

# Helen Zhang

Levittown, New York  
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## SKILLS

### LABORATORY

Bacteria Assay  
Cell Culture  
Image Analysis  
Protein Purification  
Nanoparticle Synthesis  
Reagent Preparation  
HFC Electrode Assembly  
Langmuir-Blodgett Trough

### COMPUTER

Java  
Python  
R  
HTML  
CSS  
GitHub  
Microsoft Office

### ART

Adobe Photoshop  
Adobe Illustrator  
Adobe InDesign  
Procreate

## RESEARCH EXPERIENCE

### WONG LABORATORY- Brown University

September 2019-Present

PLME Summer Research Assistantship

- Explored TCGA clinical data and differential gene expression using edgeR
- Investigating cancer cell motility in engineered and organ specific matrices

### PARK LABORATORY- Boston Children's Hospital

Summer 2019

Summer Research Intern within Respiratory Diseases division

- *Streptococcus Pneumoniae* Killing Assay with CRAMP, ZmpB/ZmpC knockouts
- Glypican 3, Syndecan 1 CHO Cell Culture and Purification

### Garcia Center for Polymers at Engineered Interfaces at Stony Brook University

- "Optimizing Molar Ratios of AuAg Alloy Nanoparticles to Improve Efficiency of Proton Exchange Membrane Fuel Cells"

Siemens Competition Semifinalist

## WORK EXPERIENCE

### RESIDENTIAL PEER LEADER (RPL)- Brown ORL

2019-2020

Community Assistant, oversaw residents and provided educational programming.

### PINNACLE EDUCATION GROUP

Summer 2018

- SAT, ESL, Living Environment Tutor
- Organized curriculum and activities for advanced students

## EDUCATION

### BROWN UNIVERSITY

Class of 2022

- **Sc.B Biology, A.B. Computer Science**

GPA: 4.0/4.0

Program in Liberal Medical Education

- 8-year Combined BA/MD Program

Coursework: Biological Design; Organic Chemistry I; Human Physiology; Object-Oriented Programming; Data Structures & Algorithms; Discrete Structures & Probability; Biochemistry; Genetics; Computational Molecular Biology; UI/UX; Software Engineering

### GENERAL DOUGLAS MACARTHUR HIGH SCHOOL

Class of 2018

National AP Scholar

Valedictorian

National Merit Scholar

GPA: 104.18

Presidential Scholar Candidate

## LEADERSHIP EXPERIENCE

### Create@Brown

2020- PRESENT

Co-Founder

### PLME Senate Secretary

2019- PRESENT

Executive Board member

### Meiklejohn Peer Advisor

2020-PRESENT

### Brown Smart Woman Securities, CMO

2018- PRESENT

Focus on enhancing financial literacy, enhancing public outreach, design

### MACARTHUR Science Olympiad President

2014-2018

Led team to States for 1<sup>st</sup> time in school history, 2<sup>nd</sup> at Regionals

### Student Government, National Honor Society Treasurer

Orchestra Concertmaster, All-County, LISFA, Pit President, Tri-M VP

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