**Interdisciplinary nature of the REU program**

<table>
<thead>
<tr>
<th>Departments represented by faculty and near-peer mentors*</th>
<th>Socials and Enrichment Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>USC Marine Environmental Biology</td>
<td>Hiking and discussing the natural history of Catalina</td>
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<tr>
<td>USC Molecular and Computational Biology</td>
<td>Kayaking and exploring different geological structures</td>
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<tr>
<td>USC Spatial Sciences Institute</td>
<td>Documentary night: Chasing ice</td>
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<tr>
<td>USC Earth Sciences</td>
<td>Kayaking and beach camping</td>
</tr>
<tr>
<td>Georgia State University Biology</td>
<td>Field work with the Catalina Conservancy</td>
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<td></td>
<td>Tour of the NASA Jet Propulsion Laboratory</td>
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</tbody>
</table>

*projects included cross-disciplinary themes of conservation genetics of key coastal species, physiology of harmful algal bloom species, an evaluation of CO2 cycling in coastal habitats, GIS mapping of coastal habitats, stress response in bivalves, and long-term time-series analysis

**Training and Professional Development Activities**

- GIS and GPS tutorial and training
- Oceanographic training cruise to teach methods in oceanography**
- Lab safety training to work independently in labs
- REU presentation of proposals to the WMSF science community
- REU proposal writing and final reports
- Discussion with faculty about research and graduate school**
- Special topic: Applying to graduate school**
- Special topic: Effective poster design**
- Special topic: Graduate student panel**
- REU Poster Symposium on USC main campus
- **highly rated by REUs in post-program surveys

**Speaker** | **Seminar Titles**
Dr. Darren Ruddell, USC Spatial Sciences | Introduction to GIS and GPS
Dr. Su Jin Lee, USC Spatial Sciences | GPS: the technology
Dr. Karla Heidelberg, USC Biology | Introduction to Ocean Sciences
Lauren Czarnecki, USC Wrigley Institute | Introduction to Marine Protected Areas
Dr. Jeanette Yen, Georgia Tech Biology | Biologically inspired design for interdisciplinary education
Dr. Marc Weissburg, Georgia Tech Biology | Introduction to Chemical Ecology
Tom Nolan, NASA Jet Propulsion Laboratory | Seeing from here to there: Earth Science from space, and The Mars Rover
Dr. David Caron, USC Biology | Harmful algal blooms along the Southern California coast
Dr. Daniel Campos, USC Biology | Next-generation sequencing technologies: welcome to the genomic era
Charlie de la Rosa, UCLA EEB | Human dimensions of conservation: science, policy, and people

**Co-PIs**: Dr. Karla Heidelberg and Dr. Roberta Marinelli
Coordinator: Dr. Diane Kim
dornsise.usc.edu/wriley/reu/
www.facebook.com/UscWiesREU
#WIES_UP @WIES_UP
wies-reu@usc.edu
8-week program at the USC Wrigley Marine Science Center on Catalina Island, CA

**Clearly defined program goals and expectations**

- Program Handbook for mentors and REUs
- Updated REU website with project information

**Pre- and post-program surveys** (Qualtrics)

- The **pre-program survey** provided a good sense of student expectations, as well as their strengths, weaknesses and interests. This information was used to organize seminars and workshops.
- Comparing the data from the pre-program survey to **post-program surveys** allowed us to gauge how much the students gained from participating in the REU program, and helped us identify improvements we can make for future REU cohorts.
- We also had a **survey for mentors**, which provided very useful information about how we can create the best mentorship situation for both mentors and REUs.

**Tracking and Engaging students**

- Facebook and other social media are key
- One tweet/instagram a day Challenge
- Ambassador of 2013 Cohort – Alle Martinez
- Annual email that will automatically populate database (similar to USC Alumni network)

**Recruitment**

- Participation on listservs, panels and at conferences that serve underrepresented minorities (e.g., shared table at 2013 SACNAS conference, organized by Jared Shaw at UC Davis Chemistry REU, IBP listserv, BRIDGE panel)
- Local universities and colleges in Los Angeles provide a natural source of diversity

**Synergistic activities with other programs**

- Socials and Enrichment Activities
- Spring 2014 REU Poster Symposium
- REU Coastal Ocean Systems and Sustainability: year 1 strengths
- REU presentation of proposals to the WMSF science community
- Urban Ocean Systems and Sustainability: year 1 strengths
- Office of Sustainability leadership training: students and staff
- Oceanographic training cruise to teach methods in oceanography**
- Harmful algal blooms along the Southern California coast
- Biological and ecological survey of the Santa Monica basin
- Next-generation sequencing technologies: welcome to the genomic era
- Socials and Enrichment Activities

**Seminar Titles**

- Introduction to GIS and GPS
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- Biologically inspired design for interdisciplinary education
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- Seeing from here to there: Earth Science from space, and The Mars Rover
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- Human dimensions of conservation: science, policy, and people

**Conference**

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