

PATRICK BOHSE

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Education

University of Pittsburgh – Pittsburgh, PA

Expected Graduation Date: April 2020

Major: Bioengineering

Minors: Chemistry, Computer Science

GPA: 3.6

Highlighted Experience

Regeneron Pharmaceuticals Protein Expression Sciences Intern – Tarrytown, NY 2019

Evaluating and optimizing BD™ Brilliant Family dyes for use in Fluorescence Activated Cell Sorting (FACS) resulting in the adoption of new dyes and obviating of spending \$50k+/year on buffer solutions for current proprietary technology platforms; Gained experience in mouse surgical techniques, flow cytometry, antibody staining and titration

Human Movement and Balance Laboratory – Pittsburgh, PA

2018 – Present

Researching the role of attention in balance and mobility in Autism Spectrum Disorder using reaction timing and infrared motion capture; Processing and analyzing data using Matlab

Regeneron Pharmaceuticals Cell Culture Co-Op – Tarrytown, NY

2017

Process development for production of therapeutic antibodies via CHO cell culture in benchtop bioreactors and shake flasks using aseptic technique; Tech development of a small-scale perfusion bioreactor model working toward goal of continuous processing

Pitt Design Hub – Vice President, Teams Liaison

2016 – Present

A club devoted to offering real-world design experience to undergraduates by pairing teams with faculty and clinicians; Main responsibilities include meeting with all design teams, providing feedback on teams' progress, communicating with all officers and faculty advisors, and keeping design teams on track

Pitt Biomedical Engineering Society

2015 – Present

Participation in weekly meetings focused on academic and professional networking, service, and bioengineering community events

Relevant Coursework – LabView, Intro to Neural Engineering, Intro to Medical Imaging and Image

Analysis, Biomedical Applications of Control, Signals and Systems, Biotransport Phenomenon,

Biomechanics, Thermodynamics, Electronics, Solidworks, Intermediate Programming in Java, Data

Structures, Algorithm Implementation, Cell Biology, Organic Chemistry, Biochemistry, Statistics

Programming Languages/Computer Skills MATLAB, Java, Labview, HTML/CSS, JMP, Solidworks, LIMS,

EndNote, FlowJo, WinList

Related Experience

IMED Lab Publication Reviewer

2018 – 2019

Reviewing research papers and textbooks to be sent out for publication, creating presentations about papers published by the lab

SteelHacks 2018

2018

Awarded 3rd place for designing and building *Autoponics*, an autonomous aquaponics system, using Solidworks and a Raspberry Pi

Presentations and Papers

Bailes, A.H., Bohse, P., Iverson, J.M., Trout, J., Sparto, P.J., Cham, R. (2019, January) Impact of an Information Processing Task on Balance in Young Adults With Autism Spectrum Disorder, A Preliminary Study. Poster presentation at the American Physical Therapy Association Combined Sections Meeting, Washington, DC.

Farmer, T. S., Bohse, P., Kerr, D. (2017). Rational Design Protein Engineering Through Crowdsourcing. Journal of Student Research, 6(2), 31-38. ISSN: 2167-1907

Awards

Dean's List – Swanson School of Engineering

Fall 2015 - Present

National Society of Leadership and Success

2016

Phi Eta Sigma National Honor Society

2016

Sigma Alpha Lambda Honor Society

2016

National Society of Collegiate Scholars

2016