

# TAEHEE LEE

Biomedical engineer experienced in medical device development and academic translational research. Seeking innovative projects that require taking on various roles.



## EDUCATION

2022

### Cornell University

M.Eng. in Biomedical Engineering

GPA: 4.06

📍 Ithaca, NY

Related coursework: Project Management, Tissue Engineering, Stem Cell Bioengineering, Bioprocess Engineering, Computer-Aided Engineering, Data Science in R, Biofluid Mechanics, Entrepreneurship

2017

### University of Pennsylvania

Certificate in Pre-Health

📍 Philadelphia, PA

2013

### Northwestern University

B.S. in Biomedical Engineering

📍 Evanston, IL



## RELATED EXPERIENCE

2022

2021

### Meinig School of Biomedical Engineering, Cornell University

Product Development - MEng Project

📍 Ithaca, NY

*Liquid ventilation system for management of Acute Respiratory Distress Syndrome*

- Led engineering team in designing and delivering transportable functional liquid ventilation system prototype
- Created CAD of components and full system for modeling physical integration
- Awarded 2nd place in Design Competition and 3rd place in Autodesk Fusion 360 Competition at Cornell's 6th Biomedical Engineering Industry Engagement Showcase
- Guided design efforts and verification with focus on defined need criteria
- Integrated various designed/selected mechanical, electronic, and sensor components into a functioning system

2021

2017

### Children's Hospital of Philadelphia

Research Technician

📍 Philadelphia, PA

**Lead investigator:** *A zebrafish model of Friedreich ataxia for drug screening*

- Developed and validated CRISPR-Cas9 modified zebrafish through verification of mutant genotypes, evaluation of disease-associated phenotypes and face validity
- Manuscript in preparation

**Lead investigator:** *Screening of random shRNA-expressing library in a cellular model of MELAS*

- Identified reproducible conditions for in vitro screening, screened shRNA library and cloned candidates, investigated potentially affected pathways in MELAS

2016

2013

### Medtronic Diabetes

R&D Engineer

📍 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 to be in line with all patient needs
- Guided team members on design verification and process validation activities for product development as a technical project management lead
- Managed expectations of project supervisors while keeping team aligned with milestone goals
- Brought validation protocols and documentation practices into compliance through extensive communication with FDA representatives as part of CAPA activities over 6-month period



## CONTACT

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## PROFESSIONAL SKILLS

Project management, verbal and written interpersonal communication, user interviews, integrity, independence, primary and secondary research, strong work ethic, attention to detail, implementation, team coordination, diligence, persistent curiosity, broad knowledge base

## TECHNICAL SKILLS

Engineering analysis, medical device design, molecular biology techniques, statistical analysis (Excel, Minitab, R), CAD (Fusion 360, Solidworks), COMSOL, QQ/PQ/IQ, dFMEA, R, MS Project, MATLAB

## PUBLICATIONS

10.1021/acscchemneuro.0c00323

10.1124/jpet.118.252759