NOVARTIS

Principal Scientist I/II —CAR-T Lead

Job ID
REQ-10090158
Oct 30, 2026
LOC_US

About the Role

Key Responsibilities

- Design and execute innovative research to advance next-generation CAR-T approaches, translating project objectives into experimental plans and decision criteria.
- Design, generate, and evaluate complex lentiviral constructs for logic-gated CAR-T approaches.
- Perform hands-on functional testing and optimization of CAR-T cells, and collaboratively develop and test novel analytical methods.
- Execute cell-line engineering to develop fit-for-purpose experimental models to evaluate function and inform construct selection.
- Critically analyze and integrate findings across engineering, in vitro biology, and in vivo pharmacology to inform candidate prioritization and translational opportunities.
- Collaboratively drive projects to meet established timelines while maintaining the highest quality and data integrity standards.
- Comply with established protocols and SOPs while performing experiments, and record and maintain meticulous records in an electronic laboratory notebook.
- Contribute to drafting technical documents and, where relevant to the program, scientific content for regulatory submissions.
- Present results, project updates, and recommendations to cross-functional teams, department meetings, and scientific leadership.

Essential Requirements

- PhD in immunology, cell biology, molecular biology, bioengineering, or a related discipline, with 1–2 years of relevant research experience.
- Hands-on experience in CAR-T engineering or engineered T-cell approaches.
- Expertise in ex vivo cell characterization using multicolor flow cytometry (FACS) and cytokine profiling methods such as ELISA, MSD, or Luminex.
- Prior experience with immune-cell isolation techniques and the culture of primary human T cells.
- Experience designing and generating lentiviral CAR constructs and interpreting functional data to guide iterative construct optimization.
- Demonstrated ability to independently design and execute experiments, prioritize research activities, solve complex problems, and make evidence-based recommendations.
- Ability to work effectively in a fast-paced, team-oriented environment and adapt to changing research directions and priorities.
- Strong collaboration and scientific communication skills, meticulous documentation practices, and a commitment to research quality and data integrity.

Desirable Requirements

- Experience partnering with computational biology, target discovery, and in vivo pharmacology teams to advance engineered cell therapies.
- Experience with engineered T-cell manufacturing and culture.
- Understanding of synthetic biology principles applied to cell engineering.
- Experience developing functional profiling approaches and experimental models that support candidate selection and translational decision-making.

Novartis Compensation and Benefit Summary:

The salary for this position is expected to range between

- Principal Scientist I: $108,500 - $201,500 USD Annual per year.
- Principal Scientist II: $119,700 - $222,300 US Annual per year.

The final position and 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.

Role Requirements

Division
DIV_RE
Business Unit
Research
Location
LOC_US
Site
Cambridge (USA)
Company / Legal Entity
U175 (FCRS = US175) Novartis Institutes for BioMedical Research, Inc.
Functional Area
FCT_RD
Job Type
Full time
Employment Type
Regular
Shift Work
No
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