diseases and how they can inform patient stratification and therapeutic discovery. The project will build a harmonized cross-disease atlas of spatial profiling data, benchmark and apply computational methods to annotate tissue structures, and develop AI models to characterize tissue niches across multi-modal spatial data. The expected outcome is a set of standardized spatial datasets, computational tools, and mechanistic hypotheses that reveal shared and distinct inflammatory tissue architectures across immune-mediated inflammatory disease and identify new opportunities for biomarker development, target discovery, and therapeutic interventions.

You will be embedded in a cross-functional team with strong expertise in spatial data analysis, AI model development, and histopathology assessment. You will closely work with scientists within Immunology and AI for Research at Novartis, connect to data scientists across the organization, and to a large PostDoc network. The outcomes of the projects will be disseminated at international conferences and in the form of scientific publications.

## Why Join the Program?

The Novartis Biomedical Research Postdoctoral Fellowship Program is designed to develop the next generation of scientific leaders, powering the future of medicine, through rigorous research, and immersive learning experiences, such as 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.

## Key Responsibilities

- Build and harmonize a cross-disease spatial profiling atlas.
- Develop best practice workflows for spatial data analysis.
- Benchmark computational methods for tissue niche detection.
- Develop and apply AI models for spatial profiling data, including foundation models to learn biologically meaningful embeddings and compare tissue structures across diseases.
- Work independently and collaboratively within interdisciplinary teams to drive your project

## 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 (graduated in 2026)
- Demonstrated record of scientific achievement (publications, presentations, patents, or equivalent)
- Strong commitment to learning, innovation, and professional development
- Strong Python and R coding skills
- Strong ability to interpret analysis results in a biological context
- Experience with analyzing spatial/single-cell profiling and/or imaging data
- Experience with applying ML and/or AI approaches for spatial/single-cell data analysis

## Desirable Requirements

- Experience in developing AI approaches is a plus
- Good understanding of immunology concepts is a plus
- Experience with histologic interpretation of normal and diseased tissues is a plus

Important:

Please submit your CV and cover letter by 15th July.

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.

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.

Please note that we can only accept applicants who are eligible to work in Switzerland.

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 \(PDF 30 MB\)](#)

部门

Biomedical Research

Business Unit

Research

地点

Switzerland

站点

Basel (City)

Company / Legal Entity

C028 (FCRS = CH028) Novartis Pharma AG

Functional Area

Others

Job Type  
Full time

Employment Type  
Early Career (Fixed Term)

Shift Work  
No

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