



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Sea Grant College Program
1315 East-West Highway
Silver Spring, Maryland 20910

December 7, 2010

Chrys Chryssostomidis
Director, Sea Grant College Program
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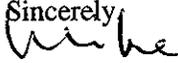
Dear Chrys:

On behalf of the MIT Sea Grant College Program's Site Review Team (SRT), I am pleased to transmit MIT Sea Grant's SRT report. It documents our findings, recommendations, and suggestions concerning program management and organization, stakeholder engagement, and collaborative network activities from the site visit that took place on your campus on September 28 and 29, 2010.

The SRT had three significant recommendations for MIT Sea Grant. A *recommendation* is a formally prescribed course of action for which the Sea Grant Program is accountable. The Program is expected to respond to each recommendation, explaining how it has implemented, how it plans to implement, or why it chooses not to implement each recommended course of action. A *suggestion*, on the other hand, is an idea that is presented for consideration. The Program is not accountable for responding to the suggestions, but is encouraged to consider implementing those deemed useful and appropriate by its leadership. In accordance with our site review policy, this report does not assign a grade or score the MIT Sea Grant Program. Our policy also states that as Program Director, you can prepare a response to this report. Both the report and response will then become part of the Program File in the National Sea Grant Office. In addition, I encourage you to keep our office informed of any activities that are undertaken to strengthen the MIT Sea Grant program.

Once again, I'd like to thank you and the MIT Sea Grant staff, university officials, JAC members, and stakeholders for the hospitality and effort put forth to make the actual site visit both productive and informative. On the other hand, the SRT was disappointed in the quality of MIT's Briefing Book. It contained errors, omissions, and inconsistencies and, in addition, was received two weeks late. The SRT could not help but conclude that insufficient attention was given to compiling and editing the materials that ultimately served as the basis for this report. Similar observations were made by the members of the 2003 PAT review.

I look forward to hearing from you.

Sincerely,

Michael Liffmann
MIT Program Officer
National Sea Grant Office

Cc: Dr. Leon Cammen, Ms. Sami Grimes, John Byrne, Bob Stickney, Judy Gray, Dale Baker

INTRODUCTION

A number of recommendations were issued in the National Research Council's report titled, *Evaluation of the Sea Grant Review Process* (2006), including several related to program evaluation. This led to development of the new Planning, Implementation and Evaluation (PIE) system that was adopted in 2008. The development involved the National Sea Grant Office (NSGO) in close collaboration with the Sea Grant Association (SGA), several state Sea Grant directors, and the National Sea Grant Advisory Board, a federal advisory committee.

The PIE system includes Site Review Team (SRT) visits for each of the Sea Grant programs. Every program will be visited once every four years with the primary objective of evaluating aspects related to its management and organization, the extent and quality of stakeholder engagement, and its collaborative network activities. The Massachusetts Institute of Technology Sea Grant College Program's (MITSG) first SRT took place September 28-29, 2010 at MITSG's offices in Cambridge, MA. The members of the MITSG SRT were:

Michael Liffmann	Chair and Program Officer, National Sea Grant Office
John Byrne	Co-Chair, National Sea Grant Advisory Board
Robert Stickney	Director, Texas Sea Grant College Program
Judy Gray	Acting Deputy Assistant Administrator, NOAA Research
Dale Baker	Sea Grant Extension Program Leader (ret.), NY Sea Grant
Dorn Carlson	Research Director, National Sea Grant Office (observer)

In preparing for the visit, MITSG and the SRT used the Site Review Procedures Manual (Manual) issued by the NSGO in March 2010. MITSG furnished the core review information including the requisite Briefing Book and the Program's 2010-2014 strategic and implementation plan. The 19-page Briefing Book contained sections on program management and organization (including leadership, recruiting research talent, and funding), stakeholder engagement (staff membership and leadership on boards and committees and partnerships), and collaborative network/NOAA activities. A short section also addressed the program improvements that resulted from the 2003 Program Assessment Team (PAT) review.

The aforementioned information, along with the 2003 PAT review report, the NSGO's January 2010 MITSG office review, and FY 2009 program metrics and project impacts obtained from MITSG's annual report were compiled in a binder and mailed to the team's members on September 14, 2010. As required, MITSG issued a public notice in early September announcing the opportunity for individuals and organizations to comment on any aspects of the Program's performance in the areas of program management, institutional setting, and stakeholder engagement. The announcement was posted on the website. No replies were received.

SRT VISIT

During the two-day visit, the SRT met with MITSG's four-person management staff, Sea Grant Extension (Marine Advisory Services or MAS) members, marine educators, several members of the Program's two advisory boards (State-Industry Advisory Council and Faculty Committee), researchers and private sector partners, a high ranking MIT official, and numerous stakeholders

ranging from fisheries and other private interests to nonprofits, educators, and federal and state agencies. The SRT agenda and other details concerning the actual visit appear in Appendix A.

ORGANIZING AND MANAGING THE PROGRAM

The MITSG Program is managed and administered by Director Chryssostomos Chryssostomidis (Director) who devotes 50% of his time to Sea Grant activities. The Program's management team is comprised of the Director and four other senior staff members: E. Eric Adams (Associate Director for Research), Timothy Downes (Assistant Director), Judy Pederson (Marine Advisory Services or MAS Leader) and Kathy de Zengotita (Program Coordinator). Combined, these four individuals dedicate 3.2 FTEs to Sea Grant-related work.

Prof. Chryssostomidis reports directly to MIT's Vice President for Research and Associate Provost, Claude Canizares, and this reporting structure has proved effective and is appropriate for the Program. Prof. Canizares is knowledgeable about and supportive of MITSG. The Program is located on the university campus and thus has excellent access to its infrastructure. The SRT concluded that MITSG has strong university support.

The Director's primary focus is on the Program's core and extramural research aspects, and he largely defers administrative affairs to Ms. de Zengotita and Mr. Downes. Dr. Pederson has served at MITSG's MAS leader for a little over a year and also serves as the coordinator of the Gulf of Maine's regional research initiative. Mr. Downes holds monthly staff meetings to discuss administrative matters, and the MAS also meets on a monthly basis to keep each other up-to-date and brainstorm how best to support its constituents.

The other MAS members are Greg Booma (Geospatial Analyst), Madeline Hall-Arber (Anthropologist), Juliet Simpson (Coastal Ecology and Climate), and Sarah Hammond (Education). The MAS staff members meet as a unit several times a month. There are currently two vacancies: the position of Communications Manager and a second educator. The hiring process for the Communications position is underway and should be completed in the near future.

Ms. de Zengotita and Mr. Ben Bray built "eSG," an impressive "cradle-to-archive" project management system that has been in operation since 2007. eSG is initiated with the request-for-proposals process, tracks and reports the funded projects, and culminates with the project archival process and display of project information on the MITSG website. It has proved beneficial for MITSG record keeping purposes and the searchable databases and records have helped communicate internally and externally. Washington Sea Grant is adapting the eSG system and a highly laudatory note was sent on September 19th by Director Penny Dalton to Director Chryssostomidis complimenting Mr. Bray and others for their "amazing expertise and collaborative energy." MITSG staff will soon rollout eSG to Virginia Sea Grant.

Although MIT is both a Land Grant and Sea Grant College it does not conform to the traditional model of considerable public involvement to identify and respond to coastal users' research and outreach needs. The MIT model identifies a research agenda (not necessarily related to the needs of the Commonwealth's coastal audiences) and then integrates outreach efforts with the research

projects. The SRT was satisfied that this model for extending scientific and technical knowledge works well given the operational structure of the institution.

MITSG is advised by a Joint Advisory Committee that consists of the 13-member MIT Faculty Committee and 17-member State-Industry Advisory Council. The groups meet twice a year and the names and affiliations appear in Appendix B. The JAC is a "brain trust for informed advice" and six members met with the SRT during the visit. Decisions are made at the pre-proposal stage as to which PIs are encouraged to submit full proposals by a Technical Review Panel whose recommendations are reviewed within a few days by the Joint Committees each spring. During the fall meeting, the JAC again reviews the Technical Review Panel's recommendations regarding full proposals selected for inclusion in the Omnibus proposal. The JAC makes specific recommendations on funding, content and timeline adjustments to each proposal included in the Omnibus. At the fall meeting, the JAC also considers and advises on the MITSG Program's overall direction for the coming year.

The State-Industry Advisory Council also serves as an important resource for the MAS team in that it is a sounding board in their planning process, "providing input and advice on the needs of a broad and varied constituency." It is comprised of representatives from marine-related resource management agencies in the Commonwealth, public interest groups, private groups and corporate entities, the NOAA Northeast Fisheries Science Center, and the Woods Hole Institution Sea Grant.

The SRT noted that MITSG does an excellent job recruiting new talent and nurturing junior researchers and students at MIT and other institutions in the Commonwealth. MITSG has also been at the forefront of many technological innovations, most notably the Autonomous Underwater Vehicles Laboratory founded in 1989 that continues to produce significant business initiatives. Many accolades were extended by members of the two advisory groups to the Director for his mentoring of the "next leaders of ocean science."

Unlike most Sea Grant programs that issue biennial calls for research proposals, MITSG has an annual call and the approach has been successful in their case. Preliminary proposals are first reviewed by a Technical Review Panel (TRP) whose members are selected by the Director based on expertise and subject-matter knowledge, and the TRP's recommendations are subsequently reviewed by the JAC. Typically, 20 pre-proposals are received each year. Eight to ten investigators are then encouraged to submit full proposals which are reviewed by out-of-state experts. The principal investigators are then afforded an opportunity to respond to and rebut written reviews, and a second TRP (also out-of-state scientists) convenes each September to discuss the written reviews, rebuttals, and make funding recommendations. The JAC then refines and approves the TRP recommendations before final versions of the proposals are submitted through the Omnibus.

The 2003 PAT made several observations and recommendations regarding the Program's lack of a systematic approach to the planning process. The SRT noted the failure of the Program to formally reply to the 2003 recommendations. The Briefing Book, however, alludes to the recommendations and assured the SRT that "MIT Sea Grant takes an integrated and comprehensive approach to planning and has fully addressed the critique of the 2003 PAT."

One of the 2003 recommendations was that advisory groups should play an increased role (early review and more input) in the strategic planning process. The SRT concluded that the JAC had a minor role in the development of the 2010-2014 Plan and that the process whereby the members are able to express their preference and support for MITSG's activities has not been clearly demonstrated. The SRT found that several of the 13 planning and management recommendations made in 2003 are still relevant in 2010.

NOAA Sea Grant appropriated funds for MITSG, and the associated match, are approximately \$4.0M per year. In addition, MITSG manages the National Office funded regional research planning initiative (\$175K in 2009-10), and the Program very impressively leveraged approximately \$1.8M per year between 2007 and 2010 from other federal and non-federal sources. In all, MITSG funds nearly 17 FTEs, nine of which are funded from NOAA Sea Grant sources.

MIT is the fifth largest Sea Grant program. When combined with WHOI Sea Grant's Institutional program, the two Massachusetts programs represent NOAA Sea Grant's second largest investment in terms of core funding.

STAKEHOLDER ENGAGEMENT

All seven MITSG MAS specialists are based in Cambridge and there is a small presence at the Gloucester Maritime Heritage Center. Currently, there are two important vacancies in communications and education, and the Project Leader, Dr. Pederson, has begun to address the lack of internal programmatic cohesion among the specialists. Each specialist independently conducts his/her projects and there appears to be little integration of effort. But, without a doubt, MITSG remains a source of reliable and trustworthy information at all levels. The primary stakeholder audiences of MAS are commercial fishermen, state and federal natural resource agency managers, municipal officials, K-12 teachers and students, and nonprofit organizations. During the SRT session with invited stakeholders the attendees indicated that MITSG is the "group to get the job done" and is valued for their "willingness to help in any way they can" attitude. MITSG continues to provide useful assistance to several governmental and regulatory entities, including the Massachusetts Coastal Zone Management Office, Mass Bay Programs, the state's Division of Marine Fisheries, several of NOAA's National Estuarine Research Reserves in the region, the National Marine Sanctuary Program, and NOAA Fisheries. MITSG has been a partner in rolling out Coastal and Marine Spatial Planning in the state and has assisted with stakeholder input, bringing other people to the table more efficiently and effectively than the state effort alone.

The MAS strategic goals were derived through unspecified planning efforts with constituents and the outreach programs were developed to address MAS issues and concerns. The goals are:

- To improve the management and use of Massachusetts' coastal and marine resources by supporting an informed, science-based decision-making process.
- To assist the Commonwealth to prevent, reduce and control (a) pollution, (b) the spread of invasive species, and (c) negative impacts on habitat.

- To promote the sustainability of coastal communities by engaging coastal stakeholders, including citizens, marine industries, non-governmental organizations, and government agencies in collaborative research, education, and policy-making.
- To enhance ocean literacy through engaging students in informal, hands-on experiences and providing stimulating programs, and activities for stakeholders of all ages.

It was difficult to ascertain from the Briefing Book alone whether MITSG, in general, and the MAS, in particular, had succeeded at building meaningful partnerships and trust among statewide and local clientele. The 6.5 pages devoted to that section of the briefing book were largely listings of professional affiliations, organizations and stakeholder groups, and contained very little descriptive information. However, most SRT concerns were dispelled following the MAS staff's oral presentations, testimonials by stakeholders, and supporting materials handed out during the visit. It is apparent that the relatively small staff is well connected with coastal users and that MITSG expends considerable effort, energy and resources at doing so. During SRT's formal interaction with stakeholders, all expressed a great deal of confidence and trust in the MITSG outreach staff. This reflects positively on the excellent quality and commitment of the MAS.

Dr. Pederson is an international expert in non-native species and marine bio-invasions. She continues to engage resource managers and the general public on matters relating to likely impacts and mitigation practices. The SRT was impressed with the outcomes produced by the MAS projects conducted by Dr. Hall-Arber, the Program's fisheries anthropologist, and Ms. Olivo-Hammond's junior and high school level marine education projects. Dr. Hall-Arber is a world-renowned social scientist who works with Massachusetts and other northeastern fisheries communities on socioeconomic issues ranging from impacts of regulations to community-supported fisheries. Ms. Olivo-Hammond leads the Sea Perch project that MITSG established in 2003 to teach educators how to build simple, remotely operated underwater vehicles made from inexpensive and readily available materials. Since its inception, Sea Perch education has been extended to over 400 teachers in 22 states and internationally.

A compelling presentation was made by some of the organizers of the MITSG-sponsored Blue Lobster Bowl, modeled after the Ocean Science Bowl. Some 120 students representing 10 Boston-area schools and 70 volunteers participate in the annual event designed to stimulate interest in science and technology.

The oral presentations convinced the SRT that MITSG MAS has many success stories but that most have not been shared with the National Office, the rest of the Sea Grant network, and NOAA.

An interesting issue raised by the SRT was the lack of coordination/cooperation on Commonwealth stakeholder issues between MITSG MAS and Woods Hole Sea Grant Extension (Cape Cod Cooperative Extension) projects. The directors of the two programs collaborate on research projects but the two outreach staffs have never met to discuss interests and possible opportunities for joint programming to benefit the state or region.

Of interest, the goal of Cape Cod's Cooperative Extension marine programs is to "...establish, develop and carry out education programs in marine resource development, to assist with problems concerning coastal industries and the management of coastal resources, and to transfer technological innovations, educational and informational materials to public officials, educators, and marine users groups."

COLLABORATIVE NETWORK/NOAA ACTIVITIES

MITSG interacts with diverse communities by participating in a broad array of committees, boards, commissions, and other working groups that are relevant and meaningful. The Program is a regional leader and works closely on research issues with other Gulf of Maine and New York Bight Sea Grant programs. That said, the Program is not actively involved in the national network activities of the Sea Grant Association, Association of Sea Grant Extension Program Leaders, National Marine Educators Association, or the Communications Network. The latter might be a result of the current vacancy since MIT hosts the Sea Grant communicators' website. Ms Hall-Arber is active in Sea Grant's Fisheries Extension network, Ms. Pederson works with researchers and outreach groups involved in aquatic invasive species but there has been very little involvement with the Sustainable Coastal Community Development and Climate Change groups.

MITSG works closely with other NOAA line offices and laboratories. The program collaborates with NOAA's OCRM (through the Massachusetts Coastal Zone Management Office and Stellwagen National Marine Sanctuary Program), National Estuarine Research Reserves System (Casco Bay, Piscataqua, Massachusetts Bays, and Peconic NERRS), and the NOAA Northeast Fisheries Science Center. MIT Sea Grant also collaborates with the Coastal Services Center and the recently established North Atlantic Regional Team.

IV. FINDINGS, RECOMMENDATIONS and SUGGESTIONS

Findings

Organizing and Managing the Program

- MIT Sea Grant is unique within the Sea Grant network and continues to demonstrate an extraordinary commitment to developing the next generation of scientific, academic, and entrepreneurial leaders.
- MIT Sea Grant conducts outstanding marine-related research and develops technology funded by Sea Grant and various extramural sources. The Program does an excellent job leveraging its NOAA federal and matching funds to obtain funding support from the private sector. There continue to be examples of success in taking concepts through research and testing to commercialization. MITSG's process for identifying research priorities and meritorious projects is excellent.
- MITSG has outstanding university support that is reflected in the funding match, support from the Faculty Committee, and interest in the annual call for proposals. The Program also does an excellent job recruiting new talent and nurturing junior researchers and students at MIT and other institutions in the Commonwealth.

- The Program's approach to overall management has shortcomings as reflected in the organizational chart. The Director effectively focuses on research and delegates the administrative and advisory responsibilities, but there is an apparent lack of overall oversight and executive management. In particular, the SRT expressed concern about the Program's operational aspects that, in the Team's view, need increased attention. The Program's research and advisory/outreach elements appear to be disparate parts and projects that need to become better integrated and presented coherently. This need is exemplified by the Program's inability to capitalize on its impressive successes beyond its research accomplishments.
- MITSG still lacks a systematic approach to the planning process. A related issue is that more attention needs to be given to the actual planning process including increased involvement by the JAC. The latest Strategic Plan is a good start but it would have been strengthened with early input and review from both advisory groups.
- Combined, MITSG and WHOI Sea Grant's Institutional program represent NOAA Sea Grant's second largest investment.

Stakeholder Engagement

- MITSG's MAS program is innovative, supports outstanding research, has a strong ocean literacy program, and an outreach program that address many aspects of ecology, fisheries, and human activities. Stakeholders expressed a great deal of confidence and trust in the MITSG MAS staff which reflects favorably on the caliber and commitment of the staff and willingness to cooperate with an impressive array of partners. The staff is well connected and works with the right people to reply to problems. However, the Program's non-research successes have not been as well-publicized and both the MAS staff and Woods Hole Sea Grant Extension should strive to work more closely in the interest of Commonwealth constituents.
- MIT Sea Grant is a northeast regional research leader, but there has been very limited participation in national network activities. This is despite the fact that many of its recent successes are being replicated elsewhere, including the eSG project management system, eelgrass planting, Adopt-a-Boat, mentoring, electronic Ocean Sciences Bowl, Sea Perch, and Intelligent Ocean Sampling projects. The latter was co-funded with Woods Hole Sea Grant.
- Improved internal and external communications should be a priority. MITSG MAS, in particular, has many success stories but most have not been shared with the National Office and the rest of the Sea Grant network and NOAA.

Collaborative Activities

- MITSG interacts with diverse communities, including other NOAA offices and laboratories, by participating in a broad array of committees, boards, commissions, and other working groups.

Recommendations (items MIT Sea Grant must consider):

- **MITSG needs a Deputy Director of Operations or equivalent.** This person would assist the Director in the overall executive management and oversight of the Program. The role is comparable to that of a university provost or a private sector chief operating officer. That is, someone is needed who understands the big Sea Grant picture and priorities, yet focuses on details and can integrate the various parts of the Program into “one MITSG.”

MITSG still **lacks a systematic approach to the planning process.** The Deputy Director could lead such an effort, creating an approach that would include greater involvement by the staff, the JAC, and constituent groups not represented on the JAC.

- **The position of Communications Manager should be filled as soon as possible.** A near-term priority for this individual should be to develop a **strategic communications plan** that would help integrate all of MITSG’s programs and projects.
- Over the years, the Program’s **non-research successes have not been well-publicized** and this is of extreme importance to the Program and MIT.
- **A coordinated Sea Grant Extension effort needs to occur in Massachusetts.** MITSG MAS should meet with Woods Hole Sea Grant Extension on a regular basis. As a first step for such an effort, the SRT recommends the two programs meet to develop an annual Plan of Work designed to better serve the Commonwealth’s coastal constituents. Both programs have similar outreach goals and the SRT concluded that there are many opportunities for collaboration to better serve the Commonwealth’s coastal constituents.

Suggestions (items MIT Sea Grant may want to consider)

- The Program should become **more actively involved in national network activities.** There is a lot to be shared and a lot to be learned from such participation. For instance, eSG is a Best Management Practice and should be marketed extensively to the Sea Grant network and others interested in improving their project management systems.
- Three suggestions made by the Joint Advisory Committee members that met with the SRT merit consideration.
 - MITSG should consider dedicating funds to **in-residence programs** for visiting artists, entrepreneurs or managers.
 - **Additional funding for undergraduates** “with good ideas” should be considered. The concept borrows from MITSG’s highly successful “Undergraduate Research Opportunity Program” but also supports students without a faculty mentor.
 - Explore opportunities for involving **MIT’s Media Lab in social science research.**

V. BEST MANAGEMENT PRACTICES

(Best management practices are "An exemplary product, practice, or procedure developed or used by a Sea Grant program and not in common use by other programs, which may be utilized or modified by other programs to make these programs stronger.")

- Each MITSG MAS staff member conducts Sea Grant and extramurally-funded research projects that directly contribute to their outreach work.
- eSG, MITSG's project management system, is being adapted for use by other Sea Grant networks.

Appendix A. Site Visit Preparations and Meetings

Prior to the site visit, the SRT corresponded extensively and held two conference calls. The team met in Cambridge on September 27 and discussed last minute details. The actual visit (see agenda on the following pages) began on the 28th and concluded late in the afternoon of the 29th. On the 28th, after proper introductions, the SRT's chair and co-chair gave a brief overview about the purpose of the visit, the highlights of the PIE system and the process to be followed in the next two days.

Director Chrys Chryssostomidis coordinated MITSG's morning presentations which focused on program management and organization and MAS programming. Over the course of the first 2.5 hours, three members of the management team discussed their roles and responsibilities. The second part of the session was dedicated to overviews of some of the MAS or extension activities (marine bioinvasions and ecology/coastal water quality/climate change) and involvement in the regional initiative.

The SRT met with six members of the Joint Advisory Committee over lunch and discussed matters pertaining to their involvement with the MITSG Program. The remainder of the afternoon focused on stakeholder engagement. MITSG MAS organized two thematic panels—fisheries and social science and “classroom to community”—and invited selected stakeholders to describe their interactions with members of the MAS. The stakeholders and MAS participants discussed how user needs are communicated and how scientific information, including MITSG research results, are used by the stakeholders.

Although the permanent position of Communication Manager is vacant, ideas as to how to modernize MIT Sea Grant communications were also shared with the SRT by the acting manager. The day concluded with presentations by a principal in an AUV start-up company and Sea Grant-sponsored researchers from MIT and Woods Hole Oceanographic Institution. The latter described their collaborative work into intelligent ocean sampling.

On the final day, the SRT met and discussed matters pertaining to continuation of a viable and productive MITSG program with Vice President for Research and Associate Provost Claude Canizares. The rest of the visit was dedicated to arriving at findings, discussing possible suggestions and recommendations and debriefing MITSG's management team.

MIT SEA GRANT COLLEGE PROGRAM
NOAA Sea Grant Site Visit Day 1,
Tuesday, September 28

- 7:30-8:30 **Breakfast & Introductions**
- 8:30-9:15 **Program Overview**
Chrys Chrissyostomidis, *Director, MIT SG*
- 9:15-10 **eSG - Managing Electronically**
Kathy de Zengotita, *Program Coordinator, MIT SG*
- 10-10:45 **Financial & Human Resources Management**
Tim Downes, *Assistant Director, MIT SG*
- 10:45-11 Break
- 11-12 **Reaching Out: Locally, State-wide and Nationally**
Judy Pederson, *Advisory Leader & Regional Coordinator, MIT SG* & Greg Booma, *Geospatial & Database Analyst, MIT SG*
Panelists:
Bruce Carlisle, *Assistant Director Massachusetts Coastal Zone Management Program*
Vince Guida, *Research Fish Biologist, NOAA Northeast Fisheries Science Center, Sandy Hook*
- 12-12:30 **Ecology, Coastal Water Quality & Climate Change**
Julie Simpson, *Coastal Ecologist, MIT SG*
Panelist:
Jay Baker, *Director of Massachusetts Bays Program*
- 12:30-2 **Lunch & Discussion**
Site visitors, Constituents and MIT SG Joint Committee
- 2-2:45 **Involving Evolving Communities: Social Science at MIT SG**
Madeleine Hall-Arber, *Marine Social Scientist, MIT SG*
Panelists:
Niaz Dorry, *Executive Director of the Northwest Atlantic Marine Alliance*
Angela Sanfilippo, *President of Gloucester Fishermen's Wives Association and Executive Director of Massachusetts Fishermen's Partnership;*
Lisa Colburn, *NMFS Northeast Fisheries Science Center*
- 2:45-3:15 **Making a Splash: Modernizing MIT Sea Grant Communications**
Nancy Adams, *MIT SG*
- 3:15-3:30 Break
- 3:30 -5:15 **Classroom to Community**
Brandy Wilbur, Sarah Hammond and Mike Soroka, *MIT SG*
Panelists:
Steve Chinosi, *Director Curriculum Innovation, Newton North High School*
Rick Ceccette, *Engineering Recruiter, Portsmouth Naval Shipyard*
Paul McGuinness, *Marine Science Teacher, Cambridge Rindge and Latin High School*
Harriet Webster, *Executive Director, Gloucester Maritime Heritage Center*
- 5:15-5:30 Break

MIT SEA GRANT COLLEGE PROGRAM
NOAA Sea Grant Site Visit Day 1,
Tuesday, September 28 con't

- 5:30 -5:55 **Research: The Future of Ocean Mapping**
Rob Damus, *Hadal*
- 5:55-6:25 **Research: Intelligent Ocean Sampling**
Bob Beardsley, *Woods Hole Oceanographic Institution*
Changsheng Chen: *UMass Dartmouth*
- 6:25-6:30 **Closing Remarks**
Chrys Chryssostomidis

MIT SEA GRANT COLLEGE PROGRAM
NOAA Sea Grant Site Visit Day 2,
Wednesday, September 29

- 7:30-10:30 **Breakfast & Committee Caucus**
- 10:30-11:10 **Initial Debriefing**
Committee and MIT SG Management
- 11:10-11:25 Break
- 11:25-11:45 Walk to Stata Center
- 11:45-1 **Meeting and Lunch**
MIT SG Senior Staff, Site Visitors, MIT VP, Claude Canizares
Stata Center, Tower G, room 601 (32-G601)
- 1-1:20 Return to MIT Sea Grant, Bldg. E38
- 1:20-2:30 **Final Debriefing**
Committee and MIT SG Management

Appendix B. Joint Advisory Committee

*Met with SRT during visit, September 28, 2010

MIT Faculty Committee

- James M. Utterback, Chair - Sloan School of Management *
- John J. Leonard - Dept of Mechanical Engineering
- Scott R. Manalis - Department of Biological Engineering
- Heidi M. Nepf - Dept of Civil and Environmental Engineering
- James L. Kirtley - Dept of Electrical Engineering & Computer Science
- Alexander M. Klibanov - Dept of Chemistry
- Wesley L. Harris - Dept of Aeron. and Astronautics
- Martin F. Polz - Dept of Civil and Environmental Engineering
- Chiang C. Mei - Dept of Civil and Environmental Engineering
- Alexander H. Slocum - Department of Mechanical Engineering
- Robert Armstrong - Dept of Chemical Engineering
- Dara Entekhabi - Dept of Civil and Environmental Engineering
- E. Eric Adams - Dept of Civil and Environmental Engineering , *ex officio* *

State Industry Advisory Council

- John Agapakis - RVSI Acuity CiMatrix
- Martin Klein - retired engineer, invented Klein sonar
- Bernadette Kolb - CDM International State/Industry Advisory Council
- Joseph Lassiter - Harvard Business School*
- Justin E. Manley - Liquid Robotics
- John Blair - retired engineer/scientist, Raytheon
- Ambrose Jearld - Northeast Fisheries Science Center
- Edwin Tiffany - CambridgeSoft Corporation
- Judith McDowell - Woods Hole Oceanographic Inst.
- Carlton D. Hunt - Battelle Laboratory*
- Charles Richards - CEO, Chairman's View
- Jella Atema - BU Marine Program, MBL
- Michael B. Manning - Worcester Polytechnic Institute Technology Transfer Office
- Andrea Rex - MWRA, Massachusetts Water Resources Authority
- Bill Hubbard - U.S. Army Corps of Engineers, New England Division
- Kathryn Ford - Massachusetts Division of Marine Fisheries *
- Paul Howard - New England Fishery Management Council

