## In situ sensing









Successes	Challenges	Opportunities
New capabilities coming online (especially in bio and chemical sensing)	<ul> <li>How do we identify new commercial sensors that could become "standard"?</li> <li>How do you move from a prototype to a "standard sensor" that many users have access to?</li> <li>"Valley of death"</li> </ul>	<ul> <li>New prototyping centers</li> <li>How does the community learn about new sensors?</li> <li>What are the needs of the community?</li> <li>What sensing technologies exist that could be brought to deep submergence science from other fields?</li> </ul>
Vehicles are great test platforms & vehicle teams are very helpful for testing/demonstrating new technologies	Iteration is difficult based on cruise schedules	<ul> <li>Are there other approaches for testing?</li> <li>How can sensor developers best work with the operators before, during, and after cruises?</li> </ul>
Funding opportunities for ocean technology development (NSF, NOAA, philanthropies)	Often hard to align funding with a cruise opportunity	<ul> <li>Are there better ways to sync operators and funds?</li> </ul>