NOVARTIS

Associate Director & Senior Principal Data Science, AI for Biologics

Job ID
REQ-10090894
Nov 06, 2026
LOC_IE

About the Role

Key Responsibilities

- Lead scientific innovation in AI-enabled biologics, antibody discovery, protein engineering, and protein design.
- Translate complex drug-discovery challenges into well-defined AI opportunities with clear hypotheses, evaluation methods, and success criteria.
- Develop and evaluate rigorous AI methods for protein structure prediction, biological foundation models, and generative molecular design.
- Assess emerging AI models, datasets, and technologies for scientific maturity, differentiation, limitations, and drug-discovery value.
- Lead cross-functional proof-of-concept studies connecting computational performance with experimental validation and meaningful scientific outcomes.
- Partner with engineering, product, data, and platform teams to transform successful innovations into reusable AI capabilities.
- Build strategic collaborations with academia, biotechnology companies, technology organizations, and external research partners.
- Provide evidence-based recommendations on which emerging technologies to explore, partner on, scale, internalize, or deprioritize.
- Influence scientific strategy by communicating evidence, uncertainty, trade-offs, risks, and potential value to senior stakeholders.
- Mentor scientists and data scientists, strengthening scientific judgment and translating AI advances into drug-discovery impact.

Essential Requirements

- Doctoral degree or equivalent experience in machine learning, computational biology, bioinformatics, structural biology, protein engineering, or a related discipline.
- At least five years’ hands-on experience translating complex scientific or biomedical challenges into machine learning and artificial intelligence solutions.
- Practical experience applying protein language models, generative models, or other artificial intelligence methods to biomolecular sequence and structure data.
- Deep expertise in biologics or antibody discovery, connecting computational predictions with experimental decisions and downstream development considerations.
- Proven experience designing rigorous model evaluation and validation studies, including benchmarking, prospective testing, or experimental validation.
- Demonstrated scientific leadership, influencing cross-functional stakeholders and translating artificial intelligence innovation into measurable drug-discovery or portfolio impact.

Desirable Requirements

- Knowledge of molecular dynamics, statistical potentials, or structural bioinformatics applied to protein and biologics research.
- Strong scientific standing demonstrated through publications, patents, external collaborations, invited presentations, open-source contributions, or professional leadership.

Rewards

At Novartis, we're committed to reimagining medicine together - and rewarding the people who make it happen.

The rewards of being part of our team go far beyond base pay and incentives. We also offer a variety of competitive benefits in kind to help you thrive personally and professionally, such as insurance plans, retirement plans, wellbeing resources and global recognition programs. In addition, we provide flexible and hybrid working options, where possible, and a minimum of 14 weeks paid parental leave.

Expected Annual Base Salary Range for role:

- Dublin: 89,180.00 - 165,620.00 EUR Annual

The salary offered is determined based on gender-neutral objectives, such as relevant skills, competencies and experience in accordance with the Novartis pay setting policy and upon joining Novartis will be reviewed periodically.

In addition to your base salary, you may be eligible for a performance-based bonus depending on certain performance parameters. Further details will be provided during the application process.

Pay equity is a fundamental principle of our employment policy and reflects our commitment to create a diverse, equitable and inclusive environment that treats all employees with dignity and respect, as outlined in our Code of Ethics.

Read our brochure to learn more about our global total rewards offering:
https://www.novartis.com/sites/novartis_com/files/novartis-life-handbook.pdf

Note: Benefits and compensation may vary by country and are subject to local legal requirements, including provisions of collective bargaining agreements where applicable. A full overview of your compensation package, including any relevant collective bargaining agreement details applicable to your role based on your employment location and Novartis employer entity, will be communicated separately to you during the application process.

Commitment to Diversity and Inclusion / EEO paragraph:

Novartis is committed to building an outstanding, inclusive work environment and diverse teams' representative of the patients and communities we serve.

Role Requirements

Primary location salary range
€89,180.00 - €165,620.00
Division

DIV_RE
Business Unit
Research
Location
LOC_IE
Site
Dublin (NOCC)
Company / Legal Entity
IE02 (FCRS = IE002) Novartis Ireland Ltd
Functional Area
FCT_DD
Job Type
Full time
Employment Type
Regular
Shift Work
No
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