# TAFHFF I FF

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

Olthaca, NY

GPA: 4.06

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

2022

2021

2021

2017

**Northwestern University** B.S. in Biomedical Engineering

Evanston. IL

## RELATED EXPERIENCE

Meinig School of Biomedical Engineering, Cornell University

Product Development - MEng Project

Olthaca, 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

#### 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

### **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 verification, validation, and qualification 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

in linkedin.com/in/taehlee **J** +1 805-300-8160

# PROFESSIONAL SKILLS

Project management, verbal and written interpersonal communication, 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, R, MS Project, MATLAB

# **PUBLICATIONS**

10.1021/acschemneuro.0c00323 10.1124/jpet.118.252759

2016 2013