NOVARTIS

Discovery Postdoctoral Fellowship: Development of Preclinical Digital Biomarkers for Patient Tolerability

Job ID
REQ-10058264

7   23, 2025

USA

About the role
Internal Job Title: Discovery Postdoctoral Fellow
Position Location: Cambridge MA, onsite #LI Onsite

We are thrilled to open applications for our Discovery Fellowship track of the Novartis Postdoctoral Fellowship Program.

Come join Novartis Biomedical Research as a Discovery Postdoctoral Fellow and take part in the discovery, development and validation of objective quality of life measures using digital biomarkers to improve patient care, compliance, and outcomes.

You will be part of a highly collaborative and multidisciplinary team with expertise in oncology, patient engagement & insights, translational medicine, data sciences, animal welfare, and digital biomarker development spanning across Cambridge MA, East Hanover NJ, and Basel Switzerland. The role is based in Cambridge, Massachusetts.

The area of focus for this Post-Doc is discovering, developing and validating in-vivo digital biomarkers to assess treatment tolerance and improve patient care and outcomes. We aim to back-translate objective quality of life measures from patients including wearable device data, into animal studies, by leveraging a deep scientific understanding of animal behavior and digital home-cage monitoring solutions. Once preclinically validated, these digital biomarkers can be utilized to empower selection of new therapies that are not only efficacious but are more tolerable than the currently available therapies. The successful candidate will collaborate with various departments and leverage emerging technologies to deliver digital biomarkers with demonstrated preclinical, clinical, and analytical validity for predicting tolerability of new therapies in patients.

As part of the Discovery Fellowship track of the Novartis Postdoctoral Fellowship Program, you will join our vibrant, dedicated postdoctoral community for events, including the monthly postdoc seminars and other scheduled events for postdocs. Fellows are surrounded by a supportive, collaborative community of postdocs and scientists, who would contribute to the acceleration of your scientific growth, along with building your professional skillset, e.g. you will have the opportunity to do a Postdoc Practicum in another laboratory or in a business function of Novartis. This applied research program is up to 3 years in length, with the option of applying for an extension of up to 1 year (pending review by the Head of Biomedical Education & Innovation and the postdoc supervisor).

Discovery Postdoctoral Fellows have a unique opportunity to conduct innovative, interdisciplinary research and are expected to publish their results in leading journals. We collaborate across scientific and organizational boundaries, with a focus on powerful new technologies that have the potential to help produce therapeutic breakthroughs for patients.

Through the Novartis Postdoctoral Fellowship Program, you will build your competency as a drug hunter, and as a scientific leader in the field. You will join a professional network that will support your growth as a research scientist, and you will have the opportunity to tackle disease and make an impact, by reimagining medicine together.

Start date: October 2025

About the Role

Key responsibilities

As a Discovery Postdoctoral Fellow, you will:

- Work independently as well as with interdisciplinary teams.
- Collaborate closely with various functions to identify candidate studies where tolerability impacts on patient compliance are critical concerns.
- Spearhead preclinical studies using digital home-cage monitoring solutions to validate digital biomarkers driven from patient insights and feedback.
- Analyze and interpret multi-modal data from wearable devices and digital home-cage monitoring solutions. Enable incorporation of preclinically validated tolerability measures in clinical trial development.
- Prepare and present findings in scientific publications and conferences.

- Identify and work with public digital endpoint datasets for purposes of algorithm development
- Use Statistical Modeling and Machine Learning to build safety and tolerability prediction models.

Role Requirements:

- PhD in translational neuroscience, biomedical engineering, animal behavior, applied ethology, or a related field; DVM, MD or equivalent.
- Note that PhD students in the last year of their thesis work are eligible to apply. Applicants are only eligible to apply up to 2 years from the date of receiving their PhD (i.e. doctorate degrees must have been awarded May 2023 or later).
- Experience leading and conducting hands-on in-vivo studies required, expertise with behavioral measures highly desirable.
- Experience in whole animal home-cage monitoring and developing and validating translational digital biomarkers is highly desirable
- Strong background in data analysis and interpretation, particularly with wearable devices and digital monitoring systems is highly desirable
- Proven track record of cross-functional collaboration and publication in scientific journals or other scientific achievements (i.e. awards, patents, grants).
- Excellent analytical, communication, presentation and organizational skills.
- Passion for fundamental exploratory research and boundless curiosity.

How to apply

Please submit your CV and cover letter by August 15, 2025, for consideration. Please make sure to discuss in the cover letter how this training program will help you fulfill your career goals.

The starting salary for this position is $87,000 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. #PDX

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

Join our Novartis Network: Not the right Novartis role for you? Sign up to our talent community to stay connected and learn about suitable career opportunities as soon as they come up: https://talentnetwork.novartis.com/network

Benefits and Rewards: Read our handbook to learn about all the ways we'll help you thrive personally and professionally: https://www.novartis.com/careers/benefits-rewards

EEO Statement:

The Novartis Group of Companies are Equal Opportunity Employers. We do not discriminate in recruitment, hiring, training, promotion or other employment practices for reasons of race, color, religion, sex, national origin, age, sexual orientation, gender identity or expression, marital or veteran status, disability, or any other legally protected status.

Accessibility & Reasonable Accommodations

The Novartis Group of Companies are committed to working with and providing reasonable accommodation to individuals with disabilities. If, because of a medical condition or disability, you need a reasonable accommodation for any part of the application process, or to perform the essential functions of a position, please send an e-mail to us.reasonableaccommodations@novartis.com or call +1(877)395-2339 and let us know the nature of your request and your contact information. Please include the job requisition number in your message.

Biomedical Research

Business Unit
Universal Hierarchy Node

USA

Massachusetts

Cambridge (USA)

Company / Legal Entity
U175 (FCRS = US175) Novartis Institutes for BioMedical Research, Inc.

Functional Area
Research & Development

Job Type
Full time

Employment Type
Regular

Shift Work
No

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