

## Expert II Data Science, Structural Bioinformatician

Job ID  
REQ-10050331

5月 06, 2025

USA

### 摘要

This position will be located at the Cambridge site and will not have the ability to be located remotely.

Internal Title: Expert II Data Science

The Biologics Research Center (BRC) at Biomedical Research (BR) is seeking a highly skilled Expert II Data Science, Structural Bioinformatician with experience in protein sequence and structure analysis, structure prediction/design and modeling of protein-protein and/or protein-oligonucleotide interactions. The ideal candidate will join our Bioinformatics and Biotherapeutics Modelling team and contribute to our innovative biologics projects.

### About the Role

Key Responsibilities

- Actively contribute to the biologics discovery pipeline and innovation-related programs by applying structure modeling methods to design and optimize both tool and therapeutic molecules at different stages of the drug discovery process.
- Assist scientists across the organization in the analysis and design of protein and oligonucleotide sequences, advancing biologics projects from early discovery to lead optimization stages.
- Apply, develop, and improve computational structural modeling and AI/ML-based methods to analyze, predict and design functional properties of drug candidates.
- Collect, analyze, and integrate diverse types of data (including structural data) from different projects to build predictive models, formulate hypotheses, and generate actionable knowledge.
- Contribute to the design, utilization, and improvement of bioinformatics tools in the field of molecular modeling to analyze sequence and structure data for knowledge generation.
- Work closely with experimental scientists, fostering a collaborative and multidisciplinary environment to drive project success.

#### Essential Requirements:

- Educational Background: Ph.D (recent Ph.D. welcome to apply) MS (with 4+ years of relevant industry research experience) or equivalent degree in bioinformatics, computational biology, computer science, structural biology or a related field.
- Technical Expertise: Experience with protein sequence & structure analysis, molecular modeling and bioinformatics databases and tools.
- Programming Skills: Competence in at least one programming language such as Python, R, C/C++ or similar and experience with HPC environments for running computationally intensive calculations and analyses.
- AI/ML Proficiency: Working knowledge in development or application of modern AI and ML approaches for protein structure prediction, protein-protein and/or protein-oligonucleotide interaction prediction, and protein design

#### Desirable Requirements:

- Prior experience in the pharmaceutical or biotechnology industry is desirable but not essential. Experience in a research or academic setting with a focus on biologics molecules is also valuable.
- Advanced understanding of the structure and function of common biologics modalities such as antibodies, ADCs, AAV or RNA
- Prior experience with commercial molecular modeling software (MOE, Schrodinger, etc.) is highly desirable
- Experience with predictive modeling and incorporation of AI/ML models into in silico workflows for biologics function/property prediction including performance evaluation, retraining and adaptation of models.
- Familiarity with version control systems like Git for collaborative coding and project management
- Analytical Skills: Strong ability to analyze, integrate & interpret complex biological data, particularly in the context of protein sequences and structures.
- A creative and innovative mindset, with a keen interest in advancing the field of biologics through cutting-edge computational methods.
- Demonstrated ability to develop hypotheses, design experiments, and drive projects to successful completion.

- Excellent communication and teamwork skills, with the ability to work effectively in a multidisciplinary environment.

Novartis Compensation and Benefit Summary: The pay range for this position at commencement of employment is expected to be between: \$103,600 and \$192,400/year; however, while salary ranges are effective from 1/1/25 through 12/31/25 fluctuations in the job market may necessitate adjustments to pay ranges during this period. Further, final pay determinations will depend on various factors, including, but not limited to geographical location, experience level, knowledge, skills, and abilities. The total compensation package for this position may also include other elements, including a sign-on bonus, restricted stock units, and discretionary awards in addition to a full range of medical, financial, and/or other benefits (including 401(k) eligibility and various paid time off benefits, such as vacation, sick time, and parental leave), dependent on the position offered. Details of participation in these benefit plans will be provided if an employee receives an offer of employment. If hired, employee will be in an “at-will position” and the Company reserves the right to modify base salary (as well as any other discretionary payment or compensation program) at any time, including for reasons related to individual performance, Company or individual department/team performance, and market factors.

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](mailto: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.

部门

Biomedical Research

Business Unit

Pharma Research

地点

USA

状态

Massachusetts

站点

Cambridge (USA)

Company / Legal Entity

U175 (FCRS = US175) Novartis Institutes for BioMedical Research, Inc.

Functional Area

Data and Digital

Job Type

Full time

Employment Type

Regular

Shift Work

No

[Apply to Job](#)



Job ID  
REQ-10050331

Expert II Data Science, Structural Bioinformatician

[Apply to Job](#)

---

Source URL:

<https://www.novartis.com.cn/careers/career-search/job/details/req-10050331-expert-ii-data-science-structural-bioinformatician>

List of links present in page

1. <https://www.novartis.com/about/strategy/people-and-culture>
2. <https://talentnetwork.novartis.com/network>
3. <https://www.novartis.com/careers/benefits-rewards>
4. <mailto:us.reasonableaccommodations@novartis.com>
5. <https://novartis.wd3.myworkdayjobs.com/en-US/NovartisCareers/job/Cambridge-USA/Expert-II-Data-Science--Structural-BioinformaticianREQ-10050331-1>
6. <https://novartis.wd3.myworkdayjobs.com/en-US/NovartisCareers/job/Cambridge-USA/Expert-II-Data-Science--Structural-BioinformaticianREQ-10050331-1>