
Zachary Brown

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PROFILE

I have three years of research experience in a microbiology laboratory, and look forward to continuing to expand my knowledge into the exciting territory of biomedical research. As I continue to develop professionally, I have found that I especially enjoy the fields of Molecular Biology and Bioengineering, and I have ambitions of ultimately pursuing an MD/PhD.

EDUCATION

University of California, Berkeley Graduated May 2017

B.A. in Molecular and Cell Biology, Biochemistry

Minor in Bioengineering

GPA: 3.79

WORK EXPERIENCE

Labwork

Ryan Lab Sep 2014 - May 2017

*I research cell cycle regulation in the alpha-proteobacterium *Caulobacter crescentus*. My research had two foci: (1) studying factors contributing to the regulation of master transcriptional regulator CtrA, and determining novel mechanisms by which CtrA is regulated, on both the levels of transcription and degradation; and (2) characterizing the relationship between CtpA, an essential protein required for outer membrane integrity, and cellular metabolism of peptidoglycan.*

Synthetic Genomics June - August 2016

Product Development Intern for Synthetic Genomics. Roles performed included maintenance of bench-top fluid-handling machine BioXP, quality assurance of company products (comparing efficiencies of different polymerases, testing master mixes for PCR buffers, etc.), de novo synthesis of complex oligos for client use, genetic engineering using CRISPR/Cas9 system of gene editing.

Leadership Experience

Organic Chemistry UGSI Aug – Dec 2015

Alongside a graduate student from the College of Chemistry, I instructed students in a wet lab environment on different experimental techniques relevant to organic chemistry. I also helped review the course material in my capacity as an undergraduate student instructor.

Biochemistry Tutor Jan 2016 - May 2017

Weekly review sessions for students enrolled in MCBC100A – an introductory biochemistry course – in order to cover the material they see in class in a new environment. I am one of several tutors who meet with the students in order to clarify the course material and assist them in completing their homework assignments.

Peer Advisor (PAWS Mentor)

Aug 2016 - May 2017

Provide assistance and insight into the Molecular and Cell Biology Major, as well as peer counseling for students. Also initiated reach-out programs intended engage more of the student body with the MCB major in order to spread awareness of the major and what it has to offer after their undergraduate education.

AWARDS AND RECOGNITIONS

National AP Scholar	May 2013
Graduated within top 10% of class (High School)	June 2013
Dean's Honors	Fall 2013, Fall 2015, Spring 2017
Speaker at UC Symposium for Biochemistry and Molecular Biology	April 2017
Graduated with Honors	May 2017

MISCELLANEOUS

Varsity Crew for Cal Sailing Team	September 2013 - May 2015
Proficiency in Spanish	proficient since 2010