

Computer-Aided Drug Design AI Project Lead

Job ID
REQ-10032730
Mar 12, 2025
USA

Summary

We are seeking an exceptional computational scientist to join our Computer-Aided Drug Discovery (CADD) team in Cambridge. If you join us, you will collaborate with the industry's best chemists and biologists. You will wield a fantastic array of physics-based software tools to design drug molecules, and you will use our advanced machine learning tools to mine a vast data set collected by one of the world's most renowned pharmaceutical companies. Are you searching for daily challenges, purpose to your job, and outstanding mentorship from a group of scientists with diverse talents? Then join the Novartis Biomedical Research CADD team.

About the Role

Internal Job Title: Senior Expert I/Senior Expert II, Data Science

Position Location: Cambridge, MA, onsite

About this role:

We are seeking an exceptional computational scientist to join our Computer-Aided Drug Discovery (CADD) team in Cambridge. If you join us, you will collaborate with the industry's best chemists and biologists. You will wield a fantastic array of physics-based software tools to design drug molecules, and you will use our advanced machine learning tools to mine a vast data set collected by one of the world's most renowned pharmaceutical companies. Are you searching for daily challenges, purpose to your job, and outstanding mentorship from a group of scientists with diverse talents? Then join the Novartis Biomedical Research CADD team.

Your responsibilities Include:

- Drive peptide discovery and design through collaborations with interdisciplinary project teams. Your primary role on the team will be the AI project lead, which involves developing digital workflows and using machine learning and artificial intelligence (AI) to build predictive PK/PD models and to mine public and internal data sets with the goal of exploring new chemical space. This collaboration requires in-depth knowledge of machine learning, structure-activity relationships (SAR), target biology, pharmacokinetics / pharmacodynamics (PK/PD), and synthetic feasibility.
- Stay abreast of scientific literature and collaborate with internal and external scientists to explore new technologies and develop new computational tools and techniques.
- Present and publish scientific work at internal meetings and external conferences.

Minimum Requirements:

- PhD in computational chemistry, physical chemistry, chemical engineering, biological engineering, computational biology, or a related field. Candidates with a laboratory-based background in chemistry or biology who have outstanding computational skills are also encouraged to apply.
- 3+ years of experience (depends on the position level) working with project teams in an industrial drug discovery environment.
- Track record of significant impact on drug discovery projects.
- Extensive experience with drug design tools and high-performance computing environments
- Strong publication history in peer-reviewed journals.

Skills and Abilities:

- Scientific rigor in molecular design and hypothesis generation.
- Team-oriented mindset with the potential to lead an interdisciplinary team.
- Excellent written and oral communication skills. Superb presentation skills are a plus.
- Proficiency in data visualization to effectively communicate insights.

Why Novartis: Our purpose is to reimagine medicine to improve and extend people’s lives and our vision is to become the most valued and trusted medicines company in the world. How can we achieve this? With our people. It is our associates that drive us each day to reach our ambitions. Be a part of this mission and join us! Learn more here: <https://www.novartis.com/about/strategy/people-and-culture>

You’ll receive: You can find everything you need to know about our benefits and rewards in the Novartis Life Handbook: <https://www.novartis.com/careers/benefits-rewards>

Novartis Compensation and Benefit Summary: The pay range for this position at commencement of employment is expected to be between \$119,700 to \$222,300 for Senior Expert I, and \$132,300 to \$245,700/year for Senior Expert II; 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.

Join our Novartis Network: If this role is not suitable to your experience or career goals but you wish to stay connected to hear more about Novartis and our career opportunities, join the Novartis Network here: <https://talentnetwork.novartis.com/network>

You’ll receive: You can find everything you need to know about our benefits and rewards in the Novartis Life Handbook: <https://www.novartis.com/careers/benefits-rewards>

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

Massachusetts

Site

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-10032730

Computer-Aided Drug Design AI Project Lead

[Apply to Job](#)

Source URL: <https://prod1.adacap.com/careers/career-search/job/details/req-10032730-computer-aided-drug-design-ai-project-lead>

List of links present in page

1. <https://www.novartis.com/about/strategy/people-and-culture>
2. <https://www.novartis.com/careers/benefits-rewards>
3. <https://talentnetwork.novartis.com/network>
4. <https://www.novartis.com/careers/benefits-rewards>
5. <https://www.novartis.com/about/strategy/people-and-culture>
6. <https://talentnetwork.novartis.com/network>
7. <https://www.novartis.com/careers/benefits-rewards>
8. <mailto:us.reasonableaccommodations@novartis.com>
9. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Cambridge-USA/Computer-Aided-Drug-Design-AI-Project-Lead_REQ-10032730-1
10. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Cambridge-USA/Computer-Aided-Drug-Design-AI-Project-Lead_REQ-10032730-1