



Job Profile: **Senior Scientist, Upstream Process Development** – JOB Z26023_SSU

Overview

The Senior Scientist, Upstream Process Development will play a hands-on role in advancing our novel expression technology by developing, optimizing, and scaling fermentation and cell-culture processes.

This role is for a senior upstream scientist who will help push our novel expression technology to the next level by developing, challenging, and improving fermentation and cell-culture processes through deep scientific thinking, creativity, and hands-on experimentation.

We are looking for an experienced, creative, and persistent upstream Senior Scientist who actively uses literature, engineering judgment, and hands-on experimentation to solve complex bioprocess challenges.

Key Responsibilities

Upstream Process Development

- Design and execute upstream process-development studies with minimal supervision.
- Translate literature insights into hypothesis-driven experiments and process improvements.
- Identify and optimize critical process parameters affecting upstream performance.
- Apply analytical tools to improve understanding of organism physiology and fermentation performance.
- Run bioreactors regularly as part of the development workflow and support routine production when needed.
- Document, analyze, and present experimental data clearly.
- Perform core laboratory activities, including media preparation, shake-flask studies, bioreactor setup and operation, process monitoring, inoculation, harvest, centrifugation, and sterile filtration.
- Follow SOPs and guidelines to maintain culture integrity, prevent contamination, and ensure compliance.

Innovation & Problem Solving

- Apply creative, engineering-driven thinking to improve the expression platform.
- Troubleshoot bottlenecks and propose innovative, scientifically grounded solutions.

Cross-Functional Collaboration

- Collaborate with process development, analytical development, and protein sciences teams.
- Contribute to project planning, timelines, and risk assessments.

Qualifications & Experience

- PhD in Biotechnology, Biochemical Engineering, Microbiology, or related field.
- At least 5 years of relevant experience in fermentation or cell-culture process development. 3 years industry experience.
- Strong hands-on expertise with bioreactors, fermentation control systems, and scale-up principles.
- Experience with contamination-control strategies, operational risk assessment, and process monitoring.
- Solid understanding of bioprocess engineering fundamentals, metabolic principles, and cell physiology.
- Experience with tech transfer activities is a plus.
- Broad hands-on experience with mammalian cell culture platforms, including fed-batch and/or perfusion.
- Experience with microbial expression systems is a plus.
- Independent, proactive, and able to drive progress with minimal supervision.
- Willing to spend a considerable amount of time hands-on in the laboratory.
- Strong data analysis skills and familiarity with common bioprocess software tools.
- Creative, resourceful, and persistent in solving technical challenges.
- Clear communicator and collaborative team player.