UMass Boston Coastal Research in Environmental Science and Technology (CREST) REU Skills Exchange

Summary and Highlights:

Throughout the 10 week CREST REU program, there are a variety of formal peer-review scientific communication and responsible conduct in research workshops. However, in week 9, CREST scholars participate in a less formal activity called “Skills Exchange” in which train their fellow scholars in a field, lab, or analysis skill that they have mastered during the summer. This experience is designed to reinforce the scholar’s ownership of their research, build his or her confidence as a scientist, and further develop the cohort.

- Provides scholars a chance to practice communication skills and expand their experience in technical speaking and presenting.
- Offers scholars the opportunity to “show-off” their new skills, building their confidence in themselves as scientists.
- Open-ended guidelines allow scholars to be creative, increasing their ownership over the activity and skill.
- Enhances cross-disciplinary training by providing other scholars in the cohort a glimpse into the research in a different subject area and helps them appreciate what goes into “that data point” on a graph or figure.

Activity guidelines:

1) Scholars chose a “skill” that is essential to their research project and that they believe will be of interest to the other scholars in the program. The choice is left completely open-ended and has ranged from a method used to collect data such as a technical laboratory or field research skill, a computation or modeling tool demonstration, or a qualitative research method. It could also be a skill used to analyze or communicate results to a specific audience.

2) Scholars have a 15-minute time slot in which they have 10 min. to conduct a field simulation or laboratory visit demonstration, play a self-made video, or give an oral presentation of the skill to the other scholars in the program. These presentations are informal, provide technical details, but communicated in a manner that scholars studying different disciplines can understand. As in the choice of skill, the manner of the presentation (e.g. video, presentation, lab or field demonstration) is also open-ended.

3) The actual skill exchange occurs over a three hour period, usually as a morning or afternoon activity. The students are allowed to present in a conference room (that we reserve for the event) or in their laboratory or at a site on campus (often a “mock” field site). The event is organized such that there is time in the schedule to hop from one location to another over the campus.

4) Other scholars are encouraged to ask questions, but there is no formal assessment. Scholars are encouraged to have fun and practice their presentation skills in an informal setting.