

# 2024 Monterey Bay Ocean Sciences REU Program

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#### **Today's Topics**

- What type of scientist do you want to be?
- CSUMB NSF Ocean Science Research Experience for Undergraduates (REU)



### Why are you interested in our programs?

# What <u>type of scientist</u> are you interested in as a career?

# Before you apply, understand what you'd like to get out of this opportunity based on these ideas

Source: UK Science Council 10 Types of Scientist

#### **Ocean science is multidisciplinary, so there are lots of opportunities**



We are not all marine mammal and shark biologists!

Ocean professionals work in water, land and atmospheric environments

Ocean work goes on at sea, on the coast, and inland

Ocean issues affect all regions, and can be US-based and international

Some ocean professionals don't even desire to be in the water that much

## Ocean careers have lots of opportunity for variety and discovery

Examples:

- Research
- Education & outreach
- Communication
- Resource Management
- Policy
- Conservation & Restoration
- Product and technology development
- Communication
- Data revolution

They are also multisector careers:

- Academia
- Industry/private sector/entrepreneurial
- Local/state/federal government
- Not-for-profit
- Non government organizations (NGOs)



Start exploring at <a href="https://www.fit.edu/your-college-decision/careers-options-in-marine-science/">https://www.fit.edu/your-college-decision/careers-options-in-marine-science/</a>



# CSUMB NSF Ocean Science REU



#### What is an REU?

- REU = Research Experiences for Undergraduates
- A paid, hands-on, summer work experience in a research environment
- Working under the mentorship of a scientist or team
- Collecting data, computer modeling, and data analysis
- Crafting research reports
- Learning professional skills as an emerging scientist
- Presenting your research progress in a talk or poster, and possibly traveling to a conference

Source: NCAR Geo REU Resource Center



<u>csumb.edu/reu</u> reu@csumb.edu

# **Ocean Sciences REU Program @CSUMB**

- 10 week summer internship program: Jun 3-Aug 10, 2024 (including travel)
- Research experience in one of 6 marine research labs
- \$6000 stipend, room & board, post REU conference travel
- Professional development workshops
- In person program
- Deadline to Apply: Feb 2, 2024 @8:59 pm (Pacific Time)



#### **REU Program Goal:**



#### Increase the number and diversity of students pursuing careers in Ocean Science

- Recruit ~15 students per year, emphasis on limited access to STEM research
- Students are recruited from around the country
- Provide rigorous research and professional development during and after the REU
- Provide students with high-caliber faculty mentoring across all phases of the REU experience



## **REU Eligibility:**



- Current sophomore or junior pursuing a degree in STEM (Science, Technology, Engineering and Mathematics)
- Do not already have a Bachelor's degree
- Recommended GPA of 2.8 or above
- Must be a U.S. Citizen or Permanent Resident
- Must be able to fully participate in the REU program from June 3, 2024-August 10, 2024

# **Applying for our REU program:**



#### • Application Form

- NSF ETAP Website (https://etap.nsf.gov/award/3236/opportunity/3796)
- Your contact info, college info, demographics, etc
- Answers to application questions
- Contact Info for <u>Two</u> Recommendations
  - if your application is successful, these persons will be contacted by email and asked to complete an online form, where they can upload their letter

#### Supporting Documents

- Most recent college transcripts (unofficial accepted)
- CV or Academic Resume

Use the resources/advice from our website: csumb.edu/reu

# Types of Opportunities in the REU Program

# **Project Opportunities**



**Oceanography** Trace Metal Analysis; Biological Oceanography; Internal Wave Dynamics; Ocean Analysis and Prediction; Ocean Optics; Ocean Modeling; Nearshore Processes; and, Coastal Circulation

**Marine Biology and Ecology** Marine Landscape Ecology; Marine Microbiology; Fish Ecology; Marine Physiology; Population Genetics; Invasion Ecology; Conservation Biology; Thermal Stress Physiology; and, Biomechanics

**Ocean Engineering** Remotely Operated Vehicles (ROVs); Autonomous Underwater Vehicles (AUVs); Ocean Instrumentation; Computer Programming; and, Artificial Intelligence

**Marine Geology** Coastal Erosion; Sediment Transport; Seafloor Mapping; Biogeochemical Analysis; Sedimentology of Upwelling Biogenic Sediments; and, Geomorphology of Coastal Environments

### **Research Partners**













#### **Professional & Scholarly Development**

10 weekly professional development workshops Writing, professional communication, ethics, grad school





SCHOOL 101

Statement of Purpose

Letter of Rec.

Chosen Considere?

#### **Professional & Scholarly Development**

Research seminars and post-REU conference support Technical skills (coding, scientific boating) & social events









# Thank you! Please ask questions...

reu@csumb.edu @MontereybayREU csumb.edu/reu



