

Danielle Elaine Bever-Sneary

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Objective: To gain employment as a professor of biotechnology or biology at a Southern California Community College.

University-Level Teaching Experience

- *University of California, Irvine* Fall 2019, Fall 2020 *Teaching Assistant*
CBE 40A Chemical Processes and Material Balances
Led a weekly discussion section to go over example problems, weekly office hours, grading. Assisted in transitioning the course to an online format for Fall 2020.
- *University of California, San Diego* Fall 2015 *Undergraduate Instructional Apprentice*
BIMM 100 Molecular Biology

Other Teaching Experience

- *California Community College Internship Program* 2020-2021
Mentor: Joshua Mandir, Santa Ana Community College Chemistry Professor and Department Chair
- *UCI FABCamp* Summer 2019
Planning of an interactive science experiment for visiting middle school students: we taught students how to extract DNA from strawberries using household products, and how this parallels processes used in the lab to extract DNA from microorganisms.
- *STEM Outreach* February 2019 – June 2019
Used funds secured from The American Ceramic Society and the Ceramic and Glass Industry Foundation to fund 6 off-campus STEM outreach workshops targeting middle school-aged children.
- *YMCA of La Jolla, CA* June 2016 – June 2017 *Unit Leader*
Managed large groups of children and employees while planning daily activities, traveling to off-site activities, and communicating with parents. Additional responsibilities included researching and planning STEM activities.

Education

- University of California, Irvine. Ph.D. Candidate Chemical and Biomolecular Engineering, present
- University of California, San Diego. B.S. Bioengineering: Biotechnology, 2017 (Magna Cum Laude)

Research Experience

- *University of California, Irvine* Da Silva Lab June 2017 – present, *Graduate Student Researcher*
Study of the nonconventional yeast *K. marxianus*, a highly attractive host for industrial production of biorenewable chemicals. Construction and validation of a robust CRISPR system to enable efficient metabolic engineering in *K. marxianus*. Use of this system enabled modification of computationally- and rationally-identified pathways for increasing the biosynthesis of non-native polyketides.
- *Synthetic Genomics, Inc.* June 2015 – December 2015 *Bioengineering Associate*
Downstream processing optimization for purification of nutritional products from microorganisms
- *Iowa State University* Sustainable Biomass Production and Processing REU Summer 2013

- South Dakota State University Bioenergy REU Summer 2012

Publications

Black, W. B., Aspacio, D., **Bever, D.**, King, E., Zhang, L., & Li, H. (2020). Metabolic engineering of *Escherichia coli* for optimized biosynthesis of nicotinamide mononucleotide, a noncanonical redox cofactor. *Microbial cell factories*, 19(1), 1-10.

McTaggart, T. L., **Bever, D.**, Bassett, S., & Da Silva, N. A. (2019). Synthesis of polyketides from low cost substrates by the thermotolerant yeast *Kluyveromyces marxianus*. *Biotechnology and bioengineering*.

Poster Presentations

Bever, D., *et al.* (2017) "Integration of the *g2ps1* Gene into *Saccharomyces cerevisiae* for Production of Triacetic Acid Lactone." Summer Research Symposium, Irvine, California.

Bever, Danielle. (2014) "Mechanical Properties of Acetylated Soy Rubber". Southern California Conference for Undergraduate Research, Whittier, California.

Bever, Danielle. (2014) "Mechanical Properties of Acetylated Soy Rubber". Honors Transfer Council of California Conference, Irvine, CA.

Bever, Danielle. (2013) "Mechanical Properties of Acetylated Soy Rubber." Annual American Society of Agricultural and Biological Engineers (ASABE) Conference, Kansas City, Missouri.

Leadership Experience

- Graduate Student Association for the Chemical and Biomolecular Engineering Department at UCI
Co-President, 2019-2020
Social/Outreach Officer, 2018-2019
- Competitive Edge Mentor, UCI, 2019
- Engineers Without Borders of UCSD
Algae Coordinator (Project Lead), 2014-2015
- Research Experience for Undergraduates (REU) Workshop, MiraCosta College, 2014

Honors, Awards, Certificates

- Mentoring Excellence Certificate (UC Irvine) 2019
- Competitive Edge Participant 2017
- UCI Graduate Dean Recruitment Fellowship 2017
- Samueli School of Engineering Recruitment Fellowship 2017
- UCSD Provost Honors 2014, 2015
- MiraCosta Dean's List Fall 2011 - Spring 2014
- Genentech Biotechnology Scholarship 2013
- Phi Theta Kappa - member since 2012
- MiraCosta Scholar Athlete (Soccer) 2011, 2012