

SAMUEL BRIGGS

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Biological Engineering Student

Highly motivated and innovative Biological Engineering student with experience in material science, bioprocessing, protein biochemistry. Passionate about learning new scientific skills and a sharp team player capable of providing leadership while also learning from mentors and fellow team members. Experienced at working in multiple projects concurrently. Effective communicator who can conceptualize complex biological information quickly.

Technical Skill

Cellular Biology: adherent and suspension cell culture, cell growth and productivity analysis using automated liquid handlers and flow cytometry.

Protein Biochemistry: gel electrophoresis, Western Blot, protein purification assays, microfluidic protein and glycan analysis (Caliper Lab Chip).

Software: proficient in Microsoft office. Experience with Python, JMP, and GraphPad Prism.

Professional Experience

GE HEALTHCARE LIFE SCIENCES, LOGAN, UT MAY 2016 – JULY 2017

RESEARCH INTERN

- Experience with maintenance of suspended and attached mammalian cell culture lines.
- Performed growth and protein productivity studies using multiple cell lines.
- Development of 20+ standardized protocols for laboratory techniques ranging from protein purification to instrument operation.
- Experience with numerous laboratory instruments including High Throughput Flow Cytometry, Liquid handlers, Microfluidic protein quality analysis, and bioreactors on scales from 96-well plate to benchtop.

SPIDER SILK LABORATORY, UTAH STATE UNIVERSITY, LOGAN, UT NOV. 2014 – May 2016

UNDERGRADUATE RESEARCH ASSISTANT

- Participated in senior design project with three fellow undergraduates to design and test a spider silk based electrospun bandage with potential use in burn victims.
- Presented research in poster format at the Utah State University Department of Research symposium and Utah Bioengineering Conference.
- Worked on projects to produce, characterize, and purify recombinant spider silk proteins using both transgenic goats and *E. coli* bacteria.
- Developed skills in bacterial culture and protein analysis using electrophoresis and Western Blot.
- Gained basic experience in laboratory safety and technique.
- Developed efficient time management and detailed record keeping habits.

BIOLOGY DEPARTMENT, UTAH STATE UNIVERSITY, LOGAN, UT JAN. 2015 – May 2016

BIOETHICS UNDERGRADUATE TEACHING FELLOW

- Assisted in class instruction by preparing questions for each class period to help direct class discussion.
 - Experience grading student papers and tests along with resolving questions and conflicts.
 - Provided one-on-one and group tutoring sessions to help class members prepare for exams.
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Education and Honors

Bachelor of Science, Biological Engineering, Utah State University (Business Minor)

Cumulative GPA: 3.82

Magna Cum Laude, University Honors

Tau Beta Pi Engineering Honors Society Member

Harold V. Peterson and **Seeley-Hinckley** Academic Scholarships Recipient

USU Biological Engineering Club Member

Languages

Spanish, Fluent; Served as volunteer Spanish teacher for non-profit organization (2011-2013).

Leadership and Service

- Selected for Governor's Honors Academy at Southern Utah University
- Eagle Scout Award Recipient and current BSA troop Assistant Scoutleader
- Member of Biological Engineering club and Tau Beta Pi Engineering Honors Society at Utah State
- Two years' service for non-profit group
 - Managed groups of 6-30 volunteers, providing instruction regarding performance
 - Organized and lead training meetings