# Taehee Lee



# **Professional Experience**

R&D Engineer | Medtronic Diabetes, Northridge CA

- Collaborated in cross-functional engineering groups to ensure developing product designs met product requirements, regulatory guidelines, and international standards
- Defined design requirements, specifications, and test methodologies for product in development
- Analyzed and verified product designs and validated product manufacturing processes
- Guided team members on verification, validation, and qualification activities for product development
- Designed, set up, and executed experiments to evaluate design concepts
- Communicated with FDA representatives to improve validation protocols and documentation
- Managed process characterizations and validations in accordance with medical regulatory guidelines
- Performed and reported process validations and part qualifications for products in production and in development

Research Technician | Children's Hospital of Philadelphia, Philadelphia PA

A zebrafish model of Friedreich ataxia for drug screening

- Lead investigator Developed and validated CRISPR-Cas9 modified zebrafish through verification of mutant genotypes, evaluation of diseaseassociated phenotypes and face validity
- Relevant techniques: antibody validation, SDS-PAGE, Western blot, qPCR, TIDE (Tracking of Indels by DEcomposition)

Screening of random shRNA-expressing library in a cellular model of MELAS (Mitochondrial Encephalopathy, Lactic Acidosis, and Stroke-like episodes)

- Lead investigator Identified reproducible conditions for in vitro screening, screened shRNA library and cloned candidates, investigated potentially affected pathways in MELAS
- Relevant techniques: gene cloning, Seahorse metabolic assay, Oroboros respirometry assay, enzymatic assays, ELISA, flow cytometry

### **Education**

Master of Engineering, Biomedical Engineering

Cornell University Ithaca, NY | May 2022

CERTIFICATE, PRE-HEALTH

University of Pennsylvania Philadelphia, PA | Aug 2017

Bachelor of Science, Biomedical Engineering

Northwestern University Evanston, IL | Jun 2013

## Skills

### TECHNICAL

- · Molecular biology techniques
- Mammalian cell culture
- Statistical analysis (Excel, Minitab, R)
- CAD (Solidworks, Fusion 360)
- Engineering analysis
- MATLAB
- COMSOL
- ANSYS

## Professional

- · MS Project
- Project management
- Integrity

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• Independence

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