

In the second breakout session at OSER, participants broke into three parallel groups to consider topics related to meeting the professional development needs of graduate students, and the value of mentoring in the field of oceanography, and retention of students in the programs.

TOPIC 1: PROFESSIONAL DEVELOPMENT NEEDS

What do you feel are the professional development needs of upper-level undergraduates, terminal Master's students, PhD students, and post-docs? Are the needs different with each of these levels? With and without academic aspirations? How can we better train students to meet these needs? What is the best method?

The group was in agreement that mentoring programs are vital in helping train and prepare students and early career professionals. Mentoring should be available to everyone across the ocean sciences community, from senior students mentoring younger students, to senior faculty mentoring younger faculty, to senior professionals mentoring graduating students. Encouraging a culture of professionalism and collaboration by teaching students to take advantage of opportunities and to seek advice from mentors other than their advisors, be it through societies, conferences, or other universities, is seen as important by all participants. Discussants also suggested that webinars or seminars can be useful in bringing together mid- to senior levels professionals in all areas of ocean sciences to talk about their experiences can help young students and early career professionals be prepared to make decisions about their own career paths. Establishing a community within ocean sciences will be important as well, and the discussants felt that perhaps this is an area where OSER could help; by posting information and resources for networking and community engagement on the OSER website.

TOPIC 2: MENTORING

Is there any value to a mentoring program, designed and implemented by the oceanographic community which collectively addresses issues of retention, career choice, and diversity? If so, taking MPOWIR as an example, how would you expand the program-include men, include women from other field of study, extend the size of the program with the focused still on women in physical oceanography?

The participants felt that mentoring programs are worthwhile, and the MPOWIR program presents an excellent model for a mentoring program. The disparity of women in physical oceanography in terms of attrition should be emphasized and the success of the program led OSER participants to believe that it could also be successful in other areas of the field.

In terms of encouraging underrepresented minorities to enter or stay in the geo/ocean sciences, the participants felt that the needs of under-represented groups are different from those of women in the ocean sciences, and therefore should be approached differently. A "coaching" system might be more effective; starting with the students before they consider applying to college. Engaging under-represented students to the career possibilities in the ocean sciences that could be relevant to their culture or region (environmental justice, for example), and then supporting them through the early course work in STEM education, could be beneficial in retaining these students. Utilizing the existing efforts of organizations and Universities, such as the Society for Advancement of Chicanos and Native Americans in Science and Texas A&M University's retention program, could provide platforms through which to retain these students.

TOPIC 3: INCREASING RETENTION

How do we build community on campus and in the departments that increases retention and engagement for all students? How can the TAMU program be expanded to successfully retain students of all backgrounds?

The participants agreed that increasing the presence of the ocean sciences as a whole at national meetings in order to reach out to students and early career professionals, and help make them more aware of opportunities available to them, is a good approach. A “Student Sunday” at national meetings, where professional development seminars and resources could be provided, was presented as one possible option.

In terms of retention, the OSER participants continued to discuss the role of mentoring in guiding students in their career paths. Mentorship needs to be looked at as more of a collective responsibility, among professors and senior level professionals, and it needs to be supported and embraced at the Dean’s level at universities. Recruiting faculty might consider asking questions about a perspective faculty member’s feelings about mentoring in order to enlist the best faculty that will continue developing a community supportive of mentoring.

The group also felt that providing long range career advice at the associate professor level, having professionals and faculty fill out work place satisfaction surveys, and providing incentives to encourage the promotion of community instead of competition, might help organizations gain insight into how to better develop camaraderie and community in the field of oceanography, thereby increasing retention.