

BIOCHEMISTRY STUDENT

ADDRESS • PHONE NUMBER • EMAIL ADDRESS

SUMMARY OF QUALIFICATIONS

Biochemist with two years of research laboratory experience, strong interpersonal, communication, data analysis and image analysis skills; well organized and focused

EDUCATION

Brandeis University, Waltham, MA

Aug 20XX - May 20XX

M.S. in Biochemistry

Thesis: Dynamical Behavior of Coupled Self-Oscillating Gels

B.S. in Biochemistry, with honors

B.A. in Chemistry, with concentration in Chemical Biology

Relevant Coursework: Thermodynamics, Dynamics of Protein Folding, Medical Enzymology & Pharmacokinetics, Quantum Chemistry, Enzyme Kinetics, Quantitative Methods in Biochemistry, Inorganic Chemistry, Data & Information Transfer Mechanisms in Biochemistry

LAB SKILLS AND TECHNIQUES

- Analysis of lab data using MATLAB and image analysis using ImageJ
- Conducted Synthesis of poly(NIPAAm) hydrogels & isothiocyanate-amine and dye containing hydrogels
- Basic understanding of PCR, ELISA Assays, PAMPA Assays, Caco-2 Assays, Cytotoxicity Assays, Cell Culture & Cultivation, UV-VIS Spectroscopy, NMR, IR Spectroscopy, Column Chromatography, GC-Mass Spectroscopy, SEC, DNA mini-prep, Sterile Technique

RESEARCH EXPERIENCE

Department of XXXXXXX, Brandeis University

Waltham, MA

Student Researcher, MS Thesis

May 20XX - May 20XX

- Conducted research as part of the BS/MS combined program as a master's thesis
- Analyzed conditions of the coupling behavior of chemo-mechanical hydrogel arrangements to understand and imitate synchronous patterns found in nature (i.e. the cardiac cycle) as well as to create biomimetic systems capable of performing work
- Synthesis of hydrogels containing dyes by step-growth polymerization between isothiocyanate-amine with the aim of producing components for solar cells
- Discussed research results and progress with lab group members
- Prepared presentations of research results at group meetings and conferences (Brandeis SciFest 2016 & Northeast Regional ACS Meeting 2016)

Brandeis University

Waltham, MA

Team Member, Sprout Grant Finalist

Apr 20XX

- Competed on a team for the Sprout Grant, an entrepreneurial competition for potential startup ideas with bases in the sciences.
- Analyzed current trends regarding the penetration of 3D bio-printing technology in the field of biotechnology
- Proposed a 3D bio-printer capable of compounding pharmaceutical prescriptions
- Optimized the capabilities of printer by tuning the printer and the printing medium using knowledge in 3D printing, biology, and chemistry

- Collaborated with a team of dedicated individuals to develop the project to qualify for and reach the final stages of the competition

STUDENT LEADERSHIP

Brandeis University, deiSic (Brandeis Sustainability Ideation Challenge) Waltham, MA
Organizational Committee Member Aug 20XX - Oct 20XX

- Planned and developed a 24-hour sustainability initiative ideation challenge to encourage projects that improve the sustainability of Brandeis University
- Collaborated with a variety of department representatives, community organizations and members to organize talks and presentations to educate and inform attendees and the community at large
- Discussed and implemented measures with the organizing committee to ensure an efficient and smooth experience for participants

Brandeis University, Department of Community Living Waltham, MA
Community Advisor Aug 20XX - May 20XX

- Fostered a sense of community among newly matriculated first year students
- Implemented innovative and new programming for residence halls
- Mediated and resolved conflict between residents

RESEARCH CONFERENCE POSTER PRESENTATIONS

American Chemical Society (ACS) Northeast Regional Meeting Oct 20XX

- **XXXX.**, Jiménez, Z., & Epstein, I. *Behaviors of Chemically Coupled Oscillating Gels.* Northeast Regional Meeting of the American Chemical Society, Binghamton, NY. (5-8 Oct 2016)

Brandeis University SciFest VI Aug 20XX

- **XXXX.**, Jiménez, Z., & Epstein, I. *Coupling Behaviors of Spatially Oscillating Gels.* Brandeis University SciFest VI, Waltham, MA. (4 Aug 2016)