



Kristin WILLIS
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 linkedin

Job History

UPSTREAM PROCESS DEVELOPMENT

Aldevron - Madison

SCIENTIST I

May 2022 – Present

- 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
- Experienced in microbial shake flask and small-scale bioreactor fermentation, cell culturing, transformation, aseptic technique, and analysis via SDS-PAGE
- Trained in mammalian cell culture techniques, including transfection, cell passaging, and harvest. Knowledgeable in adherent and suspension cell cultures
- Competent in using limit assays to detect residual RNase and DNase in biological samples, with a foundational understanding of assay principles
- Passionate about continuous learning and contributing to the development of cell therapy products while adding new technical skills to my repertoire

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

UNDERGRADUATE RESEARCH

Federico Rey Research Lab

CAPSTONE RESEARCH PROJECT

2019 – 2020

- Investigated the humanized gut microbiome of mice and its correlation with Atherosclerosis
- Selected and prepared appropriate growth media to plate and culture cecal bacteria using anaerobic techniques
- Extracted bacterial DNA and sequenced 16S portion of the genome for analysis, interpretation, and presentation

EDUCATION

UNIVERSITY OF WISCONSIN — MADISON

2016 – May 2020

B.S. Microbiology

