

Name
Address
Phone Number
E-mail
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Education:

Molecular Cell Development Biology University of California Santa Cruz
 Expected date of graduation Spring 2016

Relevant Coursework

Biochemistry
 Biotechnology
 Molecular Biology
 Genetics
 Synthetic Biology/Lab
 Microbiology, Cell Biology, Computational Biology Tools (in progress)

Research Experience

Undergraduate Researcher UC Santa Cruz **Sept. 2015- Present**

Department of Chemistry and Biochemistry, Professor Bakthan Singaram

- Utilizing a Boronic glucose sensor to measure sugar levels in the degradation of cellulose in halophiles and performing sugar serial dilutions.
- Attending lab meetings

International Genetically Engineered Machines (iGEM) Team 2015

Department of Biomolecular Engineering, Professor David Bernick **June 2015-Sept. 2015**

- Worked on isolating salt tolerant cellulases from halophiles for butanol production using archaeal model organism *Haloferax volcanii*.
- Went out into the field and collected samples, plated and performed single cell isolations, further inoculated samples in microcrystalline cellulose as the selected carbon source for microorganism to break down, performed PCR, ran electrophoresis gels and prepared samples for sequencing, used bioinformatics tools to analyze and interpret data.
- Participated in Journal Club
- Outreach coordinator for iGEM, introduced biofuel project to Spanish speaking communities like Salinas and Watsonville, CA and talked about the importance of seeking renewable sources of energy and eliminating the use of fossil fuels.
- Talked about the iGEM project with incoming UCSC freshman and international students
- Arranged meetings with the news media, interviewed with Univision Central Coast News
- Attended Santa Cruz Ag-Tech meetups and networked with businesses
- Assisted in grant writing to fund project and fundraising events (team raised total of 25k)

Lab assistant UC Santa Cruz (IMSD)

Fall 2012- Spring 2013

Department of Ecology & Evolutionary Biology, Professor Giacomo Bernardi

- Conducted research in fish population genetics
- Microsatellites, Performed DNA extractions, PCR and sent them off for sequencing
- Gathered and interpreted data

Summer Research Institute UC Santa Cruz (STEM program) Summer 2012

- An introduction to the theoretical and practical aspects of laboratory research. Hands-on training for a research assistantship in a biomedical lab.
- Research Poster Presentation at the Undergraduate Summer Research Symposium 2012
- Attended the SACNAS National Conference in Seattle, WA 2012

Presentations

Identification of Cellulose Degrading Halophiles for Butanol Production via *Haloferax volcanii*

- Hartnell College Regional Symposium Summer 2015 **August 2015**
- STEM Diversity Research Symposium 2015 **August 2015**
- Sierra Systems Synbio Symposium at the University of Nevada Reno **August 2015**
- iGEM Synthetic Biology Competition in Boston, MA **September 2015**
- SACNAS National Conference in Washington DC (pending) **October 2015**

Identification of variant *Wolbachia* strains in *Drosophila* using Microscopy and Polymerase Chain Reaction (PCR)

- Undergraduate Research Symposium **August 2012**

Tutor Experience

Math Engineering Science Achievement program

Membership Coordinator and Tutor (Hartnell College)

Fall 2010- Spring 2012

- Process membership applications, record notes, file and organize documents, data entry
- Employed tutor for Calculus I, II, III, Biology and Chemistry

Supplemental Instruction (SI) Leader-Botany

Spring 2011

- I prepared powerpoint slides for a botany class at Hartnell College through UC Santa Cruz ACCESS program. I prepared students for Exams in a fun way that would allow them to comprehend material.
- Helped students improve their confidence and study skills.

Academic Intern UC Santa Cruz Educational Partnership Center

Spring 2009- Summer 2010

- Tutored high school students in Conceptual Algebra, Algebra 1 & 2, and Geometry
- Motivated students to attend college.

Awards

Womens Educational Leadership Institute (WELI) scholar

Spring 2012

National Science Foundation scholar

Fall 2011

Laboratory Skills

- Experience using thermocycler, incubator, centrifuge
- gel electrophoresis
- PCR
- DNA extractions
- single cell isolations
- plating
- data analysis

Extracurricular Activities

SACNAS Co-President 2015-2016 Academic School Year

Present 2015

- Organized a project with a group of Middle School students in a Science, Technology, Engineering, Arts and Math (STEAM) class. Will continue to mentor these students through out the school year.

News Pitch For SACNAS Newsletter

Present 2015

- News pitch for SACNAS News was recently accepted. I will be writing an article about the positive outcomes of the challenges I have faced in hopes to motivate other students like myself to become leaders in their communities.

