

## Principal Scientist - Cryo-Electron Microscopy (Cryo-EM)

Job ID  
REQ-10062058

9月 12, 2025

USA

### 摘要

We are seeking a Principal Scientist with deep expertise in cryo-EM to join our team in Cambridge, MA. This is a highly collaborative and hands-on role that will span end-to-end cryo-EM workflows from protein construct design, protein production, and biophysics for target engagement studies through high resolution structure determination contributing directly to drug discovery programs across multiple therapeutic areas. The successful candidate will also play a strategic role in mentoring users, optimizing facility operations, and incorporating the latest technologies into our structural biology pipeline.

### About the Role

Internal Job Title: Principal Scientist I/II  
Location: Cambridge, MA, onsite #LI-onsite

## About the Role:

At Novartis, we are reimagining medicine through scientific excellence and innovation. Within the Discovery Sciences organization, the Protein Sciences group plays a pivotal role in advancing early-stage drug discovery by enabling deep structural and functional insights into therapeutic targets. Cryo-electron microscopy (cryo-EM) is a cornerstone of our structural biology capabilities, enabling structure-guided drug discovery for some of the most challenging and high-impact targets in medicine.

We are seeking a Principal Scientist with deep expertise in cryo-EM to join our team in Cambridge, MA. This is a highly collaborative and hands-on role that will span end-to-end cryo-EM workflows from protein construct design, protein production, and biophysics for target engagement studies through high resolution structure determination contributing directly to drug discovery programs across multiple therapeutic areas. The successful candidate will also play a strategic role in mentoring users, optimizing facility operations, and incorporating the latest technologies into our structural biology pipeline.

## Key Responsibilities:

- Lead cryo-EM studies from experimental design through sample prep, data acquisition, processing, and structure interpretation.
- Design, express and purify complex protein samples including membrane proteins and large protein complexes enabling high-quality samples for cryo-EM and related biophysical studies.
- Operate high-end electron microscopes (e.g., Glacios and Krios), including ancillary sample preparation equipment.
- Collaborate with cross-functional teams including protein scientists, biophysicists, and computational modelers to enable structure-based drug design.
- Train and support internal users across the cryo-EM workflow, including grid preparation, screening, and data collection.
- Stay current with advances in cryo-EM hardware, software, and methodologies, and drive the integration of cutting-edge technologies (e.g., AI-driven structure prediction or automated processing).
- Maintain detailed records of experiments, instrument logs, and facility operations.
- Contribute to the strategic planning and growth of cryo-EM capabilities at Novartis globally, working closely with partner sites such as Basel, Switzerland.

## Qualifications:

- Ph.D. in structural biology, biophysics, biochemistry, or a related discipline with 5+ years of relevant experience in cryo-EM (industry or academic setting).
- Strong experience in protein expression, purification, and optimization techniques for cryo-EM, including membrane proteins or large protein complexes.
- Proven track record in single particle cryo-EM, from sample preparation to high-resolution structure determination and modeling.
- Experience with electron microscope operation including alignment and basic maintenance
- Familiarity with cryo-EM software suites (e.g., RELION, CryoSPARC) and proficiency in scripting or automated data processing pipelines.

- Excellent scientific communication skills and ability to collaborate in multidisciplinary teams.

#### Preferred Qualifications:

- Experience with large complexes and/or protein complex crosslinking
- Understanding of AI/ML tools for construct design or data interpretation.

#### Why Join Us?

This is a unique opportunity to join a world-class structural biology team within one of the largest and most innovative pharmaceutical companies. You ' ll have access to state-of-the-art cryo-EM instrumentation, a highly skilled collaborative network, and the chance to make meaningful contributions to the discovery and development of life-changing medicines.

The salary for this position is expected to range between \$103,600 and \$192,400 per year for Principal Scientist I, and \$114,100 and \$211,900 for Principal Scientist II.

The final salary offered is determined based on factors like, but not limited to, relevant skills and experience, and upon joining Novartis will be reviewed periodically. Novartis may change the published salary range based on company and market factors.

Your compensation will include a performance-based cash incentive and, depending on the level of the role, eligibility to be considered for annual equity awards.

US-based eligible employees will receive a comprehensive benefits package that includes health, life and disability benefits, a 401(k) with company contribution and match, and a variety of other benefits. In addition, employees are eligible for a generous time off package including vacation, personal days, holidays and other leaves.

To learn more about the culture, rewards and benefits we offer our people click [here](#).

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:

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#### 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.

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