

# Brielle Hohne

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## Education

### **The University of Texas at Austin, Austin, TX**

Pursuing PhD - Chemical Engineering  
August 2019 - Present

### **The Pennsylvania State University, State College, PA**

PhD Candidate - Chemical Engineering  
June 2017 - July 2019      GPA: 3.65

### **Cornell University College of Engineering, Ithaca, NY**

Bachelor of Science - Chemical and Biomolecular Engineering  
Graduated - May 2017      GPA: 3.50

## Research Experience

### **Kumar Research Group and Keitz Lab, University of Texas at Austin**

August 2019 - Present      Graduate Student- Continuing to develop the AcrB lipid vesicle system to monitor proton transport. Looking to develop an assay to screen drug components for their effects on AcrB within the vesicle system. Looking to expand this technology to P-glycoproteins and other membrane transport proteins.

### **Kumar Research Group, The Pennsylvania State University**

Jan 2019 - July 2019      Graduate Student- Developed a lipid vesicle system to determine flux of a dye, R6G, through the membrane protein pump, AcrB, given a change in pH. Utilized stopped flow, dynamic light scattering, and Mathematica/Matlab.

### **CurtisLab, The Pennsylvania State University**

June 2017 - Dec 2018      Graduate Student- Built and optimized temporary immersion bioreactors for plant propagation. Performed bioinformatic analysis to identify gene homologues in the yam genome. Extracted RNA and DNA from yam to clone genes for transformation. Mentored and trained 5 undergraduate students.

### **Zymtronix Catalytic Systems, Ithaca, NY**

June 2016 - May 2017      Biocatalysis Intern- Worked in internal R&D with enzyme immobilization technology alongside biocatalysis lead. Executed assay development and patent development. Presented results at weekly meeting.

### **DeLisa Research Group, Cornell University**

Summer 2015 - Fall 2016      Undergraduate Research Assistant- Assisted a graduate student in her project with inducible protein silencing via allosteric ubiquibodies through execution of an independent project. Utilized laboratory skills including cell culture, protein purification, PCR, and Western Blotting.

## Presentations

Hohne, B., Curtis, W. (September 2018). *Engineering Faster, Cheaper, Scaled-Up Yam Propagation*. International Institute of Tropical Agriculture- Kenya, Monthly Seminar, Nairobi, Kenya.

## Awards

2018 NSF Graduate Research Fellow  
Dean's List Fall 2013, Spring 2015, Fall 2016  
2014 Engineering Global Fellow