# TAFHFF I FF

Biomedical engineer with hands-on experience in medical device design and development + academic translational research. Seeking innovative projects that require a strong advocate for users.



## RELATED EXPERIENCE

# Present 2022

### Emulate, Inc.

Product Development Engineer II

O Boston, MA

- · Rapid product development in startup environment in collaboration with product management, biologists, and multiple disciplines of engineers
  - · Project lead for design and development of next generation of microfluidic Organon-Chip device
  - · Identify and translate user needs into design requirements and specifications

2022 2021

#### Meinig School of Biomedical Engineering, Cornell University Product Development - MEng Student 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
- · 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

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

2016 2013

## **Medtronic Diabetes**

**R&D** Engineer

Northridge, CA

- Collaborated with multiple functional teams 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
- Improved communication of patient/physician user needs (VOC) to engineering
- · Guided team members on design verification and process validation activities for product development as a technical project lead
- · Managed expectations of project supervisors and aligned team to milestone goals
- Brought validation protocols and documentation practices into compliance through extensive communication with FDA representatives as part of CAPA activities



# **EDUCATION**

#### 2022

## **Cornell University**

M.Eng. in Biomedical Engineering

♀ 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 (Pre-Med)

Philadelphia, PA

2013

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

Related coursework: Systems Physiology, Tissue Engineering

Evanston, IL



## CONTACT

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## **PROFESSIONAL SKILLS**

Project management, verbal and written interpersonal communication, user interviews, cGMP, 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, statistical analysis (Excel, Minitab, R), CAD (SOLIDWORKS, Fusion 360), COMSOL, OQ/PQ/IQ, dFMEA, molecular biology techniques, MS Project, MATLAB

## **PUBLICATIONS**

10.1021/acschemneuro.0c00323 10.1124/jpet.118.252759