Hsuan-Ming Chi

Email: hc3331@nyu.edu | Mobile: +1 (530)953-1140 | LinkedIn | GitHub

Summary

- Biotechnology master's graduate with 4+ years of molecular biology and bioengineering lab experience.
- Skilled in stem cell culture and diverse bio-assay experiments manipulation.
- Multitasking abilities and adept at efficient time management, resulting in reducing project time by 33%.
- Passionate about utilizing Python for data analysis and applying these skills to real-world scenarios.
- Experienced lab manager seeking exciting opportunities in the biotech and pharmaceutical industry.

Experience

Rutgers University (Lab Manager, 2023/11 - present)

- Performed large-scale DNA sequence alignment of 100GB dataset on Rutgers University's Amarel High-Performance Computing cluster, leveraging parallel processing capabilities and optimized bioinformatics software environment.
- Set up lab space for new start-up, including ordering equipment and supplies, organizing inventory system to track materials, and developing protocols and workflows to ensure smooth lab operations.
- Analyze large genomic datasets from mouse models to identify marker genes and pathways involved in motor neurons development. Used statistical programs such as R/Python to process raw bulk RNA sequencing data.
- Manage mouse colony, handling breeding, weaning, genotyping to support ongoing research studies. Performed DNA extraction and PCR-based genotyping.

Memorial Sloan Kettering Cancer Center (Senior Research Tech, 2023/05 - 2023/09)

- Successfully managed a mouse colony of over 150 cages, conducted genotyping experiments with 40 to 80 samples with 10 different types of genes on a weekly basis.
- Effectively cultivated trust among cross-functional departments and other lab teams, result in a substantial increase in cooperation rates and a 50% reduction in waiting times.
- Executed job responsibilities in strict adherence to Good Laboratory Practice (GLP) standards, holding a valid certification in GLP compliance.
- Swiftly assumed responsibility upon the departure of the previous senior tech, and efficiently mastered the Laboratory Information Management System (LIMS) to ensure seamless maintenance of lab operations.

New York University, Grossman School of Medicine (Research Assistant, 2022/05 - 2023/05)

- Conducted image analysis and quantification using Tracker and EthoVision software to assess the effects of Vincristine on larval zebrafish lateral-line and other physiological responses.
- Boosted experimental efficiency by 25% through the implementation of meticulous protocols and comprehensive documentation of data for newly designed experiments.
- Proficiently synthesize research findings into comprehensive reports and craft compelling presentations to effectively communicate the research outcomes during oral presentations.

Education

New York University, New York, USA ***Master of Science, Biotechnology*** (2021/09 - 2023/05)

National Taiwan Normal University, Taipei, Taiwan ***Bachelor of Science, Life Science*** (2017/09 - 2020/06)

Projects:

- Mouse-Sheet-Manager - a mouse colony manager

Certifications

- NYU Data Science Bootcamp (2022/03)
- Biology Meets Programming: Bioinformatics for Beginners (2023/06)
- Genetics and Next Generation Sequencing for Bioinformatics (2023/07)

Skills

Software: Python, MATLAB, R language, Tableau, Integrative Genomics Viewer (IGV), ICM-Pro, SQL, MongoDB, Pandas, NumPy, Git, GitHub, Microsoft Office (Excel, PowerPoint, Word)

Laboratory: PCR, qPCR, DNA/RNA/Protein purification, Transformation, Transduction, IP/OR Injection, ELISA, Next-generation sequencing (NGS), Immunofluorescence staining, Chromatography, Protein engineering, Flow cytometry

Interests

Snowboarding, Basketball, Baseball, Boy Scouts