Job Description - **Research Associate - Process Development**
Humane Genomics, New York
www.humanegenomics.com

About us

Humane Genomics has developed a state-of-the-art platform to engineer oncolytic viruses with unprecedented target specificity and efficiency. Backed by top-tier investors, our team is focused on translating synthetic biology innovations into therapies for high-need indications such as pediatric liver cancer. As we advance our lead candidates through translational development and scale our bioprocessing infrastructure, we are seeking an energetic, hands-on Research Associate with Process Development (PD) experience to join our team in New York City.

About the role

The Research Associate will support the design, execution, scale-up, and tech transfer of upstream and downstream bioprocesses for our oncolytic virus pipeline. Operating in an agile, early-stage startup environment, you will work closely with scientific leadership to optimize production yields, refine purification filtration/chromatography steps, and establish robust in-process quality testing. This role offers high visibility and direct impact on translating benchtop research into scalable, clinical-grade manufacturing processes.

Responsibilities

Upstream & Downstream Process Development

- Assist in benchtop scale bioprocessing, including viral transfection, harvest optimization, and bioreactor culture maintenance.
- Conduct downstream purification workflows, including depth filtration, tangential flow filtration (TFF), affinity/ion exchange chromatography, and sterile filtration.
- Support process parameter screens to optimize step recoveries, purity profiles, and scalability of viral candidates
- Execute aseptic cell culture practices across multiple mammalian cell lines (adherent and suspension) to support viral production, amplification, and cell banking.
- Assist in drafting and revising Standard Operating Procedures (SOPs), technical reports, and batch records for upstream and downstream operations.

- Participate in raw material evaluations, filter membrane screenings, and single-use technology selection for pilot-scale manufacturing.

Analytical & Quality Control Testing

- Perform routine in-process analytical assays, such as qPCR, TCID50/infectivity assays, host cell impurity evaluations, etc.
- Independently execute on Science projects. Maintain detailed scientific records in laboratory notebooks , update project milestone trackers, and present data during team meetings.
- Assist with routine laboratory upkeep, equipment maintenance/calibration, buffer preparation, and safety compliance.

About you

Basic Qualifications

- M.S. or Ph.D. in Bioengineering, Chemical Engineering, Biotechnology, Biochemistry, Molecular Biology, or a related life sciences discipline
- Hands-on experience with unit operations in downstream purification (e.g., TFF, depth filtration, chromatography) or upstream biologics production
- Proficiency in executing standard quantitative assays (e.g., qPCR, TCID50, ELISA, SDS-PAGE, Plaque assays) to evaluate process performance and purity
- Strong data logging habits, experience following SOPs, and familiarity with statistical data analysis tools (e.g., GraphPad Prism, Excel)

Preferred Qualifications

- Prior experience working with viral vectors or synthetic biology platforms
- Exposure to Design of Experiments (DoE) methodology (e.g., JMP) for process optimization
- Prior experience working within a biotech startup or incubator setting
- Prior experience working with aseptic mammalian cell culture.

Salary range: $70,000 - $85,000 / year