

Senior Scientist II, Viral Vector Cargo design

Job ID

REQ-10051176

Jun 30, 2025

USA

Summary

The Biologics Research Center (BRC) is accommodated within the Biomedical Research (BR). BRC, in collaboration with the disease areas (DA) and technical expert groups, builds the future biologics therapy pipeline of Novartis through the discovery and creation of new antibody, protein, nucleic acid and virus-based molecules.

We are currently recruiting a highly motivated and independent Senior Scientist II to join our team in San Diego, CA. This laboratory-based position will focus on the design and execution of both in vitro and in vivo studies to support the discovery of novel gene therapy cargos for multiple genetic disease targets. This position will require hands-on experience with molecular biology techniques and a strong understanding of AAV-based gene therapies. This role will closely collaborate with other scientists, including computational biologists, in vivo pharmacologists, and external collaborators and CRO partners to advance the pipeline from ideas to preclinical development.

About the Role

Key Responsibilities:

- Identification of highly active and selective regulatory elements for incorporation into candidate gene therapies in vitro and in vivo by leveraging a variety of cell-based models and high throughput sequencing technologies
- Preparing bulk RNAseq and single cell RNAseq datasets from a variety of tissue samples
- Performing high throughput screening of coding sequences to identify variants with desired expression levels
- Providing mentorship for junior associates and contributing to the scientific strategy of the team
- Maintaining up-to-date knowledge of emerging technologies and scientific approaches in the field of gene therapy
- Collaborating with cross-functional teams including bioinformatics, AAV production, and *in vivo* pharmacology teams to advance programs from discovery to development
- Preparing summaries of data and presenting internally to colleagues and management
- Drafting SOPs, following protocols, diligently documenting experimental data in electronic lab notebooks, and authorizing scientific reports for internal documentation or regulatory submissions
- Leading and contributing to publications and presentations at conferences and/or business meetings.
- Actively supporting a culture of innovation, learning, respect, and trust

Essential Requirement:

- PhD with 2+ years of industry or academia experience in molecular biology, genomics, neuroscience, or related fields.

- Proficiency in vector design, cloning, transfection, cell culture, imaging.
- Hands-on experience with molecular and cell biology techniques, including qPCR/ddPCR, western blot, Fluorescence Activated Cell Sorting (FACS), and RNAseq
- Experience in developing cell-based models using a variety of molecular, biochemical, immunological, and/or imaging-based endpoints
- Proven record of productivity and scientific excellence based on publications, patents, and/or external presentations.
- Independent and critical thinker, multi-tasker, and problem solver with strong verbal and written communication skills, and a team-first mindset.

Desirable Requirements:

- Direct experience with AAV-based gene therapy in preclinical research is preferred.
- Prior experience with single cell/single nuclei RNAseq is a plus

Novartis Compensation and Benefit Summary: *The salary for this position is expected to range between \$93,800 and \$174,200 per year.*

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.

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

Research & Development

Job Type

Full time

Employment Type

Regular

Shift Work

No

[Apply to Job](#)

Job ID

REQ-10051176

Senior Scientist II, Viral Vector Cargo design

[Apply to Job](#)

Source URL: <https://prod1.id.novartis.com/careers/career-search/job/details/req-10051176-senior-scientist-ii-viral-vector-cargo-design>

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-Scientist-II--Viral-Vector-Cargo-design_REQ-10051176-1
6. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/San-Diego/Senior-Scientist-II--Viral-Vector-Cargo-design_REQ-10051176-1