

WHOI MC&G Pod 3
Session 6 Deliverable

Best practices identified by our pod for ocean-going research:

1. We note that taking the time to compile and provide information before, during and after a cruise, is, in itself, an important method to signal to scientists that their safety and comfort are a priority
2. In general, there are inherently more barriers to oceanographic research compared to other geoscience field work. We identified two concepts that address this issue:
 - a. Clearly define far in advance the requirements and conditions of the research plan to potential participants so they can make the most informed decision for themselves.
 - b. Identify and describe tasks by their requirements. A Chief Sci can make these tasks known (“a sign-up list”) before the cruise, and *allow participants* to self-identify what tasks they are capable of.
3. We feel that much of the preparation work falls to a PI/mentor to prepare personnel **before** a cruise. This important task includes:
 - a. Clearly define what daily life looks like, without assumptions about what a scientist does or does not know (e.g. three meals a day, being quiet to respect crew when sleeping, comfortable clothing)
 - b. Provide any necessary equipment to create a comfortable and safe environment (e.g. buying steel-toed boots, bad weather gear)
 - c. Review the code of conduct, WHOI does have a publicly available [conduct statement](#) for going to sea
 - i. There are currently **no** clearly defined implications for breaking code of conduct
4. An important part of field work safety plans is usually a method for removing yourself from the situation. While this is not totally possible on a research vessel, all scientists should be made aware of how to address any problems or concerns they have onboard:
 - a. In general, the task of resolving concerns falls to the Chief Scientist. See comments below about effective training for Chief Sci
 - b. UNOLS requires all institutions to provide a method for complaint resolution. Here is WHOI’s publicly available [complaint resolution flow chart](#)
 - c. Knowing that there is a connection between land and sea can be an important method for feeling less isolated in a potentially unsafe environment. A satellite phone and/or email address could be provided and be monitored ideally by a land-based, anonymous party like an Ombuds Office
5. All personnel should be provided effective training for situations with respect to harassment, discrimination, and relation. Feeling truly prepared for any situation is an important part of feeling safe.
 - a. UNOLS did recently update their website with a Maintaining civility [module](#) though it’s unclear how this is actually implemented (supposed to be mandated by Chief Sci for participants to watch)
 - b. Chief Scientists WANT bystander, de-escalation, etc. trainings

- c. The training should implement research based on living in confined spaces. For e.g. what are the protocols aboard the Space Station?
 - d. Creating a more formal way of gaining knowledge on how to deal with difficult situations from successful Chief Scientists would be important, rather than word of mouth
- 6. Improving the experience of personnel onboard, as well as the effectiveness of any training (current or in the future), requires critical assessment. The pod agreed that while a UNOLS-wide assessment brings challenges, WHOI could develop their own post-cruise assessment to collect a wide range of data from sea-going experiences. We recommend:
 - a. The assessment should be supplied to all who go to sea, at the institution, or elsewhere
 - b. The assessment should be anonymous but should identify key characteristics, particularly if it is a person's first experience at sea
- 7. The culture of sea-going research will define its safety. Ultimately we envision a multi-institutional summation of any URGE deliverables that considered sea-going research would be most effective in creating a safe working environment onboard research vessels.