



Associate Scientist/Scientist, Upstream Process Development

Synthorx is a pharmaceuticals startup company using a novel synthetic biology platform for the discovery and development of transformational protein therapeutics. We are hiring a driven Associate Scientist/Scientist with strong background in microbial protein expression and a working knowledge of protein biochemistry. This candidate will be responsible for the development of protein expression processes using Synthorx *E. coli* recombinant platform to support lead candidate selection, pre-clinical studies and technical transfer to external GMP manufacturing partners. We are seeking a self-starting, highly independent and collaborative individual, able to operate at high pace, to meet aggressive timelines.

Key Responsibilities:

- Perform all steps of protein expression and scale-up. Experience with microbial fermentation is required.
- Experimentally determine methods to optimize yields and other process parameters for protein expression
- Experience with production of polypeptides employing recombinant systems
- Leads fermentation process optimization using a data driven approach.
- Collaborate with platform and downstream process development teams to ensure efficient integration of fermentation and upstream and downstream functions
- Develop standard operating procedures, document protocols and technology transfer
- Support internal lead discovery efforts and pre-clinical studies
- Prepare and present project updates to ensure timely delivery
- Maintain a high standard for quality control including up-to-date data records for all protein deliveries, including HPLC and basic understanding of mass spectrometry methods for QC
- Troubleshoot challenging technical, experimental, and instrumental issues

Required:

- PhD degree, with a major in biochemistry, biochemical engineer, microbial physiology, biology or related field or MSc and 5+ years of hands-on experience with recombinant protein production
- Experience with *E. coli*-based protein expression including scale-up preparation employing fermentation instrumentation and protocols.
- Strong understanding of microbial physiology and its impact on process optimization
- Experience with DOE methodology for improving fermentation titers is highly desired
- Experience in protein characterization (SDS PAGE, Western Blotting, HPLC). Understanding of MS methods for QC is a plus
- Familiarity with protocols involving extraction from inclusion bodies and refolding is a plus
- Hands-on familiarity with standard molecular biology methods
- Regular activities require ability to communicate effectively and rapidly reprioritize to match dynamic and demanding timelines

Additional preferred skills:

- Basic understanding of cancer biology and/or immunology