

Himay Makhija (Mickey)

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Education

2018-2022 BS Biochemistry and Molecular Biology, Minor in Statistics, Davis CA, UC Davis

Skills & Abilities

Tech Stack: R and RStudio, Python, Power BI, Excel, HTML, CSS, JavaScript, React

Lab Skills: Micro pipetting, ELISA, SDS PAGE, qPCR, Oligo quantification and resuspension, Assay Development, Flow Cytometry, EPOCH, Clinical specimen handling, Cell culture growth and handling, Western Blot, DNA Sequence Analysis, Protein Expression, Reagent Preparation, Centrifuge usage, Microscope usage, Protein Purification, PCR machine operation.

Languages: English, Hindi, Russian

Experience

- Jun 2022-Present **Research and Innovation Core Intern, Cepheid - A Danaher Company**
- Working on Integration and optimization of sample preparation for novel diagnostic test.
Running multiple experiments and analyzing data, presenting concise and abbreviated data to the team using presentations.
Optimized PCR portion of a novel diagnostic test.
Assisted with designing primers and probes for optimal PCR diagnostics.
Created a tool to automate specific analysis, reducing analysis time by 200 hours in 60 days.
- Jan 2022-Jun 2022 **SDC Lab Assistant, UC Davis**
- Assisted students with disabilities in a nutrition and physics classes regarding lab work, note-taking, protocol adherence and GLP.
- Aug 2021-Dec 2021 **Lab Assistant and Teaching Assistant, UC Davis**
- Supported students' academic progress by providing one on one attention to help guide learning and comprehension. Grading assignments and maintaining records.
Assisted students with laboratory techniques and GLP regarding sequencing data analysis, cell culturing, SDS gel prep, handling E. coli samples and PCR machine operation.
Performed cell transformations of DH5A E. coli cells with BglB gene.
Performed Kinetic and Thermostability assays on mutant E. coli cells expressing BglB protein in order to purify and quantify the target protein.
- Sep 2020-Feb 2021 **Research Intern, SNAPDNA**
- Assisted with development of a rapid benchtop assay using cell culturing skills and GLP.
Routinely conducted cell counts of E. coli and Salmonella.
Optimized PCR performance and assisted with cell culturing and sample prep of E. coli and Salmonella.
Routinely maintained lab records and ensured good sanitation and workflow in lab downstream and upstream processes.
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