CSU COAST Annual Meeting Overview and Updates
Advance our knowledge of marine and coastal systems
Ocean, coastal and coastal watershed research and workforce development
COAST Executive Committee

Dr. Joe Carlin, Cal State Fullerton
Dr. Yvonne Harris, Sacramento State
Dr. Andrew Lawson, CSU Monterey Bay (Presidential Liaison)
Dr. Karina Nielsen, San Francisco State
Dr. Sean Place, Sonoma State (Chair)
Dr. Kaylan Randolph, Cal Maritime
Dr. Laurie Richmond, Humboldt State
Dr. Christine Whitcraft, Cal State Long Beach
COAST Presidents’ Council

Dr. Jeffrey D. Armstrong, Cal Poly SLO
Dr. Erika Beck, Northridge
Dr. Adela de la Torre, San Diego State
Dr. Tom Jackson Jr., Humboldt State
Dr. Ellen N. Junn, Stanislaus State
Dr. Eduardo Ochoa, CSU Monterey Bay (Chair)
Dr. Robert S. Nelsen, Sacramento State
Dr. Mary Papazian, San Jose State
COAST Staff (Administratively headquartered at CSU Monterey Bay)

Dr. Krista Kamer, Director
Amy Vierra, Policy and Communications Consultant
Kimberly Jassowski, Program Analyst
Daniel Yim, Program Assistant
Funding

Annual contributions
- CO: $588K
- Campuses: $234K

Annual operating budget
- $750K-$950K

AY 2019-20
- One-time $3M allocation
Research, professional development, workforce training

Faculty, undergraduate and graduate student research support

Professional development for students
- Presentations at scientific conferences
- PAID professional internships

Equity, inclusion and diversity resources and training
Recent Successes

Dr. Andres Aguilar, Los Angeles

- Grant Development Program Award 2018-19
- $373,704 NSF Mid-Career Advancement Award
  - Genomic diversification and speciation along ecological gradients in a marine fish radiation
Recent Successes

Dr. Ritin Bhaduri, Stanislaus

- Multiple undergraduate student research awards
- $30,000 Fulbright Scholar Research Award

Published four peer-reviewed papers based on student work
Recent Successes

Dr. Ellen Hines, San Francisco

- Collaborative Resource Sharing Award 2012-13
- $300,000 Lenfest Ocean Program
  - New Research to Assess Marine Mammal Bycatch Risk in Chile
- $60,000 NOAA
  - Assessing Marine Mammal Bycatch Risk for Stock Assessment Reports
Recent Successes

Dr. Hilary McMillan, San Diego
Dr. Jasper Oshun, Humboldt
Dr. Amelia Vankeuren, Sacramento

- Grant Development Program Award 2019-20
- $314,325 NSF Improving Undergraduate STEM Education: Pathways into Geoscience (IUSE: GEOPATHS)
  - Developing a diverse hydrology workforce through an undergraduate hydrological research experience in a coastal California watershed
Recent Successes

Dr. Nyssa Silbiger, Northridge

- Grant Development Program Award 2019-20
- $799,551 NSF CAREER
  - Predicting ecosystem metabolism of rocky intertidal communities in warming and acidifying oceans
## Investments and follow-on funding

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Awards</td>
<td>$2,522,183</td>
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<tr>
<td>Faculty Awards (no SSINP)</td>
<td>$1,915,191</td>
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<tr>
<td>Faculty Awards (including SSINP)</td>
<td>$3,925,566</td>
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<tr>
<td>Extramural Funding to CSU</td>
<td>~$15 million</td>
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Training and scholarship
Supported over 1,500 students
Collective grant impact of faculty associated with COAST

• Contact each campus’ sponsored programs office with list of faculty members associated with COAST
  • On faculty email list, collective knowledge
• Receive expenditure data
• Filter to remove internal, non R&D awards
• RESULT: total amount of marine and coastal external R&D spending
## Contribution to CSU external R&D expenditures

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Awards</th>
<th>Number of Individual PIs</th>
<th>Expenditures</th>
<th>% of CSU total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AY 2018-19</td>
<td>341</td>
<td>148</td>
<td>$26,924,150</td>
<td>10.2</td>
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<tr>
<td>AY 2019-20</td>
<td>317</td>
<td>146</td>
<td>$25,894,978</td>
<td>10.3</td>
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</table>
Helping students identify strengths, goals and careers

Micah Pehrson, Cal Poly San Luis Obispo, Summer Intern
This internship has made me feel like I really could go into this field and gave me more confidence in myself and what I have to offer professionally.

Sierra Jarriel, Humboldt State, Undergraduate Student Researcher
Having my own research project has completely changed my undergraduate experience ... A Master’s degree is now a clear goal of mine.

Shawn Hannah, San Jose State, Graduate Student Researcher
COAST funding was essential for me to advance my knowledge, skills, confidence, and data collection ... obtaining funding in itself is something that not only increases my confidence, but the confidence future employers and advisors have in me.
Danny Dorado, undergraduate student at Bakersfield

This experience has truly been life changing for me ... I finally feel like I am where I am supposed to be as a queer person of color, I do not have to hide who I am here, I am fully accepted. Not sure if anyone can understand how that feels after a lot of things I have experienced in my life, I am so grateful. Hoping for abundance for COAST in the future—it is necessary for people like me.
Sustained equity, inclusion and diversity campaign

Committed to creating a more inclusive and diverse marine and coastal science community in the CSU and California
Equity, inclusion and diversity in our 2022-27 Strategic Plan

First value

*Diversity, equity and inclusion*: COAST strives to create a more inclusive marine science research community in which individuals from diverse backgrounds and groups that have been historically excluded from marine science and related fields are included, supported, and valued.

First goal

Create a more inclusive and diverse marine and coastal science research community within the CSU.
Empower faculty members to be agents of change

Raise awareness among faculty members and enable them to be allies for their colleagues and students

- Be better mentors to students
- Implement more inclusive teaching strategies
- Lead and support institutional change
Workshops, speakers and panels

Inclusive Diversity in Scientific Research, Teaching and Mentoring
Panel November 2020

Virtual Implicit Bias Workshop January 2021

ADVANCEGeo trainings Fall 2021/Winter 2022

- Implicit Bias and Microaggression
- Active Bystander Intervention
- Code of Conduct
Use current funding opportunities to promote DEI

Incorporated into COAST funding opportunities

- Principal investigators (PIs) who are part of a group that is historically underrepresented in marine and coastal science, including faculty members who are Hispanic/LatinX, Black or African American, Asian, Pacific Islander, American Indian or Alaska Native; female; LGBTQIA+ and faculty with disabilities are strongly encouraged to apply. Applicants of any race, ethnicity, color, religion, gender, gender identity or expression, sexual orientation, socioeconomic background, national origin, age, dis/ability or veteran status are welcome.

Similar language in student funding announcements.
Faculty are expected to recruit historically excluded students

- When awardees are selecting students to be involved in the project, it is expected that faculty members not only consider but **actively recruit students from groups that are historically underrepresented in marine and coastal science**, including students who are Hispanic/LatinX, Black or African American, Asian, Pacific Islander, American Indian or Alaska Native; female; LGBTQIA+; economically disadvantaged; veterans; and students with disabilities. Students of any race, ethnicity, color, religion, gender, gender identity or expression, sexual orientation, socioeconomic background, national origin, age, dis/ability or veteran status should be welcomed and encouraged to participate in STEM research.
Incorporated into evaluation criteria:

- **Describe your strategy for actively recruiting students from groups that are historically underrepresented in marine and coastal science, including students who are Hispanic/LatinX, Black or African American, Asian, Pacific Islander, American Indian or Alaska Native; female; LGBTQIA+; economically disadvantaged; veterans; and students with disabilities.**

- **Describe how historically underrepresented and other marginalized students will be made to feel included and supported during their participation in this project.**

Use current funding opportunities to promote DEI
Field experiences

- Are often transformative
- Increase retention of excluded groups
- Can be prohibitively expensive

Remove financial barriers to field experiences
New $50K student program to defray cost of field experiences

Personal field gear
Field courses fees
Travel and lodging for remote field work

Look for announcement in early 2022!
Is it a good experience or a bad one?

For students new to geoscience, especially those who didn’t have access to hiking and camping trips growing up, many items that seasoned field geoscientists take for granted, such as sturdy boots, good waterproofs, and a reliable backpack, must be purchased. This financial burden can be substantial, and typically occurs at a time when students face numerous other new costs. As a result, students often go to the field unprepared and are unlikely to enjoy the experience — having cold and wet feet for a week can understandably erode the desire to learn. Practical aspects of being outdoors can also be daunting for the unfamiliar. Unanswered questions about how to go to the toilet or deal with a period have a range of serious consequences, from dehydration to infections. Universities can do much to
Questions?