NOVARTIS

Senior Scientist, Translational Preclinical Models, MPS Automated Cell Culture & Innovation

Job ID
REQ-10090251
Oct 20, 2026
LOC_US

About the Role

Internal Job Title: Senior Scientist I/II

Position Location: Cambridge, MA, onsite

Location statement: This role is based in Cambridge, MA. Novartis is unable to offer relocation support for this role; please only apply if this location is accessible for you.

Job Description:

The Discovery Sciences department at Novartis BioMedical Research is seeking a Senior Scientist I/II to support manual and large-scale automated tissue culture and advanced human model systems. The successful candidate will operate, maintain, troubleshoot, and develop scalable workflows across automated tissue culture platforms while partnering with scientists to deliver consistent, well-characterized cell models. The role requires practical expertise spanning cell biology, laboratory automation and scheduling software, microscopy, image analysis, and experimental data interpretation.

Key Responsibilities:

- Maintain, expand, cryopreserve, and characterize human pluripotent stem cell lines, including iPSC and hESC cultures.
- Execute multiple stem cell differentiation protocols in parallel while maintaining experimental schedules, traceable documentation, and quality standards.
- Perform large-scale iPSC culture in a controlled laboratory environment using automated liquid-handling platforms and high-throughput robotic systems.
- Program, operate, calibrate, maintain, and troubleshoot automated tissue culture platforms, including flask-based CellTrio systems and plate-based HighRes Biosolutions systems.
- Develop and apply microscopy and image-analysis workflows to monitor cell health and enable data-driven, real-time decisions on automated platforms.
- Establish, maintain, and operate microphysiological systems, organ-on-chip models, and advanced 3D tissue culture platforms, including routine monitoring, functional assessment, and data documentation.
- Design, execute, and optimize MPS-based studies with cross-functional scientists to improve experimental quality, reproducibility, and translational relevance.
- Perform imaging, functional characterization, and data analysis to evaluate model performance and support drug discovery and translational research programs.

- Create and improve SOPs, maintenance manuals, and start-up procedures; train users; prepare required media and reagents; and coordinate cell-production needs with project teams.

Essential Requirements:

- B.S. or M.S. in Cell Biology, Molecular Biology, Biochemistry, Bioengineering, or a related discipline, with 4+ years of relevant post-graduate experience. We will also consider recent PhD graduates, within the last 2 years, with relevant experience.
- Hands-on experience maintaining mammalian cell cultures, including human cancer cell lines and/or iPSCs, with strong aseptic technique and cell-quality practices.
- Experience executing cell culture or differentiation workflows with attention to reproducibility, scheduling, documentation, and experimental quality.
- Experience designing, building, deploying, operating, or troubleshooting automated laboratory workflows in life science or clinical laboratory settings.
- Working knowledge of microscopy, image-based monitoring, and quantitative data analysis for cellular models.
- Strong organizational, written, and verbal communication skills, with the ability to work independently, manage multiple priorities, troubleshoot effectively, and collaborate across project teams and stakeholders.

Desirable Requirements:

- Familiarity with HighRes BioSolutions/Cellario robotic platforms, CellTrio RoboCell, Sartorius CompacT, liquid handlers, bulk dispensers, and associated laboratory automation software.
- Experience with phenotypic screening, advanced microscopy, image-analysis tools, and data platforms such as Genedata Screener or Spotfire; exposure to AI-enabled analysis tools is a plus.

Compensation and Benefits:

The salary for this position is expected to range between $93,800 and $174,200 per year for Senior Scientist I, and $98,700 and $183,300 for Senior 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.

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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