

# SYDNEY RILUM

(714) 552-1882 | sydneyrilum@bren.ucsb.edu | Santa Barbara, California

## EDUCATION

---

**Master of Environmental Science and Management**, (Expected June 2022)

**Bren School of Environmental Science & Management** – University of California, Santa Barbara (UCSB)

Specializations: Coastal Marine Resources Management and Conservation Planning

Highlighted Coursework: Advanced Data Science, Geographic Information Systems, Biogeochemistry, Ecological Principles, Earth System Science, Coastal Policy and Management

**Bachelor of Arts in Environmental and Ocean Sciences**, 3.79 GPA (May 2018)

**University of San Diego (USD)**

Specialization: Marine Ecology | Minors: Biology and Chemistry

Honors/Awards: Dean's List- First Honors, Environmental and Ocean Sciences Outstanding Academic Excellence Departmental Award

Leadership/Involvement: Marine Science Club Co-President, Dance Team Co-Captain, Preceptorial Assistant (academic mentor to 20 first year students)

## WORK EXPERIENCE

---

**Scientific Aid** (5/2020–6/2020)

**California Department of Fish and Wildlife**, Newport Beach, California

- Monitored Upper Newport Back Bay's endangered California least tern colony, documented nesting behaviors during weekly island visits and observations from the bluff
- Removed invasive vegetation and patrolled public trails
- Prepped, maintained, and piloted skiff and pontoon boats
- Assisted with monthly fish surveys and collections for the Marine Life Inventory program, including plankton tows, otter trawls, and beach seines
- Aided with predator control trapping for the endangered Ridgeway's Rail

**Tidepool Educator** (5/2019–9/2020)

**Laguna Ocean Foundation**, Laguna Beach, California

- Provided education on rocky intertidal organisms and ecosystems to the public
- Promoted marine conservation efforts by increasing public awareness of the laws within marine protected areas and the proper way to explore the tidepools
- Conducted statistical analysis and data reconfiguration of monthly tidepool impact data collected by educators within the marine protected area
- Interacted and cooperated with City of Laguna Beach Lifeguards and Marine Safety Protection Officers for their enforcement of state and local laws, as well as safety

**NSF-Funded Research Intern** (6/2017–8/2017)

**Duke University Marine Laboratory**, Beaufort, North Carolina

- Conducted independent research project on the effect of chemical cues on molting of fiddler crab megalopae
- Collected fiddler crab larvae using plankton nets during nocturnal flood tides
- Performed DNA extraction, PCR, and gel-electrophoresis for larval species identification
- Presented research results to Duke faculty, in process of publishing research with mentors

**Marine Mammalogy Intern** (5/2016–8/2016)

**Aquarium of the Pacific**, Long Beach, California

- Practiced proper husbandry techniques and food preparation for sea lions, seals, and sea otters and trained harbor seals by maintaining learned behaviors
- Fed marine mammals and conducted enrichment sessions alongside mammalogists
- Educated guests on marine mammals and conservation during pinniped presentations
- Researched and presented behavioral study on sea otter pocketing

## **VOLUNTEER EXPERIENCE**

---

### **Beach Profile Monitor** (10/2020–Present)

#### **California Sea Grant – CoAST SB**, Santa Barbara, California

- Monitor the movement of the shoreline along Santa Barbara beaches by conducting monthly beach profile/contour surveys
- Data collected is added to a long-term dataset used by USGS to track changes, calibrate beach profile models, and aid local governments in planning for future coastal erosion, flooding and climate change

### **Field Monitor and Education Outreach Volunteer** (10/2018–9/2020)

#### **OC Habitats**, Orange County, California

- Surveyed and monitored Orange County coastal beach dune habitats for shorebirds, focusing on the threatened western snowy plover and endangered California least tern
- Taught elementary school students (K-6<sup>th</sup>) about local habitats using curriculum-based information during science education field trips
- Monitored snowy plover and least tern nests for Bolsa Chica Wetlands Conservancy and Huntington State Beach/Orange County State Parks during summer nesting seasons
- Coordinated and hosted beach clean-ups

### **Science Education Mentor** (1/2018–3/2018)

#### **Ocean Discovery Institute**, San Diego, California

- Engaged fourth grade students in science education, sparking interest in science careers
- Assisted with instruction of lessons and classroom management
- Prepared hands-on science lessons and helped facilitate field trips to local wetland

## **CONFERENCES**

---

### **48<sup>th</sup> Benthic Ecology Meeting**, St. John's, Newfoundland, Canada (4/4/2019)

- Awarded 2nd place undergraduate research presentation among 80+ students for my research on “The Effect of Adult Chemical Cues on Molting of Fiddler Crab Megalopae in Low Salinity Seawater”

### **Creative Collaborations Undergraduate Research Conference**, San Diego, CA (4/19/2018)

- “Effect of Adult Chemical Cues on Molting of Fiddler Crab Megalopae in Low Salinity Seawater”

## **PUBLICATIONS**

---

Reinsel, K.A., Rilum, S.C., Lohmann, S.C., Farmer, M.A., Welch, J.M., Forward, R.B., Jr. (*In Revision*).  
Estuarine salinities enhance effects of adult odors on molting of field-caught fiddler crab megalopae.

Rilum, S.C. (2018). Effect of Adult Chemical Cues on Molting of Fiddler Crab Megalopae in Low Salinity Seawater. *Undergraduate Honors Theses*, 58. [http://digital.sandiego.edu/honors\\_theses/58](http://digital.sandiego.edu/honors_theses/58)

## **SKILLS, AFFILIATIONS, & CERTIFICATIONS**

---

**Computer:** R/RStudio, ArcGIS/QGIS, Microsoft Office (Word, Excel, PowerPoint, Outlook)

**Languages:** Conversational Spanish, Basic Danish

**Affiliations:** Kappa Gamma Pi

**Certifications:** PADI Open Water Diver, California Boating License