

Principal Engineer, MS&T

Job ID

REQ-10077826

Jul 08, 2026

LOC_US

About the Role

Location:

- This position will be located in Durham, NC and will be an onsite role.
- Novartis is unable to offer relocation support for this role: please only apply if this location is accessible for you.

Key Responsibilities:

- Provide technical leadership and subject matter expertise for complex scientific investigations, regulatory submissions, and inspections
- Lead the analysis of process verification and manufacturing data to identify trends, assess process performance, and drive data driven continuous improvement initiatives
- Leverage deep expertise in upstream manufacturing processes (including mammalian cell culture and gene therapy platforms) to troubleshoot and resolve complex manufacturing issues across internal operations and external partners (CMOs)
- Mentor and develop MS&T staff, providing technical guidance in upstream processing, including troubleshooting of complex platforms such as triple transfection
- Lead and support product technology transfers into GMP manufacturing environments, ensuring successful scale-up, process robustness, and knowledge transfer across receiving sites
- Partner cross-functionally with Manufacturing, Quality, Engineering, and Validation teams to ensure reliable execution of production processes and sustained commercial supply
- Monitor critical quality attributes and process parameters to maintain product consistency
- Define and implement process improvements with global process owners and operations teams
- Support the startup, qualification, and lifecycle management of manufacturing equipment, systems, and processes, ensuring compliance with validation and regulatory expectations
- Author, review, and approve technical documentation (e.g., investigations, change controls, process descriptions) to ensure accuracy, completeness, and regulatory defensibility
- Drive operational excellence initiatives and collaborate with Quality to ensure regulatory compliance

Essential Requirements:

- Bachelor's degree with at least 12 years, Master's degree with 10 years, or PhD with at least 8 years of relevant experience. OR 9 years of experience with 3 + years of Novartis gene therapy process support.
- Experience in biopharmaceutical manufacturing aligned with the degree and years of experience outlined above
- Strong expertise in mammalian cell culture and bioreactor systems, both suspension and adherent
- Demonstrated experience with upstream processing, including triple transfection for gene therapy
- Deep understanding of GMP requirements and validation principles
- Proven ability to lead complex technical troubleshooting and manufacturing investigations
- Strong written and verbal communication skills across cross-functional teams
- Experience with technology transfer, process improvement, and operational excellence initiatives

Novartis Compensation and Benefit Summary:

The salary for this position is expected to range between \$126,000 and \$234,000 annually

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.

#LI-Onsite

Role Requirements

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>

Benefits and Rewards: Learn about all the ways we'll help you thrive personally and professionally.

[Read our handbook \(PDF 30 MB\)](#)

Division

DIV_TO

Business Unit

Production / Manufacturing

Location

LOC_US

Site

Durham

Company / Legal Entity

U473 (FCRS = US473) Novartis Gene Therapies

Functional Area

FCT_TO

Job Type

Full time

Employment Type

Regular

Shift Work

No

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