

Scientist/Senior Scientist, Protein Production and Purification

Manifold Bio is a well-funded, VC-backed biotech startup with a mission to invent next-generation technologies to design drugs that will improve and save patient lives. Our founders come from George Church's lab at Harvard Medical School and are innovators in leveraging DNA and protein multiplexing technologies to engineer biological systems. Our team is highly collaborative and interdisciplinary. We are located in the Pagliuca Harvard Life Lab, a well-equipped modern lab space with a rich community of companies building cutting-edge technologies.

Position

We are seeking an enthusiastic scientist to join us on our mission of multiplexed, *in vivo* drug discovery. In this role, you will oversee and expand our protein production and purification operations to enable *in vitro* and *in vivo* studies. This is a hands-on role and you should have extensive experience in protein biochemistry and in producing, purifying, and characterizing protein therapeutics. You will work closely with a collaborative team of scientists to design, execute, and analyze complex experiments in a fast-paced environment. You will play an integral role in enabling multiplexed testing of novel therapeutic designs *in vivo* using our proprietary protein barcoding platform. In particular, you will be responsible for developing a robust protein production pipeline and you will take ownership of production and characterization of test articles for animal studies. There will also be many opportunities for creativity and innovation as we push the boundaries of our platform's multiplexing technology in every step of the drug discovery process. Together, we'll build multiplexed protein quantitation technologies that [massively increase the throughput of testing protein therapeutic designs](#) and fundamentally change the current paradigm of drug development.

Responsibilities

- Produce, purify, and QC proteins and protein mixtures at scale to enable *in vivo* studies
- Independently design, plan and execute experiments to optimize yield, throughput, and purity of candidate protein therapeutics
- Establish characterization and QC assays for proteins and protein mixtures
- Build on current protein production pipeline and develop plans to scale up protein production capabilities as company grows
- Stay up to speed on cutting edge research and industry standards for protein therapeutics
- Maintain data integrity and effectively communicate findings to the team

Required Qualifications

- PhD and/o 5+ years of experience in the field of protein biochemistry, molecular biology, or similar
- Deep knowledge of expression of recombinant proteins in bacterial and mammalian systems
- Experience with protein production and purification at scale
- Expertise in protein chromatography (FPLC, ion exchange, affinity, SEC) and protein analytical/characterization techniques (analytic chromatography, SDS-PAGE, western blotting, SPR/BLI)
- Prior work with antibody constructs, single-domain antibodies, or similar
- Collaborative, curious, and flexible, with strong communication skills
- A genuine passion for science and developing medicines

Preferred Qualifications

- Previous work with DNA and protein libraries
- Experience preparing proteins for *in vivo* experiments
- Previous work with high throughput protein production and purification



ManifoldBio

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- Mastery of AKTA FPLC equipment and Unicorn software
- Experience with periplasmic extraction and/or endotoxin removal
- Background in process optimization and scale-up
- Strong protein engineering skills and intuition

Why you might be a good fit

- Excitement and deep scientific interest in producing novel proteins and protein libraries
- Proven track record of taming difficult-to-produce or purify constructs
- Enthusiasm for working closely with a tight-knit team on challenging problems in protein therapeutics
- Excellent record keeping and communication skills to facilitate complex experiments with multiple parties
- Forethought, organization, and flexibility to meet deadlines in a fast-paced environment

If you're excited to build a platform that combines DNA and protein multiplexing technologies, please reach out to careers@manifold.bio.

We value different experiences and different ways of thinking and believe the most talented teams are built by bringing together people of diverse cultures, genders, and backgrounds.