

Senior Expert I Data Science

Job ID
REQ-10046473
Apr 10, 2025
USA

Summary

Internal Title: Senior Expert I Data Science

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

Job Description Summary

We are seeking a highly motivated, passionate Senior Expert I Data Science to join the data science team of Biologics Research Center (BRC) in San Diego, CA. BRC builds the biologics pipeline in collaboration with Biomedical Research Disease Areas via a breadth of technologies for discovery of antibody, protein, gene therapy and RNA-based therapeutics.

The Senior Expert, Data Science must possess a strong background in Python programming and data analysis skills, have experience working with large-scale datasets using Linux, and demonstrate a thorough understanding of machine learning theory. It is essential to be self-motivated and committed to continuously learning about the latest advancements in the field of data science, given its rapid technological evolution. Curiosity to understand the “why” rather than merely addressing the “how” is crucial for success in this role. The ideal candidate must be an independent researcher, proficient in reviewing existing literature, sourcing solutions online, and devising innovative solutions as required.

Novartis offers a unique environment to apply data science methodologies to large biomedical datasets, enhancing the discovery of new medicines.

About the Role

Job Description Summary

We are seeking a highly motivated, passionate Senior Expert I Data Science to join the data science team of Biologics Research Center (BRC) in San Diego, CA. BRC builds the biologics pipeline in collaboration with Biomedical Research Disease Areas via a breadth of technologies for discovery of antibody, protein, gene therapy and RNA-based therapeutics.

The Senior Expert, Data Science must possess a strong background in Python programming and data analysis skills, have experience working with large-scale datasets using Linux, and demonstrate a thorough understanding of machine learning theory. It is essential to be self-motivated and committed to continuously learning about the latest advancements in the field of data science, given its rapid technological evolution. Curiosity to understand the “why” rather than merely addressing the “how” is crucial for success in this role. The ideal candidate must be an independent researcher, proficient in reviewing existing literature, sourcing solutions online, and devising innovative solutions as required.

Novartis offers a unique environment to apply data science methodologies to large biomedical datasets, enhancing the discovery of new medicines.

Key Responsibilities:

- Collaborate with scientists and bioinformaticians to develop next generation ML/AI models for potency prediction and chemistry optimization using internal and public in vitro and in vivo siRNA datasets.
- Identify, assess, and implement novel algorithms and methodologies from publications to continuously enhance the data science strategy for AI-enabled siRNA design and delivery.
- Effectively collaborate with biologists in data interpretation, visualization, and communication of results
- Contribute to BRC's AI protein design initiative through AI model evaluation, adoption, integration, and automation.
- Collaborate with other scientists on developing computational solutions to address ad hoc data science challenges.

Essential Requirements:

- Ph.D. in Data Science, Bioinformatics, Computer Science, or related disciplines
- Experience in machine learning modeling
- Excellent programming skills in Python, with Linux as the operating platform, and familiarity with high-performance clusters.
- Clear understanding of basic concepts in statistics.
- Accurate understanding of machine learning and deep learning concepts.
- Previous experience with machine learning applications.
- Desirable knowledge in deep learning areas, including CNN, GNN, transformers, and language models.
- Adequate biological knowledge to facilitate effective communication with scientists.
- Strong communication and interpersonal skills are essential for success in this role.

Desirable Requirements:

- Experience with RNAi therapeutics and siRNA design is preferred.

Novartis Compensation and Benefit Summary: The pay range for this position at commencement of employment is expected to be between: \$119,700 and \$222,300/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 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.

Division

Biomedical Research

Business Unit

Pharma Research

Location

USA

State

California

Site

San Diego

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-10046473

Senior Expert I Data Science

[Apply to Job](#)

Source URL: <https://prod1.novartis.com/careers/career-search/job/details/req-10046473-senior-expert-i-data-science>

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/Novartis_Careers/job/San-Diego/Senior-Expert-I-Data-Science_REQ-10046473-1
6. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/San-Diego/Senior-Expert-I-Data-Science_REQ-10046473-1