Julianna Lamm

310-795-7479 | juliannalamm@gmail.com

EDUCATION

Fordham University | *M.S Computer Science* | GPA 3.9 — Expected 2025

University of California, **Berkeley** | *B.A Molecular and Cell Biology* — May 2020

Skills: Python, C++, JavaScript, React, Next.js, PHP, Opencv, Pytorch, Scikit-learn, YOLO, Linux

RELEVANT WORK EXPERIENCE

Zhou Lab, Fordham University, NY — Aug 2024 - Present

Graduate Student Researcher

- Graduate student researcher building upon the Fruit Fly Brain Observatory to provide a new suite of interactive tools for elucidating the functional logic of fly brain from biological data
- Develop computer vision tools for extracting and reconstructing the structure of brain circuits

Dewpoint Therapeutics, Boston, MA — Jan 2022 - March 2024

Data Science Research Associate II ,

- Implement exploratory and predictive object detection on a wide range of microscopy images and across multiple cell types to identify and classify condensates
- Coordinate with the Data Engineering team to build robust and reliable machine-learning prediction and detection pipelines
- Script automated image analysis pipelines and leverage rigorous statistical analysis on detected ROIs to identify data trends and improve lab protocols

Research Associate, Chemical Biology — May 2021 - Jan 2022

- Direct report to chemical biology team lead tasked with establishing target deconvolution platform that utilizes novel click chemistry techniques to identify and validate molecular targets
- Assist in development of high-throughput semi-automated IF-based platform to monitor bio-condensate response across all cell types and stimuli with capabilities to screen for hundreds of compounds at a time
- Lead and manage operational efforts to establish partnerships with suppliers and CROs for the development of custom antibody repository

Ohana Biosciences, Cambridge, MA — June 2020 - April 2021

Research Associate

- Integral member of four-person team tasked with the identification, categorization, and standardization of unique sperm cell biological characteristics
- Conducted sperm DNA fragmentation and surface characterization assays for the scalable and quick identification of sperm fertility using cell surface biomarkers
- Collaborated with business and marketing team to identify relevant technologies and R&D competitive opportunities pertaining to male fertility

Lishko Lab, UC Berkeley, CA — Sept. 2019 - June 2020

Research Assistant

- Independently developed and scripted an open-source, python-based Computer Assisted Sperm Analysis (CASA) that extracts sperm motility, count, hyperactivation, and progressivity using brightfield videos of sperm under standard microscope for senior thesis
- Aided graduate student in completion of PhD thesis, grant proposal writing, and lab meeting presentations
- Performed routine sperm motility analysis, sperm cytometric assays, qPCR, and mammalian cell culture

Amyris, Emeryville, CA — June 2019 - Feb. 2020

New Product Development Intern

- Gather, compile, and disseminate information on current legal limits and emerging controversy relevant to chemicals used in personal care and cosmetic industry
- Developed consumer driven and scientifically backed skin-care products using innovative and sustainable material science techniques
- Conceptualized an innovative brand rooted in technical literature and consumer demand

PUBLICATIONS

Will M. Skinner, Natalie T. Peterson, Bret Unger, Shaogeng Tang, Emiliano Tabarsi, **Julianna Lamm**, et. al., (2023). Mitochondrial uncouplers impair human sperm motility without altering ATP content*, Biology of Reproduction,* Volume 109, Issue 2, August 2023, Pages 192-203, https://doi.org/10.1093/biolre/ioad064.