

Jimmy T. Lail

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WORK EXPERIENCE

BridgeBio Gene Therapy

May 2023 – Present

Senior Associate Scientist (Computational Genetics Mentorship)

Raleigh, NC

- Completed RNA sequencing, differential gene expression, and gene ontology analytics project of mouse brain tissue via jupyter notebook.
- Used Github for repository contributions.
- Created a Github repository that aggregates and transforms data from cell culture passaging, production bioreactors, and analytical assays into an R shiny dashboard to streamline the TDO AAV upstream teams decisions for AAV particle creation optimization.
- Curated a table of monogenic indications amendable to AAV gene therapy from multiple data sources.
- Used AWS EC2 instance for project development.
- Used OOP to generate custom plasmid GTF (Gene Transfer Format) files for nf-core RNAseq pipeline analysis.
- Performed multiple comparison nf-core differential abundance pipeline analyses via Seqler and locally.
- Generated redacted reproducible dataset and parameters for nf-core differential abundance pipeline troubleshooting and Github issue ticket submission.
- Used published datasets to validate gene target for indication.
- Presented analysis results and conclusions to affiliates.

BridgeBio Gene Therapy

Jan. 2023 – Present

Senior Associate Scientist

Raleigh, NC

- Conducted cell passaging of HEK293 cells for triple transfection.
- Executed production-scale experiments, optimizing processes for gene therapy drug candidates from Ambr15 to 200L STR.
- Authored Upstream process descriptions.
- Presented experiment findings at team and department meetings.
- Supported technical transfer and scale-up of processes for manufacturing campaigns.
- Provided data verification for experimental findings.
- Assisted in laboratory equipment service and PM.

BridgeBio Gene Therapy

Apr. 2021 – Jan. 2023

Scientific Associate II

Raleigh, NC

- Utilized Python and R for data management, analytics, and visualization.
- Conducted cell culture of HEK293 cells for AAV gene therapies at various scales.
- Collaborated in process development for gene therapy drug candidates.
- Assisted in protocol and process description authoring.
- Delivered presentations of data and experiments in CMC meetings.
- Contributed to development work plans and technical transfer.
- Ensured proper documentation and data verification.
- Supported laboratory equipment maintenance.

Seqirus

Oct. 2019 – Mar. 2021

Scientific Associate I

Holly Springs, NC

- Engaged in technical development and cell culture projects, following SOP and Good Documentation Practices.
- Collaborated with diverse teams on analytical and problem-solving projects.

- Provided cell culture support for influenza vaccine development.
- Operated and troubleshooted Ambr liquid handlers and bioreactors.
- Utilized DOE and JMP for data analytics.

NC State University

Lab Assistant (Volunteer)

Jan. 2018 – Jan. 2019

Raleigh, NC

- Maintained and cultured Caco-2 and IPEC-j2 cells.
- Prepared chambers for TER experiments and followed Immunofluorescence SOP.
- Conducted plasmid DNA extraction and purification.
- Performed real-time PCR and gel electrophoresis.
- Contributed to lab reports and journals.

EDUCATION

North Carolina State University

MS, Physiology

May 2019

Raleigh, NC

- Volunteered in a gastroenterology laboratory and attained a Biotechnology Certificate.

North Carolina State University

BS, Biological Sciences

May 2016

Raleigh, NC

- Dean's List (Fall 2012 - Spring 2014)
- Cross Country Club - Fall 2012

CERTIFICATIONS, SKILLS & INTERESTS

- **Certifications:** Biotechnology, R Data Scientist
- **Skills:** Seqera, nf-core, R (Tidyverse), Python (Pandas, Sklearn, Gprofiler), Data Visualization, Data Wrangling, JMP, DOE, Suspension Cell Culture, STR & SU Bioreactors, AMBR15 & AMBR250 systems, Aseptic Technique
- **Interests:** TV/movies (big CW Flash and Supernatural fan), video games, weightlifting