NOVARTIS

Associate Director & Senior Principal Data Science, AI for Biologics

Job ID
REQ-10092233
Nov 10, 2026
LOC_IN

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.

Commitment to Diversity and Inclusion:

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

Accessibility and accommodation

Novartis is 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 recruitment process, or in order to perform the essential functions of a position, please send an e-mail to diversityandincl.india@novartis.com and let us know the nature of your request and your contact information. Please include the job requisition number in your message

Role Requirements

Division
DIV_RE
Business Unit
Research
Location
LOC_IN
Site
Hyderabad (Office)
Company / Legal Entity
IN10 (FCRS = IN010) Novartis Healthcare Private Limited
Functional Area
FCT_DD
Job Type
Full time
Employment Type
Regular
Shift Work
No
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