

Sara Jean Reinelt

✉ sara.reinelt01@student.csulb.edu

🏠 sites.google.com/view/sreinelt/home

📺 sara-jean-reinelt

🐦 Sara_JeanR

Research Intrests

Glaciology, Physical Oceanography, Polar Climate Change, Sea Ice, Ocean Modeling, Ocean-Ice Interactions, Paleoclimate.

Education

B.S. in Physics

CALIFORNIA STATE UNIVERSITY AT LONG BEACH

2023 (expected)

Long Beach, CA

A.S. in Physics

SADDLEBACK COLLEGE

2021

Mission Viejo, CA

B.S. in Enology

CALIFORNIA STATE UNIVERSITY AT FRESNO

Minor: Chemistry

2011

Fresno, CA

Study Abroad in Switzerland, Italy and France

L'ECOLE D'INGÉNIEURS DE CHANGINS (EIC)

Major: Oenology

2010

Canton de Vaud, Switzerland

A.A. in Psychology

SADDLEBACK COLLEGE

2008

Mission Viejo, CA

Research Experience

Research Experience for Undergraduates (REU)

OCEAN SCIENCES RESEARCH INTERN AT RUTGERS UNIVERSITY

Advisor: Dr. Elizabeth Sikes

Summer 2021 (Planned)

New Brunswick, NJ

Undergraduate Research Assistant

INSTITUTE OF ARCTIC AND ALPINE RESEARCH, UNIVERSITY OF COLORADO BOULDER

Advisors: Drs. Alexandra Jahn and Hannah Zanowski

Analyzed climate model simulation and created figures using Python resulting in presentation.

(Listed under 'Publications and Presentations')

August 2020 - Present

Boulder, CO

Robotics Team Member: Science Sub-Team

SADDLEBACK COLLEGE

Development and implementation of science package to be added to a Mars Rover for the University Rover Challenge, administered by The Mars Society.

August 2020 - Present

Mission Viejo, CA

Course-Based Research Experience

SADDLEBACK COLLEGE

Research project examining COVID-19 infections and deaths. Resulted in poster presentation, award, and local publication. (Listed under 'Publications and Presentations')

Spring 2020

Mission Viejo, CA

Undergraduate Research Assistant

DEPARTMENT OF VITICULTURE AND ENOLOGY, CALIFORNIA STATE UNIVERSITY AT FRESNO

September 2010 - July 2011

Fresno, CA

Awards and Honors

2021 **First Place STEM Poster**, Infection Rate and Fatality Rate in Males vs. Females Due to COVID-19 in NYC

UCI Student Research Conference

2021 **STEM Program Award**, Naval Horizons

Administered by the American Society for Engineering Education

Deans List, Saddleback College - Fall 2020, Spring 2020, Fall 2019

Publications and Presentations

S. Reinelt, A. Thomas, and M. Bearup (2020) Infection Rate and Fatality Rate in Males vs. Females Due to COVID-19 in New York, New York. Saddleback College Journal of Biology. In Press.

S. Reinelt: Meltwater Impacts AMOC Evolution During the Last Deglaciation. Oral presentation at the 2021 Earth System and Space Science Conference, CU Boulder. **March 2021**.

S. Reinelt: Infection Rate and Fatality Rate in Males vs. Females Due to COVID-19 in New York, New York. Oral and Poster presentation at the UCI Student Research Conference, University of California Irvine, **March 2021**.

S. Reinelt, Thomas A, and Bearup M: Infection Rate and Fatality Rate in Males vs. Females Due to COVID-19 in New York, New York. Poster presentation at the Saddleback College 2020 Spring Undergraduate Research Conference, Saddleback College, **May 2020**

Laboratory and Technical Skills

LABORATORY:

Experience: HPLC assay preparation and the following analyses: brix, turbidity, pectin, pH, pinking, color, dissolved oxygen, residual sugar, sorbic acid, total acidity, volatile acidity, alcohol, cold stability, filterability, heat stability, total and free SO₂, and solid analysis.

Equipment Used: densiometer, dissolved oxygen meter, cash still, nephelometer, pH meter, refractometer, auto-titrator, gas chromatograph, alcohol meter, hydrometer, micro-oxidizer, and spectrophotometer.

COMPUTATIONAL:

Python programming language (beginner-intermediate), LaTeX.

MISCELLANEOUS:

SCUBA certified. Proficiency in Microsoft Office and various winery database softwares.

Relevant Coursework

MATHEMATICS:

- Calculus I, II, III (multivariate)
- Introduction to Statistics
- Introduction to Linear Algebra
- Elementary Differential Equations (Spring 2021)

PHYSICS:

- General Physics (Calculus-based Introduction to Classical Mechanics of Solids and Fluids)
- General Physics (Calculus-based Introduction to Thermodynamics, Light, and Modern Physics)
- General Physics (Calculus-based Introduction to Classical Electromagnetism) (Spring 2021)

CHEMISTRY:

- General Chemistry I and II
- Elementary Organic Chemistry
- General Biochemistry
- Quantitative Analysis

OTHER:

- Introduction to Physical Geology
- Introduction to Oceanography (Spring 2021)
- Programming with Python (Spring 2021)

Memberships and Affiliations

2021	Member , Society of Physics Students, CSU Long Beach
2021	Member , Women in Physics, CSU Long Beach
2021	Member , European Geosciences Union (EGU)
2020 - Present	Member , Phi Theta Kappa International Honors Society
2020 - Present	Member , Alpha Gamma Sigma Honors Society
2020 - Present	Member , Science Sub-Team, Saddleback College Robotics Team
2020 - Present	Member , Association of Polar Early Career Scientists (APECS)
2019 - Present	Member , The Oceanography Society (TOS)
2019 - Present	Member , American Physical Society (APS)
2017 - 2019	Member , Pink Boots Society
2010 - 2015	Member , American Society of Enology and Viticulture (ASEV)
2010 - 2011	Project Director , California Association of Viticulture and Enology Scholars, CSU Fresno
2009 - 2011	Member , Enology Society, CSU Fresno
2009 - 2011	Member , Viticulture Club, CSU Fresno
2007 - 2008	Vice President , Psi Beta Honor Society, Saddleback College