December 2, 2013

Agenda

Deep Submergence Science Committee (DeSSC)
Early Career Scientist Program
J.W. Marriott, 515 Mason Street, San Francisco, CA
Room: Skyline A
December 7-8, 2013

Saturday, Dec 7th:

1:00 – 5:00 pm: Early Career Scientist Program - J.W. Marriott, 515 Mason Street
6:30 – 9:30 pm: Dinner Seminar – Jasper's at Serrano Hotel, 405 Taylor Street

Sunday, Dec 8th:

9:00 am – 5:00 pm: DeSSC Community Meeting - J.W. Marriott, 515 Mason Street

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Day 1: Saturday, December 7, 2013 – J.W. Marriott, 515 Mason Street – Skyline A Room

1300 Opening Remarks, Meeting Logistics, Introductions (Peter Girguis)

- Overview of the agenda
- Introductions

1315 Introduction to UNOLS, DESSC, NDSF, and the Federal Agencies

- UNOLS, DESSC and the Ship Time Request System (Annette DeSilva - 5 minutes)
- The National Deep Submergence Facility (Andy Bowen - 5 minutes)
- Introduction of Agency Representatives (Brian Midson and Tim Schnoor - 5 minutes)

1330 Breakout sessions: Pete Girguis will provide a brief description of the break-out sessions. Breakout sessions will all run in parallel sessions. Participants will have the opportunity to attend three sessions.

Session I:	1330 – 1415
Session II:	1415 – 1500
Break:	1500 – 1515
Session III:	1515 - 1600

- **Introduction to Deep Sea Research** – (Deb Kelley, Mike Perfit, and Karyn Rogers)
- **Grant Writing Workshop** - (Brian Midson, Anton Post, Dave Emerson, and David Valentine)
- **Emerging Technologies** – Emerging technologies for geochemistry, geology and biology. Developing and incorporating technologies. (Scott Wankel and Pete Girguis)
- **Data Management** – (Vicki Ferrini)

1600 DeSSC Ocean Interest Group Initiative - Jeff Marlow

1610 Open Discussion (Moderated by the DeSSC Early Career Scientist Committee)

1700 Adjourn meeting, break before dinner

1830 Dinner Seminar - Jasper's at Serrano Hotel, 405 Taylor Street

- Guest Speaker – Dr Charlie Paull (MBARI) will provide a talk on "Seafloor Imaging"

Session Descriptions

Introduction to Deep Sea Research - Deb Kelley, Mike Perfit, and Karyn Rogers,

Deep sea research can be as challenging as it is rewarding, but the route from a good scientific question to a well-executed research program can be circuitous. In this working group we will shed some light on how deep sea research is done, how it differs from other field-based research, and the resources that are available to scientists trying to undertake ocean-going expeditions. We will give a broad overview of (1) available vehicles and other technologies; (2) planning and proposing a research project/cruise; (3) the funding structure and cruise planning (pre- and post-cruise) process; (4) tasks and activities at sea; and finally we will discuss (5) what's different about doing research in the deep ocean and on ocean-going research vessels. This working group is ideal for EC scientists who are new, or relatively new, to deep sea research and want to learn more about opportunities for joining ocean-going expeditions, but aren't quite ready to undertake an expedition of their own.

Grant Writing Workshop – Brian Midson, Dave Emerson, Anton Post, and David Valentine

This working group will discuss the elements of developing a competitive NSF proposal that aims to utilize resources managed by the National Deep Submergence Facility and requires the UNOLS fleet support. Topics that will be covered include the central importance of concept development for hypothesis driven research; what is meant by broader impacts; the nuts and bolts of budgeting a proposal, and complying with NSF requirements for grant submission. We will provide an overview of special requirements for a proposal that requires deep-sea vehicle and ship time, including what to expect in the event that you are funded. An emphasis will be placed on resources available and/or steps you should take to help mentor you through the process of obtaining your first successful grant to get to the bottom of the ocean.

Emerging Technologies – Emerging technologies for geochemistry, geology and biology. Developing and incorporating technologies. (Scott Wankel and Pete Girguis)

There are many technical challenges associated with working in the deep sea, including the tremendous pressures, the corrosive nature of seawater, the extremes in temperature (both cold and hot, in some cases). These issues continue to impede the development of analytical and sampling technologies that are effective in the deep sea, but recent trends towards miniaturization and the coincident reduction in power demand has led to an increase in the development of in situ technologies. Here we will present some recent advances in deep sea technologies, and also provide advice on how to approach the development of your own instruments and samplers.

Data Management – (Vicki Ferrini)

Stewardship of scientific data is fundamental to enabling new data-driven research, and ensures preservation and accessibility of high-quality data. Well-documented data ensure scientific reproducibility and enable syntheses and comparisons of data far beyond the initial scope and goals of the scientific program that acquired individual data sets. In addition, there are increasing demands on researchers to properly manage their data to ensure that data are preserved for future (re-)use. This session will provide an overview of available tools and services relevant to NDSF assets that facilitate data management including resources for developing data management plans, domain-specific data systems that host related data, and an overview of data publication and citation