The Collecting Net

Massachusetts Governor Deval Patrick Visits MBL to Announce Loeb Renovation Funding

State Funding Helps Leverage Private Investment from Howard Hughes Medical Institute

On Monday, November 17, Massachusetts Governor Deval Patrick attended a press conference at the MBL announcing that the Howard Hughes Medical Institute (HHMI) has awarded $15 million to the MBL to fund major renovations to the Loeb Laboratory. Governor Patrick was accompanied by several state and local dignitaries including Senate President Therese Murray, Massachusetts Life Sciences Center (MLSC) president and CEO Susan Windham-Bannister, and MBL distinguished scientist Osamu Shimomura.

The $15 million HHMI grant was leveraged through a commitment of $10 million in state funds contained in the Massachusetts Life Sciences Act, which was signed into law by Governor Patrick last June. On November 18, one day after the announcement of the HHMI funding, the MLSC announced the release of the $10 million grant to the MBL. The cost of the renovation project, scheduled to begin in March 2009, will total $25 million.

“The Life Sciences Act was designed to both create jobs, and support life-saving research, and I am delighted to see part of this important funding put to use with the vital research being done at the Marine Biological Laboratory in Woods Hole,” said Governor Patrick. “This is a terrific example of leveraging private investment in economic development through the targeted use of public resources.”

The three-story Loeb Laboratory houses the MBL’s intensive, full-immersion graduate and postdoctoral-level laboratory courses. Each year the MBL trains more than 450 students, including 200 international students, as part of its education programs, which include more than 20 graduate and post-graduate laboratory courses.

“The MBL’s discovery courses transform scientists into leaders of the next generation,” said Gary Borisy, MBL director and chief executive officer. “Through the combined investment in the MBL by the Commonwealth and the Massachusetts Life Sciences Center—made possible by the Massachusetts Life Sciences Act—and the Howard Hughes Medical Institute, this project has become a reality. We are deeply grateful to Governor Patrick, Senate President Therese Murray, Senator Robert O’Leary, and the entire Cape Cod delegation for their support of our efforts and look forward over the coming years to implementing and transforming the Loeb Laboratory into a cutting edge facility worthy of the students who train within it.”

Following the press conference, which was held in the MBLWHOI Library’s Bay Reading Room, Governor Patrick and other guests toured a teaching laboratory in Loeb and visited the Marine Resources building, where they were treated to a demonstration of some of the marine organisms used in MBL research.

Employee Spotlight

Meet Kelly Holzworth
Center Administrator, Ecosystems Center

Kelly Holzworth has a lot on her plate. When she’s not managing the Ecosystems Center’s staff, grant proposals, or its nearly $8 million budget, she can be found picking tomatoes in the MBL community garden she proposed, having lunch on the picnic table she helped build in the quad, or perhaps carrying a handbag that she made at home in her spare time.

Kelly, a nine-year veteran of the MBL, has been center administrator for the Ecosystems Center since September 2003. The position is the equivalent of a business manager in the corporate world. “The toughest part of my job is keeping track of all the cost centers,” Kelly says. She is also responsible for wading through the many regulations for federal grants, and handles their financial tracking.

The work is challenging, but rewarding. “I like the ebb and flow,” Kelly says, “and no day here is the same as the day before. I love the people here and honestly love to come to work each day.”

Kelly often recruits her coworkers to help with extra projects. “My office looks out on the area between the buildings and I kept thinking what a wonderful space it would be to grow a garden,” Kelly explains. So, earlier this year, she and Gillian Galford, a graduate student in the Brown-MBL program, wrote a detailed proposal for the MBL and a group from Ecosystems helped build the garden. This year they harvested tomatoes, eggplant, basil, oregano, and cilantro.

The community garden has been well received, with four plots being used by Ecosystems staff and a fifth used by the Satellite Club, the MBL’s summer day camp for six to 12 year olds. Kelly hopes that the garden will expand in the future. “We could easily add six more plots if there is interest.”

In her off-time, Kelly also volunteers with Birthday Wishes, an organization that provides birthday parties for homeless children. Kelly’s daughter, a freshman at Falmouth High School, volunteers with her. As the Party Coordinator, Kelly uses her organizational and artistic skills to throw a monthly birthday party at the Carriage House, a shelter for women and children in North Falmouth. The children choose the party theme and presents, and also receive party favors. When there are no birthdays to celebrate, the group holds an arts and crafts night.

“Volunteers and donations are always gladly accepted,” Kelly says. “It’s a good way to use your unused party supplies like paper plates and cups. It’s also a great place to volunteer. We usually have someone doing face painting or other crafts with the kids.”

To learn more about Birthday Wishes, contact Kelly at ext. 7471 or visit <www.birthdaywishes.org>

Researcher Spotlight

Meet Nick Warren
Project Coordinator, Sustainable Aquaculture Initiative

One of Nick Warren’s first jobs after college was building stone walls for a local landscaping company. Today, he helps plan and build fish ponds in an attempt to alleviate hunger in Haiti.

Nick first came to the MBL in 2005 as a research assistant in Lionel Jaffe’s lab after graduating from Wheaton College in Norton, Massachusetts, where he was a biology major and a music minor.

After working for Dr. Jaffe, Nick joined the MRC’s Sustainable Aquaculture Project as a volunteer, and later managed the MRC’s tank room. It was in 2005, while at the MRC, that Nick learned about the MBL’s Haiti aquaculture project, and was soon hired as its project coordinator. Since then, he has helped to develop and test several methods of raising fish in the poverty stricken country.

For the last five years, MBL researchers, led by Bill Mebane, superintendent of the MRC’s Aquaculture Engineering Division, have been developing fish-rearing tactics and pond management protocols for the Comprehensive Development Project (CODEP) in L’Acul, Haiti. Their ultimate goal is finding a way to combat malnutrition. The researchers were initially attempting to produce a fish food pellet from plants indigenous to Haiti. When they found that method was too time demanding and difficult to sustain, Nick and Bill decided to change tactics.

“We needed to pay more attention to what life was like in Haiti, and work with the culture,” says Nick. “There are people that spend several hours a day just gathering water. The people we are working with are also involved in a reforestation program, and many have additional jobs on top of that. We were wrong with the idea that people had time to spare.”

After researching several options, Bill, Nick, and their colleagues found that many of the issues they were facing have been dealt with successfully in parts of Asia, Africa, Bangladesh, and Israel. With the help of international experts, the team adopted a new fish food production

Continued, page 3
here in Woods Hole and elsewhere—personally shared in the joy of Dr. Shimomura’s phenomenal achievement.

As MBL staff, we should all be proud to be a part of this remarkable institution. Each of us plays a role in making the laboratory a leader in biological research and education and, through our work, we help to promote science quality and excellence. Dr. Shimomura is the most recent testimonial to that excellence as the 56th Nobel Prize winner who has been affiliated with the MBL either as a researcher in residence, visiting researcher, faculty member, course director, or alumnus of one of our courses.

The MBL has a history of scientific excellence as evidenced in the impressive number of Nobel winners affiliated with the institution. Another jewel in the MBL crown is our educational program, which is well known throughout the life sciences. As testimony to our success, the Howard Hughes Medical Institute recently awarded the MBL $15 million to fund a top-to-bottom renovation of the Loeb Laboratory, the cornerstone our education program. We were thrilled to host Massachusetts Governor Deval Patrick, Senate President Therese Murray, and other local officials at the MBL two weeks ago to announce this spectacular award, which affirms that MBL educational programs are unparalleled in the nation and recognizes the importance of our courses to the past and future of biology and biomedicine.

Two weeks ago we also celebrated yet another historic milestone for the MBL when the Massachusetts Life Sciences Center Board of Directors approved a $10 million grant for infrastructure improvements in Loeb. These state funds are contained in the Massachusetts Life Sciences Act, signed into law by Governor Patrick last June. We are honored to be a part of the historic Act and look forward to transforming the Loeb into a cutting-edge life sciences facility that will provide our staff, students, and visiting scientists with the facilities they so well deserve.

As 2008 comes to a close and we reflect on these and other achievements of the last year, I wish to extend to all MBL staff my most sincere thanks for all of your hard work. The MBL would be nothing without its people, and, thanks to the commitment of all of you, we continue to create a unique and vibrant community that produces a level of scientific excellence of which we can all be proud.

Best wishes for a safe and happy holiday season,

Gary Borisy,
Director and CEO

method that promotes the growth of periphyton—a kind of algae—to feed fish. Farmers only need to maintain ponds so that conditions are optimal for algae growth, and the fish will grow to maturity using very few resources.

Nick travels to Haiti about seven times a year and each time stays anywhere from one week to a little over a month.

Working in Haiti has been exceptionally difficult this year, according to Nick. Two tropical storms and two hurricanes in a 30-day period have devastated the country and washed out roads and flooded airports have made it difficult for relief organizations to get food and water to storm victims. The number of internally displaced people is huge, according to Nick, and there is limited access to them because of the infrastructure problem.

As recovery from the storms continues in Haiti, Nick and Bill made another visit to the country in October to survey the damage and create a long-term plan to support this project locally. “Our ultimate goal is to transfer information to fish farmers and to work with Haiti’s CODEP so that the fish program can be autonomous,” says Nick. “It had been a few months since we had been there, so the types of activities we focused on included observations, weighing fish, having group meetings with pond owners, talking about technical challenges, offering time to work one-on-one with farmers, and working in the fish nursery. We tried to work with people to address any mechanical issues as well.”

When not working at the MBL, Nick has several hobbies that keep him busy. During his college years, he made good use of his music minor, playing in a band called Speakeasy. While he still plays today, Nick has traded his electric guitar in for an acoustic. In his spare time, Nick also enjoys sports and is an avid soccer player and member of the Cape Cod Amateur Soccer League, where he plays defense for the Falmouth United team.

For a closer look at the Sustainable Aquaculture Project and to view a photo slideshow, visit <www.mbl.edu/features/images/sai_slideshow0408.mov>
Facilities Update

It has been a busy season for construction and renovation projects at the MBL. From seawalls to greenhouses, to plans for a major laboratory renovation, a lot of work is underway to improve the infrastructure of the MBL.

• All of the sea walls on the MBL campus have now been repaired or reconstructed. This fall, the Swope Center seawall was completed, marking the last phase of a 20+ year project to stabilize the seawalls surrounding Eel Pond and Great Harbor.

• Devil’s Lane cottages #5, #6, and #7 are being renovated this winter. The entire first floor system of Devil’s Lane #7 was found to be completely dry rotted and will therefore be reconstructed.

• The MBL is building a research grade greenhouse at its property in Falmouth Technology Park to support the research of Ecosystems Center senior scientist Zoe Cardon and her colleagues. The new greenhouse will provide the precise environmental conditions necessary for research ranging from exploration of interactions between plant roots and the soil microbes, to examination of plant responses to changing environmental conditions expected from climate shifts. A range of plant types will be grown, including fast-growing, economically important trees such as poplar, dominant trees from northeastern forests such as red oak, a variety of agriculturally important plants such as tomato and bean, and wild grasses and forbs common to grasslands and forests of the U.S.

• The design phase of the Loeb Laboratory renovation project is nearly complete and schematic designs have been forwarded to the course directors for comment. The MBL received its first detailed estimate based on these plans at the end of November. The full renovation project will total $25 million. The MBL recently received a $15 million grant from the Howard Hughes Medical Institute and a $10 million commitment of state funds—contained in the Massachusetts Life Sciences Act—to fund the renovation.

Greening the MBL

The MBL Climate Committee works to guide the MBL toward a neutral or positive impact with respect to greenhouse gas emissions. With the MBL’s utility bills estimated to cost more than $2 million in 2009, the following initiatives are being taken to help lower energy costs and minimize the laboratory’s carbon footprint.

• Ten new high efficiency boilers are being installed in the MRC with an expectation of a 3 to 4-year payback based on gas energy savings.

• New seawater pump controls are being installed in the Water Street pumphouse. The new controls will regulate water flow on an as needed basis and are expected to provide a 2 1/2 to 3-year payback, based on electric energy savings.

• Loeb Laboratory renovations will strive to meet at least the equivalent of LEED (Leadership in Energy and Environmental Design) Silver standard certification.

• A design grant application for the proposed wind turbine at the Falmouth Technology Park facility has been submitted. If approved, the MBL would seek funding to construct and erect a 1.6 megawatt wind turbine generator, which would provide enough electricity to power a significant portion the MBL village campus. This estimated $4 million project has been calculated to have a 7-to 8-year payback on electric energy savings.
Looking Back: Japanese Dignitaries Visit the MBL

On October 4, 1975, Emperor Hirohito of Japan visited with scientists at the MBL and WHOI as part of an American tour he was taking with Empress Nagako. The emperor was an expert on the hydroids, plant-like invertebrates which include polyps and certain jellyfish. At the MBL, a group of scientists including Shinya Inoué offered the emperor an “Hour of Science” in an MBLWHOI Library room especially prepared for the purpose. The emperor took great interest in the aquaria containing specimens of local organisms, particularly a rare species of hydroid. Before concluding his visit, Emperor Hirohito graciously signed a copy of his report, “Some Hydrozoans of the Bonin Islands,” and donated it to the Library. Today, the desk and chair that the emperor used for the book-signing are housed in the Agassiz Room in the MBL Archives.

On November 8, 2008, Osamu Shimomura, MBL distinguished scientist and 2008 Nobel Laureate in Chemistry, was awarded the Order of Culture, the highest honor given annually by the Emperor of Japan, at a ceremony held in the Grass Reading Room of the MBLWHOI Library. The Order of Culture, which recognizes high achievement in culture, the arts, or academia, is traditionally presented at the Imperial Palace in Tokyo. The ceremony for Shimomura at the MBL was the first time the Order of Culture conferment has been held outside of Japan. Shimomura was honored for his discovery of green fluorescent protein, which is now used worldwide in the microscopic imaging of cells and their components.

Visiting Japanese dignitaries and MBL representatives flank Osamu Shimomura who sits at the same desk and chair used by Emperor Hirohito during his October 1975 visit to the MBL. (left to right): Catherine Norton, Yoichi Suzuki (Consul-General, Consulate-General of Japan), Shinya Inoué, Kazuko Honjo, Osamu Shimomura, Akemi Shimomura, Susumu Honjo (Scientist Emeritus, WHOI), Pamela Clapp Hinkle, Fumio Isoda (Director-General, Research Promotion Bureau, Ministry of Education, Culture, Sports, Science and Technology, Japan). Credit: Tom Kleindinst

Ecosystems Center scientist Anne Giblin’s nitrogen cycling research at Toolik Lake, Alaska, and nitrogen’s effects on climate change were featured in a September 2nd New York Times story written by 2008 Logan Science Journalism fellow, Richard Morgan. Read the story online at <nytimes.com> (search for “Anne Giblin”)

MBL in the News

The Encyclopedia of Life project and the role of the MBL’s Biodiversity Informatics Group were highlighted on CBS Sunday Morning on November 7th. Watch the piece online at <cbsnews.com/video/watch/?id=4581024n>

New England Cable News (NECN) visited Woods Hole to cover Dr. Osamu Shimoura’s Nobel Prize announcement on October 8th, and the MBL press conference with Governor Deval Patrick’s on November 17th. Visit <necn.com> to watch video clips of both stories (search for “Marine Biological Laboratory”)

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The late Hirohito, Emperor of Japan, signs a copy of one of his scientific reports in the MBLWHOI Library during his 1975 visit to Woods Hole. Credit: WHOI Archives

The late Hirohito, Emperor of Japan, signs a copy of one of his scientific reports in the MBLWHOI Library during his 1975 visit to Woods Hole. Credit: WHOI Archives
Employee News

New Employees

*The MBL has welcomed the following new employees since last spring:*

- Dina DiCarlo, Assistant Director, Development, External Affairs
- Peter Falco, Grants Specialist, Financial Services
- Newman Galati, Part-Time Student Helper, Ecosystems Center
- Anthony Goddard, Systems Administrator, Encyclopedia of Life
- David Graham, Research Assistant, BioCurrents Research Center
- Ahmed Hamed, Scientific Informatics Project Leader, MBLWHOI Library
- Joshua Hamilton, Chief Academic & Scientific Officer
- Amy Hancock, Veterinarian, Marine Resources
- James Hache, Custodian, Building Services, Transportation, & Grounds
- Troy Hill, Research Assistant, Ecosystems Center
- Vithal Kudal, Scientific Informatics Software Developer, Encyclopedia of Life
- Ryan Lehy, Groundskeeper, Building Services, Transportation, & Grounds
- Robert Lewis, Research Assistant, BioCurrents Research Center
- Michael Little, HVAC Technician, Plant Operations & Maintenance
- Kara Maloney, Research Assistant, Marine Resources
- Eileen McDonald, Director of Housing & Conferences, Financial Services
- Raghu Metpally, Postdoctoral Scientist, Bay Paul Center
- Lina Moitoso de Vargas, Research Assistant, Cellular Dynamics Program
- Katherine Newhall, Center Administrator, Bay Paul Center
- Naoki Noda, Postdoctoral Scientist, Cellular Dynamics Program
- Stephanie Oleksyk, Research Assistant/SES Recruiter, Ecosystems Center
- Jacqueline Page, Assistant to Manager of Sponsored Programs, Financial Services
- Jennifer Peters, Research Assistant, Ecosystems Center
- Michael Pimental, Watch Person, Plant Operations & Maintenance
Promotions

- **Pamela Clapp Hinkle** was promoted from director of communications to director of development and external relations.

- **Kristen Lans** was promoted from project administrator to project coordinator, Encyclopedia of Life.

- The MBL Science Council has named 2008 Nobel Laureate Osamu Shimomura a distinguished scientist.

Other Employee News

- Distinguished scientist Shinya Inoué was honored in *Cape Cod Life Magazine’s* Hall of Fame which acknowledged the extraordinary work and contributions of 25 people in the Cape Cod community. The story appeared in the October 2008 issue.

- Bioinformatics database coordinator Tamara Clark was the featured artist in the September/October issue of *Cape Cod Magazine*. Tamara, a scientific illustrator, has done contract drawing for numerous departments and laboratories at the MBL, including the Encyclopedia of Life, which is also highlighted in the magazine. Tamara’s illustrations, including everything from an imperial blue butterfly to a peregrine falcon, appear on the site’s exemplar pages. For more information about Tamara’s work, visit <tamar aclark.com>.

- A CD produced and engineered by Rob Loyot, director of information technology, reached #8 last spring on the national Americana Music Association chart, which

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The MBL Softball Team—The Specimens—led by coach Jim Marcello and assistant coach Rhys Probyn, finished the 2008 summer season with a 5-6 record in the WHOI Softball League. This year the league was expanded to 17 teams, including those from the Town of Falmouth. All games were played at either McKee Field (on WHOI’s Quissett campus) or Belltower Field.

Annual Picnic Features Southern Cooking, Pie Baking Contest

The annual MBL picnic was held September 11 in the MBL Quad. Sodexho generously provided the food for the event, which this year had a southern barbeque theme. Besides the ribs, chicken, and large selection of side dishes, the highlight of the picnic was a pie baking contest.

Twelve pies were entered into the contest, which was judged by Pie in the Sky employee, and former Semester in Environmental Science student, Emily Peacock and other Pie in the Sky staff. Ecosystems Center research assistant Elissa Schuett (left, shaking hands with Gary Borisy) won first prize—a $20 Pie in the Sky gift certificate—for her ginger pear pie. Purchasing Assistant Lisa Hunt placed second with her Emeril’s chocolate cream pie and was awarded with a stainless steel Pie in the Sky coffee mug.

Thanks to Sodexho, Pie in the Sky, and all MBL employees who helped to make this year’s MBL picnic a great success!

Other Employee News, cont.

represents the national Top 40 in many different genres of music. The album is titled “Inverted Valentine” by the band “Girls Guns and Glory.” To watch music videos and listen to songs, visit <girlgunsandglory.com>.

• Two sculptures by Tiffany Van Mooy, BioCurrents Research Center program administrator, were part of a juried art exhibit featuring media created using renewable, recycled, reclaimed, or reused materials. The exhibit, titled “REMADE - An Art Exhibit Celebrating the Inventive,” was on display at ‘g’ Green Design Center this fall as part of the showroom’s one-year anniversary celebration. Tiffany’s sculptures were created from old newspapers, cut into strips, spiraled to increasing diameter, and wrapped with bark from fallen trees to resemble a real tree slice. In her sculpture titled “New York Times Tree Rings,” (left) Tiffany used one complete week of the New York Times to create a tree slice whose “tree rings” marked headlines from each day.
Small But Committed Organization

Many in the MBL Community may not be aware of a small but committed organization in Woods Hole called GLOW. An acronym for Gays, Lesbians, and Others at WHOI, GLOW is dedicated to providing the Woods Hole scientific community with a welcoming environment for gays, lesbians, bisexuals, transsexuals, and transgendered individuals as well as their partners and allies at MBL, NMFS, SEA, USGS, WHOI, and WHRC. GLOW serves to fill a social need in Woods Hole by having its members meet in Falmouth for cocktails or dinner or at each others’ homes for cookouts and parties. Alex Valm, a Brown-MBL graduate student, serves as MBL’s representative on this committee and can provide anyone interested with information about the GLOW community, support networks, and local resources. Alex can be reached at x7656 or avalm@mbl.edu.

For more than 50 years, dedicated people have been fighting hard to change the laws so that no one in the U.S. is discriminated against because of their sexual orientation. One of these steadfast fighters was gay-rights activist Del Martin. Ms. Martin was the first open lesbian to serve on the board of directors of the National Organization for Women, and she helped spearhead a successful campaign to get the American Psychiatric Association to remove homosexuality from its roster of mental illnesses. She died last August after marrying her long-time partner in San Francisco on June 16, 2008. They were the first same-sex couple to be united in that city under California’s new law, which made same-sex marriages legal. Gay marriage in California has since been banned following a State vote on November 4, 2008 to restrict marriage to heterosexual couples.

Massachusetts has been a pioneer in changing the law, being the very first state in the U.S. to make same-sex marriages legal. In addition, Massachusetts Congressman Barney Frank was the first to bring a bill before the House that prohibits employment discrimination based on an employee’s actual or perceived sexual orientation. The bill passed in the House on November 7, 2007. If the Senate passes this bill, it will become part of a new law entitled the Employment Non-discrimination Act of 2007.

Current federal employment discrimination laws cover only race, color, religion, sex, national origin, disability, age, and as of May 21, 2008, genetic predisposition. They do not cover sexual orientation or gender identity meaning that a percentage of our population is not protected. That exact percentage is widely debated because the 2000 census only collected data on gay and lesbian couples. In 1995, however, an article titled “Issues in Gay and Lesbian Adoption” estimated that approximately ten percent of the U.S. population was homosexual (Sullivan, A., Proceedings of the Fourth Annual Pierce-Warwick Adoption Symposium, Washington, DC: Child Welfare League of America, 1995), which today would represent 30 million people. That means 30 million people are not protected by federal employment discrimination laws. Fortunately, some states have already adopted the law as one of their own since states are permitted to pass their own laws as long as they either include or expand the protection set forth by federal law. Massachusetts is one of those states that has chosen to adopt this law to ensure protection for its gay, lesbian, bisexual, transsexual, and transgendered (GLBT) citizens. MBL, too, has incorporated sexual orientation into its policy on Equal Opportunity, Affirmative Action, and Diversity.

— Jane MacNeil, x7378, eeo@mbl.edu

Message from the Equal Employment Opportunity Coordinator

Diversity Day 2008

Last June, the Woods Hole scientific community celebrated Diversity Week by holding a series of multi-cultural events, each held at a different research institution on a different day. MBL took this opportunity to invite the Cape Cod African Dance & Drum Ensemble, a group of creative dancers and drummers led by Tara Murphy, to perform. For over an hour at lunchtime the MBL Club was filled with rhythmic sounds, spirited movements, and infectious laughter, much of it provided by children from the Satellite and Periwinkle Clubs. This enjoyable performance was the result of volunteer efforts by MBL employees Erika Del Castillo, Diana Kenney, Kelly Holzworth, Mike Toner, and Ann Woolford with additional help from Jane MacNeil, Kara Ryan, and Sodexho.
Web Update

The MBL website continues to grow with the recent addition of video and audio content. The new multimedia page <mbl.edu/news/multimedia> offers videos of the entire 2008 Friday Evening Lecture Series, footage of this fall’s Nobel Prize press conference with Osamu Shimomura, the recent press conference with Governor Patrick and other legislators announcing funding for the Loeb Laboratory, and more. The multimedia page will expand as new content becomes available. If you or your lab has interesting video associated with your research, please notify David Gallagher in the Communications Office, dgallagher@mbl.edu.

• Last summer, the MBL launched a series of web-only news features <mbl.edu/news/features> highlighting some of the fascinating research done at the MBL by our visiting scientists.

• The MBL Guide to Research and Education <mbl.edu/gre> has been completely updated for 2009 and features revised information on education, research, housing, applications, tuition, and fees. Expanded information on MBL fellowships <mbl.edu/fellowships> offers those interested in conducting visiting research at the MBL a step-by-step guide.

• The Human Resources page <mbl.edu/hr> has also been updated with new policies, as well as photos from this fall’s staff picnic.

• And, don’t forget the MBL events page <mbl.edu/events> continues to be the place to go for the most up-to-date list of events, lectures, and conferences.

Benefits Update

Changes are coming to the MBL Supplemental Retirement Plan for 2009! Beginning January 1, 2009, we will be adding mutual funds as additional investment alternatives. The new mutual funds include the International Equity Fund, Large-Cap Value Fund, Mid-Cap Value Fund, Mid-Cap Growth Fund, Small-Cap Equity Fund, Lifecycle Retirement Income Fund and Lifecycle Funds. We hope to also add these funds to the MBL Retirement Plan later in 2009 or in 2010 as the change to this plan will require a more extensive plan document re-writing.

Lifecycle Funds have been called “funds of funds.” Using TIAA-CREF mutual funds as underlying investments, a lifecycle fund is managed with a specific target retirement date in mind. Each fund, available for target retirement years in five year increments from 2010 to 2050, is adjusted from more aggressive to more conservative as the target retirement date approaches. Thus, funds will gradually be reallocated from funds invested primarily in stocks to funds invested primarily in bonds or money market instruments. The Lifecycle Retirement Income Fund is designed for investors who are already in or entering retirement.

The second change for 2009 is the availability of Roth contributions to our retirement plan. Roth contributions are participant contributions made on an after-tax basis, that is they are not excluded from your income as a salary reduction contribution to our current plan would be. The benefit of a Roth contribution is that the benefits at retirement (after age 59) are generally income tax-free. The contributions must remain in the plan for five years to achieve this benefit. The annual maximum is the same as for the salary reduction plan at $15,500 for 2008, with an additional $5,000 catch-up for those ages 50 or older. While you may make both GSRRA and Roth contributions during the year the combined amount contributed in any one year is limited by the above limit.

Limits recently announced for 2009 are as follows:

* Elective Deferrals $16,500
* or Roth Contributions $16,500
* Catch-up Contributions $ 5,500
* Catch-up Deferrals for individuals $3,000

age 50 or over AND with 15 years of service or more at MBL, subject to $15,000 lifetime maximum

Upcoming Human Resources Seminars and Events

Watch for laball announcements with additional details

Coming in 2009
• TIAA-CREF individual counseling sessions
• Identity Theft:
  When bad things happen to your good name
• Preparing for Retirement: It’s not just about money
  • Achieving Balance:
    How to handle the stress of work and family life

2008 MBL Photomicrography Contest First Place Winner, “An Effluorescence of Squid” by Rachel Fink. To see other winning images and for information about the annual contest, please see: <www.mbl.edu/photo_contest/index.html>
Great EsCapes:

Historic Lighthouses

There's something romantic about a lighthouse, guiding sailors through dangerous seas and back safely back to port. From Bourne to Provincetown, Cape Cod has some of the most picturesque lighthouses in the world. The quiet off-season is a unique time to visit these historic gems and take in beauty of the stormy seas around them.

**Nobska Light, Woods Hole**
The original lighthouse was built in 1828 and replaced in 1879. When seen straight on from the sea, it appears white, but from the side, it assumes a reddish color. This phenomenon helps orient sailors.

**Directions:** From Falmouth, follow Route 28 to Woods Hole. Just before Woods Hole, turn left onto Church Street.

**Hardings & Chatham Light, Chatham**
Built in 1881, Chatham Light was moved to its present location near the Coast Guard Station in the early 1920s. Nearby telescopes enhance the spectacular view of the North Beach breakthrough.

**Directions:** Follow Main Street, Chatham to its end bearing right. There is yet another private light at the end of Hardings Beach in Chatham which can be viewed from Champlain Rd.

**Cape Cod Light, Truro**
In 1797, the Cape’s first lighthouse was ordered built by George Washington to warn sailors of the area known as the “Graveyard of Ships.” The current beacon, with over 620,000 candlepower is the most powerful light in New England and ships from 30 miles away can identify this landmark. In July 1996, the lighthouse, then only 100-feet away from an ever-eroding cliff, was moved west 450-feet to its current location.

**Directions:** Take Route 6 to Truro. Follow signs to Cape Cod (or Highland) Light off Highland Road near the Truro School.

**Race Point, Provincetown**
This 40-foot beacon, built in 1816, helped guide ships around the tricky shoals for centuries before the Cape Cod Canal was built.

**Directions:** From Herring Cove Beach, the light is about a mile hike north across the sands.

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Lighthouse information and directions reprinted with permission from CapeCodTravel.com and CapeCodToday.com