The impact of the Scripps Institution of Oceanography REU site on increasing diversity in ocean and earth sciences

1 Defining the Challenges
The OCE REU program exists to help attract and retain a diverse pool of talented undergraduate students into graduate school and careers in earth, marine and atmospheric sciences at a national level.

Challenges:
- How to define diversity?
- How to recruit diverse students?
- How to assess success in increasing the pipeline of diverse students in graduate school and careers?

2 The Scripps Undergraduate Research Fellowship: SURF
Program Components include an original research project, career seminars, GRE preparation class, writing a draft NSF GRFP, final symposium presentation, field trips, dinners and social events.

Funding for this REU site is provided by NSF Division of Ocean Science

3 Recruiting Diverse Students
Table 3. SURF Participant Demographics and Academic Preparation.

<table>
<thead>
<tr>
<th>Year</th>
<th># of participants</th>
<th>Predominately Undergraduate Institution</th>
<th>Underrepresented minority</th>
<th>UCSD student</th>
<th>Female</th>
<th>Academic Status</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>11 (10)</td>
<td>54%</td>
<td>54%</td>
<td>72%</td>
<td>9%</td>
<td>Soph. 27% Junior 27% Senior</td>
<td>3.3</td>
</tr>
<tr>
<td>2012</td>
<td>20 (13)</td>
<td>70%</td>
<td>75%</td>
<td>65%</td>
<td>15%</td>
<td>Soph. 65% Junior 20% Senior</td>
<td>3.3</td>
</tr>
<tr>
<td>2013</td>
<td>18 (10)</td>
<td>22%</td>
<td>72%</td>
<td>72%</td>
<td>22%</td>
<td>Soph. 50% Junior 28% Senior</td>
<td>3.4</td>
</tr>
<tr>
<td>2014</td>
<td>20 (18)</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td>15%</td>
<td>Soph. 55% Junior 30% Senior</td>
<td>3.4</td>
</tr>
<tr>
<td>2015</td>
<td>23 (19)</td>
<td>35%</td>
<td>64%</td>
<td>59%</td>
<td>25%</td>
<td>Soph. 66% Junior 15% Senior</td>
<td>3.4</td>
</tr>
<tr>
<td>2016</td>
<td>21 (16)</td>
<td>43%</td>
<td>71%</td>
<td>71%</td>
<td>33%</td>
<td>Soph. 43% Junior 24% Senior</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Our recruitment targets URM students, but additionally seeks to reach diverse pools of students that were not as well positioned for success in oceanographic and earth sciences. Students in these cohorts reported significant gains in the goal areas (see evaluation results).

4 Evaluation Results

5 Retaining Diverse Students
Results from the annual follow-up survey of academic and career progress of all past SURF participants, conducted in spring and early summer of 2016, show that the SURF program has been successful in increasing the diversity in graduate school and careers in ocean and earth sciences at a national level.

Jane L. Teranes
Scripps Institution of Oceanography
UC San Diego