

JOB HISTORY

RESEARCH & DEVELOPMENT

Fujifilm Cellular Dynamics

RESEARCH SPECIALIST II

June 2023 – Present

- Engaged in developing a protocol to generate hepatic stellate cells by testing various seeding densities, growth factor concentrations, and media components
- Co-authored a poster presented at the Society of Toxicology conference, showcasing the novelty of our new cell type; named on the pending patent for these cells' differentiation
- Proficient in mammalian cell culturing techniques, including maintenance, passaging, harvest, and experimentation with various cell lines
- Responsible for organizing, planning, and conducting experiments to differentiate stem cells into hepatic stellate cells and cardiomyocytes
- Effectively orchestrated multiple concurrent experiments and documented results using an electronic lab notebook, showcasing an aptitude for creating comprehensive and organized reports
- Utilized analytical techniques such as flow cytometry, qPCR, and fluorescence-based assays to assess cell purity and quantify protein concentration

UPSTREAM PROCESS DEVELOPMENT

Aldevron - Madison

SCIENTIST I

May 2022 – June 2023

- Designed and executed experiments for *E. coli* fermentation of recombinant proteins to develop optimized growth conditions, media composition, and process parameters
- Led projects from technical planning to execution, including client consultations and report writing, consistently resulting in successful delivery of project objectives and outcomes
- Proficient in microbial shake flask and small-scale bioreactor fermentation, cell culturing, transformation, aseptic technique, and analysis via SDS-PAGE

DOWNSTREAM BIOMANUFACTURING

Aldevron - Madison

ASSOCIATE SCIENTIST II | SCIENTIST I

June 2020 – May 2022

- Responsible for the purification of research grade proteins, IVT enzymes, and nucleases according to manufacturing protocol and operating necessary equipment for production
- Proficient in high pressure homogenization, column packing, AKTA chromatography and programming, SDS-PAGE, tangential flow filtration, and buffer preparation
- Experienced in high throughput antibody purification processes in a low endotoxin environment, including A660/A280 concentration determination and size exclusion chromatography
- Ensured project success by recording protein yield measurements, analyzing product purity, and adapting to problems as they arise throughout the manufacturing process

PRIOR EXPERIENCE

EMBEDDING/HISTOLOGY

Labcorp Drug Development (formerly Covance)

STUDY TECHNICIAN INTERN

Summer 2019

- Performed histology tasks by embedding animal tissues in compliance with SOPs, GLPs, and regulatory guidelines
- Improved Pathology department's digital slide scanning process by implementing new equipment
- Presented improvements to upper management, detailing the impact of new technology implementation

EDUCATION

UNIVERSITY OF WISCONSIN — MADISON

2016 – May 2020

B.S. Microbiology

