

Scientist, Hybrid Computational / Synthetic Biology

Manifold Bio is a biotech company pursuing a pipeline of protein therapeutics using novel molecular measurement technologies and library-guided protein engineering. Our drug discovery engine is differentiated by massively parallel screening *in vivo* from the beginning of our discovery process. This unique platform is powered by a proprietary protein barcoding technology that allows multiplexed protein quantitation at unprecedented scale and sensitivity. We combine this and other high-throughput protein engineering approaches with computational design to create antibody-like drugs and other biologics. Our world-class team of protein engineers, biologists, and computational scientists are working together to aim the platform at therapeutic opportunities where precise targeting is the key to overcoming clinical challenges.

Position

We are seeking a hybrid scientist with a mix of wet and dry lab experience who is excited to go end-to-end designing, executing, and analyzing novel library-based experiments. With hybrid founders and a highly interdisciplinary team, we are strong believers in the synergy that comes from combining disciplines. You will design DNA libraries, use advanced cloning techniques to build them, devise novel screens, and then apply statistical analyses and machine learning approaches to your data. You will work closely with the CSO on a set of focused, highly impactful projects that advance the capabilities of our protein therapeutics discovery platform. Additionally, you will support analysis of the team's NGS data, derive useful insights from these data, and advise on platform improvements and next steps. Individuals with experience in disease bioinformatics, machine learning, or protein engineering will have the opportunity to work in these respective budding areas of research at Manifold Bio. This position will be customized to fit the individual's expertise and interests, so please reach out!

Responsibilities

- Design, execute, interpret and iterate on novel library-based experiments
- Apply statistical methods and machine learning to NGS data to identify novel variants
- Provide deepful insightful analyses of team's NGS experiments and advise on next steps
- Develop novel protein engineering platform technologies

Desired Experience and Capabilities

- PhD or equivalent experience in protein and or molecular biology, biological engineering or a related field; must total 5+ years hands-on molecular biology wet lab experience and/or NGS data analysis experience
- Experience going end-to-end from experimental design through cloning, execution, NGS, and analysis
- Expertise in statistical computing and willingness to adapt our python / jupyter / git / AWS stack
- Collaborative, curious, flexible, and strong communication skills

Why you might be a good fit

- Experience with screening-based methods with an NGS readout, e.g. DMS, MPRA, CRISPR screening, cancer screens, single cell sequencing
- Experience designing and assaying libraries of DNA, protein, gRNAs, promoter regions, etc. in multiplex
- Experience designing antibody or other therapeutic binder libraries
- Experience with phage/yeast/mammalian display or similar
- Experience predicting sequence-function relationships (e.g. using ML/biophysical models)

If you're excited to build a platform that combines these 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.