

# **Ocean Studies Board**

## **Committee on Future Needs in Deep Submergence Science**

- **6 month Study**
- **Announce the Committee - ~ 21 March**
- **The statement of task:**  
“Recognizing the likely retirement of the submersible ALVIN, this study will evaluate the future directions and facility requirements for deep submergence science and examine the range of potential applicable technologies that can support basic research in deep sea and seafloor areas.”

# OSB Study - Continued:

**Specifically, the Committee will:**

1. assess the continued role of human occupied vehicles in deep submergence science, within the context of current and projected capabilities of remotely operated and autonomous vehicles, telepresence, seafloor observatories, and other non-human occupied technologies;
2. make recommendations regarding the mix of new facilities needed to continue to carry out world-class deep submergence science; and
3. discuss innovative design concepts and technological advances that should be incorporated into any new submersibles to support current and future research needs.

# OSB Study - Continued:

Recommendations will be made within the constraints (established by NSF) that total construction costs (including related costs such as modifications to support ships) shall not exceed the upper practical limit for the Division of Ocean Sciences' "mid-sized infrastructure" (roughly 10 percent of the division's annual budget or approximately \$25M) and total operating costs shall be similar to the operating costs for ALVIN. If multiple types of vehicles are deemed necessary, suggestions will be made concerning the optimal phasing of implementation over several years. Cost estimates will be supplied by the National Deep Submergence Facility, other submersible owners and operators, or outside companies if needed.”