



## Scientist, Protein Production Process Development

Synthorx is a pharmaceuticals company using a novel synthetic biology platform for the discovery and production of improved protein therapeutics. We have advanced a revolutionary technology that expands the genetic alphabet to drive the site-specific incorporation of multiple non-natural amino acids into proteins of any size, and to manufacture these improved proteins at scale. This technology enables the design of biotherapeutics with useful chemical functionality and opens-up opportunities to make novel protein therapeutics to previously difficult to drug targets. We are hiring a Scientist to join the Production group. The successful candidate will have a strong background in protein expression in *E. coli* and a working knowledge of protein biochemistry and purification.

### Key Responsibilities:

- Leadership role in protein production to support Late Stage Research and CMC activities.
- Strong subject matter expertise in downstream purification operations, including chromatography (affinity, ion exchange, HIC, reversed phase and multi-mode), membrane separation, targeted precipitation, protein refolding of inclusion bodies, etc
- Experimentally determine methods to optimize recovery yields from protein expression
- Experience with fermenters and industrial experience are a plus
- Experience in authoring experimental protocols and reports, technology transfer process descriptions, and regulatory submissions
- Prepare and present project updates to colleagues, senior leadership, and external partners
- Supervise/Mentor junior staff and provide insight and technical expertise for project progression.
- Support the team in the set-up, operation, and associated analysis of upstream and downstream processes
- Maintain a high standard for quality control including up-to-date data records for all protein deliveries, including basic understanding of analytical methods for product quality and process decision making
- Troubleshoot challenging technical, experimental, and instrument issues
- Consummate ability to work in a highly collaborative, fast-paced, cross-functional environment, with superior oral and written communication skills

### Required:

- Ph.D. degree with 3+ or MSc degree with 10+ years of hands-on experience with recombinant protein production
- Technical proficiency in designing and developing purification processes for proteins including products expressed in microbial hosts: experience with platform systems for incorporation of novel amino acids into polypeptides is a plus.
- Proficient in downstream purification using the Unicorn system with AKTA instruments.
- Familiarity with protein analytical techniques to perform assays such as HPLC, SDS-PAGE and endotoxin quantification
- Experience in TFF (ultra-filtration, diafiltration) depth filtration and chromatography.
- Hands-on familiarity with standard molecular biology methods
- Experience with *E. coli*-based protein expression. Scale-up preparation employing fermentation instrumentation and protocols is a plus
- Effective communication and rapid prioritization to match dynamic and demanding timelines
- Proven track record of success in anticipating and tackling non-standard challenging issues in upstream and downstream process development.
- Ability to work efficiently to meet aggressive deadlines and solid multitasking skills.

Additional preferred skills:

- Basic understanding of cancer and/or immuno-biology