# Best Practices LDEO REU Site

## Dallas Abbott, Lamont-Doherty Earth Observatory of Columbia University

### Maximizing Student Safety
1. Students taught emergency procedures and numbers, advised who to turn to with problems.
2. All students and advisors given all students emergency contact information before start of program. Advised to keep with them and accessible at all times.
3. Coordinator or assistant on call at all times.
4. All students must take fire and lab safety training before they are allowed in any laboratory.
5. Students given option to purchase local health insurance for the summer.

### Maximizing Advisor Engagement
1. Advisors post project description emphasizing creative science that they would like to see done.
2. Students select research areas of interest.
3. Advisors select students after engaging top few candidates in conversation.
4. Student’s research is directly supervised by their advisor.
5. Students write up their results so that advisor has a record of their research.

### Maximizing Student Engagement
1. Students begin dialog with their advisors to define their project before arrival.
2. Students introduced to the research community through reception, and one-on-one at every opportunity by coordinator, advisors and other staff.
3. Advisors provide daily one-on-one training, which is supplemented by workshops in scientific writing and poster preparation.
4. Students talk about their research in structured group settings and at final poster session.
5. Funding provided to present results at national meetings.

### Maximizing Student Satisfaction
1. Research projects vetted for suitability for undergraduates and for involving elements (e.g. fieldwork, lab work, social relevance) attractive to them.
2. Projects are cutting edge science where answer is unknown and the student can become the expert.
3. Only advisors committed to spend time with the student. No absentee “big names”.
4. Students given access to resources need to do the research.
5. Students invited to participate in research and social life of the institution and continually reminded of this invitation.

---

**Field Work**

**Field Trip**

**Final Poster Session**