

## Education

B.S. Environmental Science concentration in Watershed Systems  
California State University, Monterey Bay (CSUMB)  
Aug. 2018 - Present. Anticipated graduation date: May 20, 2022.  
GPA: 3.94 / 4.00

## Research experience

Research Experiences for Undergraduates (REU) in the Dodds Lab at Kansas State University  
Apr. 2020 - Jun. 2021

Supervisor: Dr. Walter Dodds

*REU project:* Assessing transport and retention of nitrate and other materials through the riparian zone and stream channel with simulated precipitation

*Description:* I led field and lab work with ~300 stream water and riparian soil samples that were processed using the Lotic Intersite Nitrogen eXperiments (LINX) II method for  $^{15}\text{N-NO}_3$  additions. I helped to prepare figures for this project's peer-reviewed journal article.

Undergraduate researcher in the Watershed Environments and Ecology Lab at CSUMB

Aug. 2018 - Present

Supervisor: Dr. John Olson

*Honors capstone project:* The influence of salinity on leaf-litter breakdown rates in tidal streams (Oct. 2020 - Present)

*Description:* I led field and lab work with 32 leaf packs and 6 electrical conductivity (EC) / temperature data loggers. I am analyzing the data and creating a presentation for the CSUMB Capstone Festival in Spring 2022.

*Important team member:* I am collaborating with Alyssa Schaer, undergraduate researcher, as she helped with field work and is analyzing benthic macroinvertebrate (BMI) data from our samples. We worked together on a few applications and Schaer was awarded the Undergraduate Research Opportunities Center (UROC) Researcher stipend (Jun. - Aug. 2021) and California Chapter Society for Freshwater Science Best Poster Award (Oct. 2021).

*Fieldwork:* Hydrology monitoring for the Santa Lucia Conservancy (Sept. 2018 - Jan. 2022)

*Description:* I led field crews for monthly hydrology monitoring (flow meter and water quality (WQ) multiprobe at 4 sites); biannual water chemistry monitoring (flow meter, WQ multiprobe, water grab samples for nitrate, nitrite, and ortho-P, and water grab samples for suspended sediment at 8 sites); annual creek walks (3-12 km GPS surveys recording wet or dry channel and WQ multiprobe at 4 sites).

*Important team member:* I trained Lexi Yokomizo, undergraduate researcher, who is now leading the fieldwork portion of this project. I recruited Yokomizo to join Dr. Olson's lab (Mar. 2021) and she was accepted into the UROC Scholars program that provides a stipend for research-related activities for 2 years (Dec. 2021).

*Fieldwork:* U.S. Environmental Protection Agency Streamflow Duration Assessment in the Rocky Mountains (Jul. 6-30, 2020 and Jul. 3-18, 2021)

*Description:* My field partners and I have surveyed ~70 sites across perennial, intermittent, and ephemeral statuses. We retrieved EC / temperature data loggers, recorded hydrologic indicators, and sampled BMI.

## **Presentations**

REU project: Assessing transport and retention of nitrate and other materials through the riparian zone and stream channel with simulated precipitation

Authors: Gretchen Wichman, Walter K. Dodds, James P. Guinnip, Jessica R. Corman, John Blair

Poster: Association for the Sciences of Limnology and Oceanography (ASLO) Virtual Meeting (Jun. 2021)

Oral: Microbiomes of Aquatic, Plants, and Soil Systems across Kansas (MAPS) Virtual Symposium (Mar. 2021)

Poster: Great Plains Limnology Virtual Conference (Oct. 2020)

Honors capstone project: The influence of salinity on leaf-litter breakdown rates in tidal streams

Authors: Gretchen Wichman, John R. Olson

Poster: California Chapter Society for Freshwater Science (Oct. 2021)

Poster: Society for Freshwater Science Virtual Meeting (May 2021)

Poster: Stanford Research Virtual Conference (Apr. 2021)

## **Awards**

[All figures given in U.S. Dollar]

Project-related awards

UROC Travel Award - \$300 (Nov. 2021)

Council on Ocean Affairs, Science & Technology (COAST)-CSUMB Undergraduate Research Award - \$300 (Feb. 2021)

UROC Scholar which entails 2 years of funded research hours under Dr. Olson's supervision (Dec. 2019 - Dec. 2021)

Presentation-related awards

ASLO Aquatic Sciences Meeting Student Award - \$150 (Jun. 2021)

Society for Freshwater Science Instars Award - \$394 (Apr. 2019), \$40 (Apr. 2020)

Scholarships

California State University (CSU) Trustees' Awards for Outstanding Achievement - \$3,000 (Aug. 2021)

Association of California Water Agencies Clair Hill Scholarship - \$5,000 (Apr. 2021)

Carmel Garden Club Scholarship - \$2,000 (Apr. 2021)

June Stock Scholarship - \$1,288 (Apr. 2021)

Bob Curry Watershed Scholarship - \$500 (Jun. 2020)

Yukon and Clemence Chow Scholarship - \$1,000 (Jun. 2019)

Brian Graves Memorial Scholarship - \$4,000 (Jun. 2018)

Margaret Jane Anderson Memorial Scholarship - \$2,000 (Jun. 2018)

Rotary Club of La Jolla Florence Riford Scholarship - \$18,000 (Jun. 2018 - Jun. 2020)