



### **Scientist, microbial fermentation protein sciences and early stage CMC process development**

Synthorx is a pharmaceutical company using a novel synthetic biology platform for the discovery and development of transformational protein therapeutics. We are hiring a driven 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. Experience with *E.coli* fermentation is highly desirable.
- Experimentally determine methods to optimize yields and other process parameters for protein expression.
- Experience with recombinant production of polypeptides.
- Lead fermentation process optimization using a data driven approach.
- Experience with fermentation equipment at bench, pilot and industrial scale.
- 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.
- Supervise/Mentor junior staff and provide insight and technical expertise for project progression
- Maintain a high standard for quality control including up-to-date data records for all protein deliveries.
- Troubleshoot challenging technical, experimental, and instrumental issues.

#### **Required:**

- PhD degree with a major in biochemistry, biochemical engineer, microbial physiology, biology or related field and 3+ or MSc and 10+ 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 platform systems for incorporation of novel amino acids into polypeptides is a plus.
- 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.



Travel: 0-20%

Additional preferred skills:

- Experience in technical transfer to external CMOs.
- Experience in regulatory submissions.
- Basic understanding of cancer biology and/or immunology.