

Scientist

Responsibilities

- Lead research teams and oversee associate projects
- Be willing and excited to wear many hats
- Execute long-term genome engineering projects for genome-wide recoding in bacteria
 - Develop tools and techniques for the genetic engineering of various bacterial strains
 - Design, build and test plasmids and genomic constructs in bacteria and/or *S. cerevisiae*
 - Screen and identify modified target strains using plate-based assays
 - Identify desired changes in bacterial strain genomes using a variety of methods (Sanger sequencing, NGS, allele-specific PCR)
 - Characterize bacterial strains at bench and microtiter-plate scale
 - Develop and improve pipelines for DNA assembly, genome editing, next-generation sequencing and strain characterization
- Assist in the generation and filing of key 64-X intellectual property
- Act as a project leader, generating budgets and timelines for genome engineering projects
- Support and lead other team members or entire teams in the laboratory as needed
- Provide guidance to junior and senior researchers based on your experience
- Support other members of 64-X as needed

Required

- BS in Molecular Genetics, Bioengineering, Synthetic Biology or equivalent
- PhD in Molecular Genetics, Bioengineering, Synthetic Biology or equivalent
- 3+ years of relevant laboratory experience
- Deep understanding of bacterial genetics and bacterial genome engineering
- Experience handling and engineering bacteria
- Experience with standard molecular biology techniques: PCR, isothermal assembly, restriction- and homologous recombination-based cloning
- Experience using advanced genome engineering technologies
- Experience with bacterial conjugation methods
- Strong technical background in high throughput strain engineering
- Familiarity with NGS pipelines
- A deep understanding of genetics, gene regulation, physiology, and fermentation for a variety of bacteria.
- Strong organizational skills and can systematically and effectively multitask/advance various projects simultaneously

- Has demonstrated initiative, attention to detail, and can adapt to feedback
- Is energetic and able to communicate effectively and work collaboratively within a team

Preferred

- A few years of experience working in a similar role in the synthetic biology / life sciences industry
- Experience handling and engineering a variety of bacteria (gram negative and positive)
- Experience programming and scripting to assist in experimental design and data processing
- Familiarity with statistics to strengthen experimental design and data analysis
- Experience manipulating and analyzing NGS datasets
- Familiarity with basic protein structure and associated tools (e.g., PyMol)

How to apply:

- Send a cover letter and resume or CV to careers@64-x.com