UNOLS COUNCIL MEETING 8:30 A.M., Thursday, 14 October 2010 National Science Foundation, Stafford II, Room 555 4201 Wilson Boulevard Arlington, VA

Meeting Minutes

Executive Summary:

The UNOLS Council met at the National Science Foundation (NSF) in Arlington, VA on the morning of October 14, 2010. Major discussion topics included:

- Antarctic research vessels and UNOLS, OPP, and OCE
- Greening the UNOLS Fleet initiatives
- UNOLS Evaluation of the Decline in Ship Time Requests
- Formation of a new UNOLS Standing Committee The Ocean Observing Science Committee
- BP Research Funding for the Gulf of Mexico
- An update on the Schmidt Research Vessel Institute

Appendices:

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III	Agency Recommendations for 2011 Fleet Operations
IV	Ship Time Demand Decline Survey
V	Summary Report of FIC Meeting
VI	Antarctic Research Vessels and UNOLS
VII	Polar Research Vessel SMR Refresh
VIII	<u>R2R Update</u> (~5.8 MB)
IX	Gender Climate at Sea
Х	Feasibility of a More Flexible UNOLS
XI	BP Research Funding for the Gulf of Mexico
XII	Schmidt Research Vessel Institute Update (~1.2 MB)
XIII	Post Cruise Assessment Report Subcommittee Report (~1.5 MB)
XIV	NRC study: An Ocean Infrastructure Strategy for U.S. Ocean Research
XV	DESSC Nominations
XVI	UNOLS Goal

Action Items:

1) UNOLS Vessel Operations in the Gulf of Mexico: Continue to contact Bill Streever of BP for RFP information on Gulf of Mexico research (Jon Alberts)

2) Ship Time Demand Survey

• Finalize a community survey to evaluate ship time demand (Annette DeSilva, Ad hoc

committee, and input from the Council)

• Broadly distribute the survey and collect data (UNOLS Office)

3) Antarctic Research Vessels and UNOLS

- Continue efforts to coordinate facilities with UNOLS, OCE, and OPP
- Conduct an refresh of the 2006 Polar Research Vessel SMRs (PRV Committee and UNOLS Office)

4) Greening the UNOLS Fleet – Prepare a proposal to hold a workshop (Bruce Corliss and the UNOLS Office)

5) Post Cruise Assessment Report (PCAR) Review

- Subcommittee members will continue their review of PCARs
- UNOLS Office will continue to compile and summarize PCAR data
- Explore implementing a new on-line PCAR.

6) Investigate the feasibility of a more flexible UNOLS (Subcommittee and UNOLS Office)

- Prepare a questionnaire for R/V operators that will solicit information on past experiences from Charters and research cruises funded by non-government sources Pros, cons, challenges, benefits, and lessons learned
- Gather information on concerns/requirements with regard to non-government funding.

7) Gender Climate at Sea (UNOLS Office)

- Contact WorkPlace Answers to determine options for implementing an on-line training course as a pilot program
- Collect information from users for a year's period
- Then develop a customized program if needed.

8) UNOLS Outreach/Mentoring Initiatives Update – Prepare a proposal for an Early-Career Chief Scientist Training Cruise Program (Clare Reimers)

Meeting Minutes

Call the Meeting: Vernon Asper, UNOLS Chair, called the meeting to order and provided an opportunity for introductions. The agenda for the meeting is included as *Appendix I*. The participant list is included as *Appendix II*.

The meeting minutes from the June 2010 Council Meeting were accepted (Rabalais/Corliss).

Agency Recommendations for 2011 Fleet Operations – A letter was prepared by NSF, ONR, and UNOLS and submitted to the Council on 15 September 2010. The letter is included as *Appendix III*.

The recommendations include the following:

• Maintenance periods in the vessel homeport are strongly encouraged both as a cost saving measure as well as an opportunity to conduct preventative maintenance.

- If no additional work is identified when the final schedules are completed, it may be necessary for NSF to consider providing some funds to support extended maintenance or partial layup periods for the NSF-owned ships, *Wecoma* and *Point Sur*.
- The agencies encourage operators of all ships to find ways to reduce costs and seek appropriate opportunities to support research and education programs supported by other funding sources.
- The agencies emphasize to operators of institution-owned ships that they must decide if their planned schedule can support the cost to operate.

UNOLS Evaluation of Decline in Ship Time Requests – Annette DeSilva reported that a draft on-line survey has been created and is available at: <u>http://www.surveymonkey.com/s/unols_test_survey</u>. Many of the questions on the form were taken from a survey that was conducted by Woods Hole Oceanographic Institution (WHOI) many years ago. The survey has been updated with suggestions from the Council members. Details are included in slides that are contained in *Appendix IV*.

Historical data will be used to reflect actual usage. This survey will collect information regarding future ship time demand.

The next steps for this effort will be to finalize the survey form and broadly distribute the Survey URL. The UNOLS Office will compile the data and present the preliminary results at the winter Council Meeting.

Summary of Fleet Improvement Committee (FIC) Meeting - Clare Reimers, FIC Chair, provided a summary of the FIC meeting on October 13, 2010. Her slides are included as *Appendix V*. Some of the topics included:

- The Regional Class Research Vessel (RCRV) funding mechanism is not yet identified at NSF. Solicitation for operator(s) of the RCRV is under development for one to three vessels. Release of the solicitation could be in early 2011. The academic lead institution will be responsible for the RCRV design refresh and expected to show a team with significant capability in directing vessel design and mission equipment specifications (similar to the *Sikuliaq* process).
- The FIC recommendations relating to NSF's RCRV design issues were reviewed with follow-up from Bob Houtman.
- NAVSEA requested input from FIC on specific mission equipment systems (MES) selections for the Ocean Class Research Vessels (OCRV). The Navy has developed a proposed Baseline Mission Equipment Specification consistent with known available AGOR Program budget. Actual ship construction costs and availability of additional funding sources will determine to what extent equipment beyond the Baseline can be provided. Additionally, FIC is tasked with suggesting members for a scientific advisory committee for the OC AGORs. FIC will work with the Navy to define the tasking for the committee.
- During the FIC meeting pictures of the R/V *Sikuliaq* bridge mock-up and ADA stateroom layouts were reviewed.
- R/V *Marcus Langseth* operations and capabilities were reviewed by Sean Higgins. Two modifications to the vessel have been recommended; one to the main deck winch and winch house installment, and the other to the stern/hydroboom.

- The FIC has been tasked by NSF to prepare a document with updated service life end dates for all UNOLS vessels. A new approach to establishing end dates is to be applied that is based on ship inspection assessments of material condition and technological capabilities.
- Alex Isern reported that the National Science Board has advised a refresh of the SMRs for a Polar Research Vessel. UNOLS will solicit 8-9 committee members for the SMR refresh project.
- Clare reported on efforts to organize a Chief Scientist Training Workshop (CSTW). Two principal concerns of UNOLS today are (1) young investigators, especially those from non-operating laboratories, need opportunities to learn how to gain access to ship time and what ships offer for specific types of research, and (2) running a successful research cruise requires leadership and communication skills and knowledge of Chief Scientist responsibilities. A UNOLS CSTW will serve as a major forum for teaching young scientists how to effectively plan for, acquire, utilize and report on time at sea for academic research and education.
 - Peter Wiebe Will the workshop be focused at students or PhDs? Clare Initially the workshop will be focused at the junior faculty level, then expand to students.
- Lastly, Clare reported that NSF has requested that the FIC consider new UNOLS Vessel Classes, which would consist of four classes. The suggested new model from NSF is:
 - Global (includes *Sikuliaq*)
 - Ocean (includes intermediates)
 - Regional
 - Local (to include *Walton Smith*)
 - NSF's thinking is that the classes should be based on:
 - Simplicity 4 classes are easier to grasp.
 - What the ship is capable of doing not what the ship is necessarily doing now.
 - Ownership should not be a discriminator
 - Small variations in length, tonnage, science berth, deck space, etc. also should not be discriminators.
 - Clare summarized the new class system (see slides). The FIC will consider this in the coming year.

Ocean Observing Science Committee (OOSC) – A ballot measure is before the UNOLS membership to establish the new OOSC standing committee. During the summer meeting the OOSC Terms of reference were approved by the Council. John Morrison, the Chair of the ad hoc committee to form the OOSC, reported the ad hoc committee has been working to identify members for the OOSC. A call for nominations was announced. About 30 self-nominations and nominations were received. The ad hoc committee worked to review the nominations and identify members.

The OOSC membership will include seven members, but initially the ad hoc committee recommends the following individuals:

- Larry Atkinson
- Mary Jo Richardson
- Emmanuel Boss
- Steve DiMarco
- Suzanne Carbotte.

Larry has agreed to serve as Chair for one year.

The ad hoc committee recommends the appointment of the five nominees pending the formation of the OOSC by the membership. A motion was made to establish the membership of the OOSC with the five nominees pending approval of the formation of the OOSC by the UNOLS membership. (Morrison/Wiebe)

Discussion:

- Nancy Rabalais requested more information about the OOSC nominations and process.
- John Morrison The ad hoc committee reviewed many, many names and held many phone meetings. This was the group that best represented the various areas.
- One Council member indicated that he feels conflicted because he is associated with OOI. However, he has concerns about a specific nominee who is recommended for OOSC membership. The nominee indicated in his statement of interest that OOI is flawed. This nominee may not be open-minded to OOI.
- Wilf Gardner The ad hoc committee discussed this particular issue. The nominee is known to speak his mind. He thinks it is important that candidates speak their mind, and he thinks that the nominee will provide constructive criticism.
- Linda Goad OOI comes under NSF's MRE projects. She thinks that the UNOLS OOSC will have an important role and it is a necessity to have the committee. A cross-section of the community is important.
- Bob Houtman From the NSF perspective, OOI is one observatory. They are interested in OOSC looking at the broader range of observatory issues. This will be like any other UNOLS Committee and NSF will task them.
- Kenneth The scientific oversight of the ocean observatories is a big charge. A lot of people on the original Nominee list dropped off because they were from an institution that was associated with OOI. This rule will have to be relaxed as observatories grow. It was a tough charge, and this is a good start.

The motion to approve the OOSC membership passed. Abstaining were Nancy Rabalais and Bob Collier.

Break

The Status of UNOLS On-Going Activities, Issues, and Items of Council Interest:

Antarctic Research Vessels and UNOLS – Vernon Asper provided a report on the status of efforts for a cooperative relationship between UNOLS, Office of Polar Programs (OPP), and OCE for polar facility coordination. His slides are included as *Appendix VI*. Some of the recent activities associated with the effort include:

- Vernon sent a letter to NSF/OPP on 24 September 2010 on behalf of the Council. The letter provided "A Suggested Approach and Offer of Support from the UNOLS Council Regarding Ship Acquisition, Operation, and Oversight of Future Southern Ocean Research Vessels."
- NSF recently tasked UNOLS to conduct a Polar Research Vessel (PRV) Science Mission Requirements (SMR) refresh project. A subcommittee will be formed and a workshop will be held.

• UNOLS is also assisting by coordinating a marine technician exchange program between Ocean Sciences and Polar Programs.

Alex Isern continued the report by elaborating on the PRV SMR refresh project and plans to replace the *Nathaniel B Palmer*. Her slides are included as *Appendix VII*.

NSF will release a Request for Proposals (RFP) for a vessel with similar capabilities as that of the *Palmer*. NSF hopes that the vessel that is selected from the RFP will fill the gap until the PRV can be constructed and come on-line.

• Vernon Asper – Will the ship have to be US Flagged? Alex – Yes, for two years.

Alex discussed the efforts that have been made to define the PRV requirements and plans for the future. An extensive study was conducted from 2002 to 2006 to define the PRV requirements and it offered a very good start. One area that requires more community input; however, is on the science questions that drive the ship's icebreaking and capability needs. The National Science Board (NSB) has advised OPP to proceed with planning for the PRV. In response, OPP approached UNOLS to conduct a refresh of the 2006 PRV SMRs. A lot of work went into the previous study and the task is not to re-invent what was already accomplished.

UNOLS was asked to form a subcommittee to assist with the PRV SMR refresh effort. The subcommittee would be made up of eight to nine members. Nominations are being solicited from the research community and other relevant groups. It is anticipated that the subcommittee will meet three times and there will be one community workshop. The PRV subcommittee is charged with:

- Review and refresh the PRV SMRs
- Develop and publish a community survey
- Conduct a workshop
- Provide interim input to the National Research Council on the PRV SMR findings.

- Robin Muench What ice class level will the PRV be? Alex She doesn't want to mix the requirements for the McMurdo breakout with this PRV science vessel. Science demand is high. It is not the intent to build a Polar icebreaker, *Palmer* does a lot of work out of the ice. This is a fine line to walk.
- Dennis Nixon The increased involvement with UNOLS as great. Can this ship be built and operated by UNOLS. Alex It can't be stated at this time.
- Dan Schwartz At the FIC meeting there was a discussion on getting away from the definition that the service life of a ship is 30 years. Is there any thought about getting away from defining the service life of a Polar ship as 20 years. Alex The current Polar ships are in very good shape. However, the question is whether or not the *Palmer* and *Gould* still serve the research needs. Feedback from the community indicated that the *Gould* is a good ship but falls short of the science requirements. The community also has indicated that a more capable ship is needed in place of the *Palmer*.
- Deb Steinberg There has been some rumor of using a local, smaller vessel for Polar support. Alex A study on Palmer Station resupply was conducted. The station only needs

resupply twice a year. However, there is a need to move people at Palmer Station. Airlifts are difficult and they cannot fly over bird colonies.

- Can some of the regional ships be sent to do work in the Polar Regions? Alex ARVOC discussed this as an option, but ran out of time for this year's season. They will try it again next year. If the UNOLS fleet could be used more effectively it would be great.
- Peter Wiebe Draw on the expertise of the *Aurora Borealis* design/construction effort. Alex We need to be careful that the ship that is acquired will be affordable to operate and construct. We also need to consider green technology.
- Alex NSF has a bi-polar interest. The Arctic is the forefront because the ice is thinning and there are local interests in resources. However, she has logistical concerns about operating a vessel 40 days in the Arctic and 40 days in the Antarctic. Southern Oceans are critical.
- Robin Muench The USCG is also asking for a vessel for the Arctic. The science community should stay abreast of this effort.
- Bruce Corliss What is the timeline for bringing a PRV on-line? Alex The MRE timeline would be about eight years. The current RFP would provide a vessel for five years with an option for expansion.

R2R Project Update – Bob Arko (R2R/LDEO) provided the Rolling deck to Repository (R2R) status report and plans forward. His slides are included as *Appendix VIII*.

The program goals are to:

- Migrate all routine underway data to long-term repositories
- Create catalog of cruises and standard products
- Access data quality and provide timely feedback to operators

The Year 1 goal was to bring the entire UNOLS fleet on-line with R2R. With 30 days remaining in their first year, they have three ships to bring on-line. More than 1600 cruises have been cataloged and over five million files archived.

They have been working to create a "Sailing Orders" web form that is populated by the UNOLS Ship Time Request and Scheduling (STRS) system data.

R2R is collaborating with NOAA and jointly developing a standard. They are working with NODC to establish submission protocols. A NOAA/R2R kick-off meeting was held in July 2010. One problem that has arisen is that cruise distros may contain Personally identifiable information (PII). As an interim fix, R2R is transmitting distros to NOAA via secured link. A solution may be to exclude sensitive PII from distros.

Upcoming efforts include finalizing the NGDC submission agreement and begin submission of cruise level metadata and navigation.

- Jon Albers The sailing orders form will assist with post cruise reporting.
- Clare Reimers Are the data centers doing any post cruise processing? Does the chief scientist see the final data set that gets archived? Bob R2R does a check and NOAA might do some processing. Once the data is received at R2R, the Chief Scientist is asked to check

the list of data that will go into the archive. The Chief Scientist is consulted as the data moves down stream.

Gender Climate at Sea – Jon Alberts provided an update on voluntary on-line training and implementation strategies. His slides are included as *Appendix IX*.

Kenneth Coale, Jon Alberts, Bruce Corliss, and Annette DeSilva have reviewed the on-line training courses on sexual harassment prevention offered by WorkPlace Answers. A proposed implementation strategy is to:

- Selected WorkPlace Answers' training course: "Unlawful Harassment Prevention" and modify the introduction to customize it for the UNOLS Fleet, addressing intensity of working at sea, etc.
- Allow Marine Superintendents to view the course as a pilot program.
- Determine how many licenses are needed and who would act as the UNOLS Administrator.
- Collect feedback and summarize the findings and get back to Workplace Answers with more concrete suggestions to customize the training for the UNOLS fleet.
- Work with Workplace Answers to customize a program if needed.
- The estimated cost is about \$15 per training session
- The training would be offered to the science party and the crew.

Consortium for Ocean Leadership: Working Group on Funding – Vernon Asper reported that he and Jon Alberts attended a recent meeting of the working group that is studying funding for future fleet renewal. At the meeting presentations were made by Dick Pittenger, Dolly Dieter, Alex Isern, and others. People from the Hill including Kate Moran attended the meeting. The Ocean Leadership working group sees difficulties in keeping the fleet capitalized and they are looking for novel ways to get funding. They encouraged UNOLS to be more aggressive. Jon and Vernon have been asked to draft sections of the working group report.

- Nancy Rabalais Dick Pittenger emphasized that there are already a lot of existing reports on this subject.
- Vernon Asper As a non-ship operator, when an institution is selected for award of a vessel's operation, there is no community sense of ownership of the vessel. It would be better perceived if everyone could feel ownership in the fleet.
- Dan Schwartz How will future federal budgets impact future operations? Will there be cuts and how will we operate? Vernon This was not discussed at the meeting.
- Nancy This issue was discussed in the NRC study.
- Vernon Ocean Sciences is competing against other science facilities.
- Rob Pinkel How did this topic come up? Jon Ocean Leadership initiated the working group. ONR made it clear that the Navy would not fund new Global ships, so alternate options for funding vessel acquisition would be needed.
- John Morrison The ocean community should be able to put together a 10-year plan like NOAA did. However, we have not been successful getting such a plan accepted by OMB. Peter Wiebe The Interagency Working Group on Facilities (IWG-F) attempted to draft such a plan, but couldn't get it accepted by OMB. This is one of the reasons why UNOLS drafted the Fleet Improvement Plan.
- Nancy The Ocean Leadership report will be internal until final acceptance.

Investigate the feasibility of a more flexible UNOLS to meet the needs of additional users. Vernon Asper reported that a volunteer is needed to serve as Chair for the *ad hoc* committee investigating the feasibility of a more flexible UNOLS. Slides are included as *Appendix X*.

The ad hoc committee was initially formed in October 2009 with tasking to investigate the problems and make recommendations. The ad hoc committee was asked to prepare a white paper addressing fleet opportunities, constraints, successful methods for engaging new users, and defining how decisions are made regarding ship use.

The members of the original ad hoc committee included John Diebold (Chair), Nancy Rabalais, Mary Jane Perry, and Stan Winslow. Advisors included Dennis Nixon and the agency representatives. A new Chair is needed. A task would be to survey the ship operators who have experience with non-traditional supported cruise operations.

Debbie Steinberg agreed to serve on the committee. Nancy Rabalais and Joe Malbrough agreed to be co-chairs.

BP Research Funding for the Gulf of Mexico – Jon Alberts provided an update on the RFP status on a call for proposals for Gulf of Mexico research. His slides are included as *Appendix XI*. In 2010 after the spill, we were fortunate that there was flexibility in the fleet and that ships could be diverted to the Gulf of Mexico. Linda Goad worked hard to get the ships scheduled. There were 274 ship days of UNOLS RAPID response cruises in the Gulf of Mexico as of 29 September 2010. Nancy Rabalais reported that there were also academically owned vessels that responded to the spill research.

Jon reported that we expected to see a lot of requests for work in the Gulf of Mexico (GOM) for 2011, but we haven't. He has made attempts to contact BP (Bill Streevers). BP has announced a \$500 million GOM Research Initiative (GRI) to study the effects of the Deepwater Horizon incident and the potential associated impact on the environment and public health over a 10 year program. It is our understanding that the funds will come through GOM Alliance (GOMA).

- Vernon said that he has heard that GOMA will be required to form an advisory board of elected members.
- Nancy Rabalais The Gulf states wanted elected officials as reviewers for GOMA. The science representatives objected to this if the proposals would not be peer reviewed.
- Vernon When the GOMA funds were announced the Northern U.S. states indicated that they could manage the funds and the southern states objected. Bill Streever (BP) indicated that they want to have peer-reviewed science, but the politicians got involved. BP attempted to form an advisory committee, but the committee was never formed because there were objections.
- Jon Alberts– The UNOLS Office is trying to stay abreast of this. We have ships on the West Coast that can be sent to the Gulf for work.
- Vernon There will potentially be billions of dollars in punitive damages.
- Peter Wiebe Can UNOLS vessels be used for the BP work (because it is private/non-traditional funding)? Vernon The BP money is going to academic institutions for research. Dennis Nixon As long as there is an academic scientist aboard a cruise, the UNOLS vessel

will still fall under the Oceanographic Research Vessel (ORV) designation. In the case of *Ewing*, there was a long-term charter with the private sector; it was a very complex process. We have plenty of examples of non-traditional funding for research vessels.

• Rich Findley – The RVTEC meeting will include a session on the Gulf of Mexico oil spill response.

Schmidt Research Vessel Institute (SRVI) Update – Jon Alberts presented information about the SRVI. Slides were provided by Peter Zerr and are included as *Appendix XII*.

SRVI is a new private oceanographic institution, established to promote exploration and discovery of the world's oceans through improved oceanographic data collection and sharing. SRVI will pursue the application and development of innovative cost-effective research methods and ocean data collection technologies. They plan to pursue collaborative projects with external research institutions.

SRVI plans to operate two research vessels. In January 2011, R/V *Lone Ranger* (77m) will begin a two to three year service in the Gulf of Mexico. The maximum science party size is 12. R/V *Falkor* (83m) is planned for re-delivery in March 2011. The *Falkor* will be a globally capable vessel with an expected service life of about 20 years, with the maximum science party of 22. The ship will tentatively operate in the Gulf of Mexico, Alaskan Arctic, and Pacific in 2011 and 2012 and beyond. Specifications for the ships and SRVI's science areas of interest are included in the slides.

Representatives of the Science Program Development, Marine Operations, and Engineering divisions of SRVI will be visiting oceanographic research institutions to meet with researchers interested in pursuing collaborative research opportunities aboard the SRVI vessels.

Discussion:

- Jon reported that SRVI has been visiting UNOLS institutions. They are interested in collaborations and are offering ship time for free.
- Rob Pinkel SRVI has a strong drive to get to sea. Rob told SRVI that they have to support crew and process the data.
- Dan Schwartz –HBOI and MBARI established research institutions and later became UNOLS members.
- Sandy Shor Will SRVI become a research institution? Dan Schwartz The goal is for SRVI to become a virtual institution. Erik King and Pete Zerr are working virtually.
- Dan Schwartz SRVI will self-fund science. Rob They don't plan to hire scientists.
- Peter Wiebe Are these ships DP capable? Rob The *Lone Ranger* does not have DP. SRVI has indicated that these are transition vessels. The *Falker* has DP.
- Kenneth What can SRVI do on their ships that they can't do on UNOLS vessels? Dennis They want to do Google Earth work.
- Deb Sternberg Does SRVI see a need for a science advisory group? Rob They seemed go think that one would be formed.

Post Cruise Assessment Report (PCAR) Subcommittee – Jon Alberts introduced Erin Jackson (UNOLS Office) who provided a status report on the PCAR current activities. Erin's slides are included as *Appendix XIII*.

Bob Collier has stepped down as the PCAR chair, and Wilf Gardner has agreed to serve as the new chair. Other members include Joe Malbrough (RVOC rep) and Dave Fisichella (RVTEC rep).

The Committee's goal is assure that communications intended by the PCAR process remain effective. They are to report back to the Council on high-level trends and issues that might need to be addressed by the broader community in the interest of improving quality of the seagoing operation.

To increase the return rate of the PCARs, the UNOLS office sent letters directly to the Chief Scientists requesting the forms. This was effective, especially for vessels with anomalously low return rates.

This year the PCAR committee reviewed the PCAR forms for *Thompson, Revelle, Knorr* and *Kilo Moana*. Most of the PCAR suggestions relate to equipment.

An Ocean Infrastructure Strategy for U.S. Ocean Research in 2030 http://www8.nationalacademies.org/cp/projectview.aspx?key=49139 – Peter Wiebe provided a brief update on the study. His slides are included at *Appendix XIV*. The study has to be completed 24 months, June 2011.

Committee Activities and Issues requiring Council Attention:

- **RVOC Chair** The Council endorsed the appointment of Joe Malbrough as the RVOC Chair.
- **DESSC Membership** Pete Girguis reported that he assumed the role of DESSC Chair at the May 2010 DESSC meeting at WHOI. His slides are included as Appendix XV. Four members will rotate off of DESSC by the end of 2010 and in response a call for nominations was announced. From the nominations, DESSC selected four persons for nomination and Council appointment: Samantha Joye (UGA), Evan Solomon (UW), Vicki Ferrini (LDEO), and John Wiltshire (UH). Their statements and CVs will be circulated to the Council for consideration.

UNOLS Goals and Priorities – Bruce Corliss suggested a goal for 2010/2011 to explore options for establishment of a UNOLS Speaker Series. His slides are included as **Appendix XVI**. The series could be introduced as a pilot program that would include a revolving set of speakers who would participate in this outreach program each year for three years, at which time a review of the program would be carried out to determine if it is a worthwhile outreach activity for UNOLS.

- Dan Schwartz This is an outstanding goal. It ties into the decline in ship time demand.
- Deb Steinberg Many of us do this already. We could perhaps tag this onto existing efforts.
- Peter Girguis There is a lot of mis-information about UNOLS. This could be a good opportunity for UNOLS to engage junior faculty.

- Rich Findley Many people think that UNOLS is a funding agency.
- Kenneth Coale This could be an outreach activity for undergraduates, graduates, and faculty.
- Bruce Corliss The lectureship program could focus on a combination of science and ships.

UNOLS Council Winter Meeting – Dates and location will be determined via email.

1200 Adjourn