2013 was a historic year for the MBL.
As the laboratory commemorated its past with a 125th anniversary celebration, we embarked on the promising future of a full affiliation with a major university.

With the support and hard work of the Board, scientists, staff, and the greater MBL community, we found a partner in the University of Chicago, a remarkable institution with strong historical and intellectual ties to the MBL that date back to the laboratory’s founding in 1888. At a special meeting of the MBL Corporation in June of 2013, members voted for a change in the bylaws that made it possible for the MBL to form a landmark affiliation with the University.

Both UChicago and the MBL have reputations for scientific excellence and highly collaborative cultures that draw top biologists from around the world. And with our affiliation, a shared mission of leadership and innovation in scientific research and education was strengthened.

In the months following the affiliation’s official start on July 1, 2013, MBL scientists and staff worked diligently with University colleagues with the essential task of implementing the new partnership through both operational and scientific planning.

MBL’s resident faculty members met regularly to discuss ways to enhance interactions among programs within the MBL, and with faculty and programs at the University of Chicago. A committee comprised of the heads of MBL’s administrative units was convened in the summer of 2013, and focused on operational implementation. A University faculty committee, chaired by Neil Shubin, the Robert R. Bensley Professor of Organismal Biology and Anatomy and Senior Advisor to the President and Vice President for Research and National Laboratories at the University of Chicago, was formed in the Fall of 2013 to foster and develop the affiliation through collaborative research and educational initiatives. These efforts remain underway and have expanded to include joint scientific and operational retreats in both Chicago and Woods Hole.

This spring, the MBL Board of Trustees welcomed Robert J. Zimmer, president of the University of Chicago, as the new chair of the MBL Board. President Zimmer succeeds Jack W. Rowe, who led the MBL through an exceptionally successful capital campaign and two significant renovation projects that transformed Loeb and Rowe laboratories. The MBL has benefitted tremendously from Jack Rowe’s leadership and from the exceptional generosity of the Jack and Valerie Rowe family, for which we are very grateful.

As the MBL looks toward its next 125 years, we are energized by the opportunity to craft a vision and strategy that will make the most of our affiliation with the University of Chicago and further distinguish the quality and impact of our research and educational programs. There is enormous room for discovery before us as we work to ensure that the future of the MBL is as bright, if not brighter, than its remarkable past.

Joan Ruderman
MBL President and Director
University of Chicago and MBL Form Landmark Affiliation

In July 2013 the University of Chicago and the MBL strengthened their combined eminence and innovation in biological research and education by forming an affiliation that builds upon their shared values and historical ties. Both institutions have reputations for scientific excellence, highly collaborative cultures that draw top biologists from around the world, and programs that will benefit from the affiliation’s combination of strengths.

MBL Celebrates 125th Anniversary

The MBL commemorated its 125th anniversary with a series of special events, including Discovery Day, a free family science fair and anniversary party. In conjunction with the celebration, the MBL Community Archives Project collected community photos, memorabilia, and remembrances for the MBL Archives and History of MBL website, developed by the MBLWHOI Library, EOL Informatics Group, and Arizona State University.

Life in the “Plastisphere” of the World’s Oceans

Plastics are the most abundant form of marine debris, with global production rising and documented impacts in some marine environments. Associate Scientist Linda Amaral Zettler and collaborators published a study documenting the microbial community associated with plastic marine debris at several locations in the North Atlantic. They uncovered a diverse multitude of microbes, a community now called the “Plastisphere.” They showed that plastisphere communities are distinct from surrounding surface water, implying that plastic serves as a novel ecological habitat in the open ocean.

Senator Warren Visits the MBL

U.S. Senator Elizabeth Warren (D-Massachusetts) toured the MBL accompanied by MBL President and Director Joan Ruderman, University of Chicago President Robert J. Zimmer, Argonne National Laboratory Director Eric Isaacs, and other members of the institutions’ leadership teams. The MBL’s affiliation with the University of Chicago, Senator Warren said, “is a great partnership; great for Massachusetts and for [the MBL].” Her visit, she said, was a “reminder of why we are investing in research ... Woods Hole is the place the world is looking to for the best research and latest ideas.”
University of Chicago, MBL Launch Research Awards, Scholarship Programs

The MBL and UChicago introduced the Frank R. Lillie Research Innovation Awards. The competitive, multi-year grant program, one of the first results of the UChicago-MBL affiliation, supports innovative, interdisciplinary research that will lead to novel ideas and biological discovery. UChicago also initiated a full-tuition, merit based, renewable scholarship for undergraduate study at the University to be awarded annually to the child of a year-round MBL employee who is accepted for enrollment at the University of Chicago.

Long-Term Tundra Warming Study Provides Insight into Ecosystem’s Resiliency

University of California Santa Barbara Ph.D. student Seeta Sistla, a graduate of the Brown-MBL program, compared plant species and total carbon and nitrogen storage in warmed and control tundra plots. These plots were established by Ecosystems Center Senior Scientist Gus Shaver more than 20 years ago as part of the Arctic Long-Term Ecological Research Project. Sistla found that warming increased plant biomass and woody dominance, indirectly increased winter soil temperature and suppressed surface-soil-decomposer activity, but did not change total soil carbon or nitrogen stocks and thereby increased ecosystem carbon storage. This is an important prediction that indicates carbon loss could be partially offset by greater storage in vegetation as the tundra warms.

New Sculptures Grace Waterfront Park

MBL’s Waterfront Park was enhanced with the installation of two new sculptures. “Flukes,” a cast-bronze abstract form inspired by the shape of a whale’s tail, was generously donated to the MBL by the artist, Gordon Gund. A life-sized bronze statue of environmentalist and writer Rachel Carson was also unveiled. The statue commemorates Carson’s ties to Woods Hole and Cape Cod and is modeled on a photograph taken of the scientist seated on a Woods Hole dock, notebook in hand, looking out at the sea. The statue is the culmination of the work of the Falmouth, MA-based Rachel Carson Statue Committee.
Jellyfish Built for Efficiency, Not Speed
Jellyfish may not be fast, but they are one of the most efficient swimmers on the planet, reported MBL Whitman Investigators Brad Gemmell and John Costello of Providence College and Sean Colin of Roger Williams University. The key to the energy savings is a previously overlooked part of the way jellies move, a mechanism scientists call “passive energy.” During the relaxation phase, after the jellyfish contracts, the scientists discovered that another vortex ring in the water gives the animal a second locomotive boost. The discovery may explain why jellyfish can “bloom” and overrun an ecosystem, outcompeting much swifter predators like fish.

Microbial Diversity Course Named “Milestones in Microbiology” Site
The MBL Microbial Diversity Course was honored as the 2013 “Milestones in Microbiology Site” by the American Society for Microbiology. The designation recognizes places where major developments in microbiology occurred and/or where outstanding microbiologists made seminal discoveries. The course, initiated in 1971, has shaped the careers of generations of outstanding microbiologists, and continues to be a premier site for advanced training at the leading edge of microbiological investigation.

Genes Linked to Human Neurological Disorders Found in Lamprey Genome
A consortium of scientists including Jennifer Morgan of the Eugene Bell Center for Regenerative Biology and Tissue Engineering published the genome of the sea lamprey, a vertebrate fish used by Morgan to study the molecular and cellular basis of spinal cord regeneration. Morgan and MBL Whitman Investigators Ona Bloom and Joseph Buxbaum identified several genes linked to human neurological disorders, including Alzheimer’s disease, Parkinson’s disease, and spinal cord injury.

Staying Alive in the High and Dry
Ecosystems Center Senior Scientist Zoe Cardon and colleagues showed how the movement of water from deep moist soil, through plant roots, to shallow dry soil delivers sips of sustaining water during drought to surface soil microbes that make nitrogen available to plants. Working in Utah’s sagebrush steppe, the team monitored this “hydraulic lift” of soil water and discovered that the mechanism stimulated microbial activity and more than doubled the plants’ uptake of nitrogen from the surrounding surface soil at exactly the time they were flowering and setting seed. Greater understanding of hydraulic lift could aid scientists and growers in finding ways to protect crops from the effects of prolonged drought.

New Program Helps Scientists Build a SUCCESSful Career
The MBL launched SUCCESS (Shaping and Understanding Career Choices in Education, Science and Self), a new career development program for young scientists. The program features a series of weekly workshops led by panels of established scientists from institutions across the United States. Topics address everything from choosing a career, to honing presentation skills, to obtaining funding and finding mentors.
**Impacts of Beach Oiling on Coastal Microbes**

The beach ecosystems along the northern Gulf Coast underwent a major disturbance in the months following Deepwater Horizon oil spill. Bay Paul Center scientists published a study of the changes in microbial community composition from oil hydrocarbon contaminated sands at seven coastal sites that experienced a range of oiling. They documented that, in addition to increases in oil hydrocarbon-degrading bacteria, there were community-wide impacts including increased variability of core, resident, and transient members of the bacterial community in coastal sands. These changes could affect the biological and chemical stability of coastal ecosystems.

**Shedding Light on Cell Structures**

Cellular Dynamics Program scientists Rudolf Oldenbourg, Michael Shribak, and Shalin Mehta developed the optical setup, image acquisition, and processing algorithms needed to measure the polarization sensitive absorption of pigments in photoreceptors and in other light absorbing cell structures. In related work, members of the Oldenbourg laboratory created OpenPolScope.org for users and developers of polarized light microscopy techniques. The open-access website is a platform for the collection and dissemination of knowledge about the technology, its applications, and its further development.

**New Insight on Cuttlefish Decision-Making During Camouflage**

A study from Kimberly Ulmer and Roger Hanlon in the Program in Sensory Physiology and Behavior and their colleagues showed that when cuttlefish change their skin patterns for camouflage purposes, they respond to vertical visual cues in their environment more strongly than to horizontal cues. Many prior experiments had shown the influence of two-dimensional substrates, such as sand and gravel habitats, yet many marine habitats have three-dimensional structures, such as rocks and coral, among which cuttlefish camouflage from predators. Such choices highlight the selective decision-making that occurs in cuttlefish as they determine their camouflage body patterns.

**Bell Center Student Awarded Ph.D.**

Brown-MLB Program student Cassandra Bilogan successfully defended her Ph.D. dissertation, making her the first Brown-MLB student to complete her degree in the Eugene Bell Center for Regenerative Biology and Tissue Engineering. Bilogan conducted her doctoral research in the lab of Associate Scientist Marko Horb. Bilogan’s research focused on embryonic development, in particular development of the pancreas. Understanding how the pancreas develops is vital to finding treatments for a range of pancreatic diseases, including diabetes and pancreatic cancer.

**Study Examines Effects of Cropland Intensification on Amazon Watershed**

Ecosystems Center Senior Scientists Christopher Neill and Linda Deegan and colleagues study ways that clearing of Amazon forest for soybean cropland influences runoff to streams, water quality and stream habitats. The work also indicates that cleared and intensively farmed regions of the Amazon are near a point where clearing for cropland is reducing rainfall by lowering the amount of water recycled to the atmosphere.
How to Survive Without Sex

Bdelloid rotifers, a group of more than 400 small aquatic invertebrate species, are considered an “evolutionary scandal” due to their successful evolution apparently without sex. An international collaboration of scientists including the Bay Paul Center laboratories of Irina Arkhipova and David Mark Welch published the first genome sequence of a bdelloid rotifer. Their analysis is shedding new light on the evolutionary significance of sex, and suggests that the homogenizing and diversifying roles of sex may have been replaced in bdelloids by gene conversion and horizontal gene transfer.

Rudolf Oldenbourg Appointed Director of Cellular Dynamics Program

MBL Senior Scientist Rudolf Oldenbourg was named director of the Cellular Dynamics Program, whose research focuses on developing new techniques and technologies for the study of living cells. Oldenbourg has pioneered advances in transmitted light microscopy and invented the LC-PolScope, a polarized light microscope enhanced by the use of liquid crystal technology, electronic imaging, and digital image processing. The LC-PolScope is now widely used in clinical and research laboratories around the world and has found particular relevance in fertility clinics, where it can be used noninvasively to visualize meiotic spindles in human eggs.

Fish Study Probes Evolution of Vertebrate Jaw

The emergence of the biting jaw is a major novelty in the evolution of vertebrates. A classical and widely cited hypothesis that the jaw evolved from the gill skeleton remained unsupported by palaeontological evidence or genetic data. Using shark, skate, and paddlefish embryos, Whitman Investigator Andrew Gillis of Dalhousie University and his colleagues showed that nested expression of the Dlx genes—the “Dlx code” that specifies upper and lower jaw identity in mammals and bony fishes—is actually a primitive, shared feature of the jaw and gill arches of jawed vertebrates. The evidence supports the hypothesis made by anatomist Karl Gegenbauer more than a century ago and demonstrates that the structures were primitively specified by a common Dlx blueprint.

Embryology Course Turns 120

The MBL’s Embryology course celebrated its 120th session in 2013. The course was founded in 1893 by University of Chicago scientists Charles Otis Whitman (then MBL Director) and Frank Rattray Lillie. Considered the premier course on animal developmental biology, the course brings together leading faculty and students in an intensive research experience that explores the latest paradigms, problems, and technologies in modern developmental biology. To celebrate the course’s legacy, a commemorative symposium was held at which former directors, faculty, and students discussed their research, and considered the course’s role in shaping the practice of science.
The Marine Biological Laboratory (MBL) is dedicated to scientific discovery and improving the human condition through research and education in biology, biomedicine, and environmental science. Founded in Woods Hole, Massachusetts, in 1888, the MBL is a private, nonprofit institution and an affiliate of the University of Chicago.

LEADERSHIP
Chairman of the Board of Trustees: Robert J. Zimmer
President and Director: Joan V. Ruderman
Speaker of the MBL Society: Colleen M. Cavanaugh

SCIENTISTS & AFFILIATED STAFF
The MBL has approximately 250 year-round employees, about half of which are scientists and science support staff. The staff is joined each year by more than 300 visiting scientists, summer staff, and research associates from hundreds of institutions around the world, as well as a large number of faculty and students participating in MBL courses (see below).

AWARD-WINNING SCIENCE
Among the scientists with a significant affiliation with the MBL (scientists, course faculty and students) are 55 Nobel Prize winners (since 1929); 124 Howard Hughes Medical Institute investigators, early career scientists, international researchers, and professors (since 1960); 229 Members of the National Academy of Sciences (since 1960); and 198 Members of the American Academy of Arts and Sciences (since 1960).

AFFILIATION WITH THE UNIVERSITY OF CHICAGO
The MBL and the University of Chicago formed an affiliation on July 1, 2013, that enhances both institutions’ missions of leadership and innovation in scientific research and education. The affiliation builds on shared values and historical ties between Chicago and the MBL, which was led by University of Chicago faculty members for the first four decades of its existence.

MAJOR PROGRAMS & RESEARCH AREAS
**Ecosystems Center:** Ecosystems processes, biogeochemistry, and climate change

**Bay Paul Center for Comparative Molecular Biology & Evolution:** Microbial ecology; genetics and metagenomics; molecular evolution

**Bell Center for Regenerative Biology & Tissue Engineering:** Cell, developmental and regenerative biology; tissue engineering and regeneration

**Cellular Dynamics Program:** Microscopy, imaging and cellular dynamics; cellular physiology and biocurrents; biosensors

**Program in Sensory Physiology & Behavior:** Sensory biology (especially vision, balance, hearing); cephalopod camouflage; animal behavior

**Whitman Center for Visiting Research:** Collaborative research by leading scientists from around the world

EDUCATIONAL PROGRAMS
**MBL Courses:** 25 courses providing advanced, laboratory-based research training in fields such as cellular physiology, embryology, neurobiology, and microbiology, including (in 2013) 557 students from 416 institutions and 45 countries; and 845 faculty, staff, and lecturers from 276 institutions and 17 countries.

Educational programs also include undergraduate education and independent research, graduate training, the Brown-MBL Graduate Program in Biological and Environmental Sciences, postdoctoral training, and community continuing education programs.

OTHER PARTNERSHIPS
**The Brown-MBL Partnership** fosters research collaborations between scientists from the MBL and Brown University, and includes undergraduate training, a joint graduate program, graduate training grants, and collaborative research programs.

**The Woods Hole Consortium** is a research and educational alliance between the MBL, the Woods Hole Oceanographic Institution, and the Woods Hole Research Center.

**Encyclopedia of Life (EOL):** The MBL is a founding member of the Encyclopedia of Life, a global consortium working to provide free, open access to curated digital knowledge about life on Earth, with a special focus on more than 200,000 marine organisms. The software programming team responsible for building EOL is based at the MBL.

SCIENTIFIC CONFERENCES
The MBL annually hosts scientific meetings, conferences, and departmental retreats, accommodating more than 2,600 participants from around the world.

RESOURCES
**The MBLWHOI Library** houses one of the world's foremost print and electronic literature collections in the biological, biomedical, ecological, and oceanographic sciences; and conducts digitization and informatics projects.

**The W. M. Keck Ecological and Evolutionary Genetics Facility** is a high-throughput DNA template production and sequencing facility in the MBL's Josephine Bay Paul Center.

**The Marine Resources Department** is an advanced facility for maintaining, culturing, and providing aquatic organisms essential to biological, biomedical, and ecological research.

**National Xenopus Resource** breeds and maintains *Xenopus* (frog) genetic stocks; and provides training in *Xenopus* husbandry, cell biology, imaging, genetics, transgenesis, and genomics.

FINANCES
**2014 Operating Budget:** $47.4 million (40% government grants and contracts; 11% nonfederal grants and contracts; 8% contributions; 7% endowment earnings; 34% other)

**Endowment:** $76.0 million (as of Dec. 31, 2013)

**Net Assets:** $166.7 million (as of Dec. 31, 2013)

* as of August 2014
2013 brought several significant financial changes to the MBL, in addition to transitioning to the new affiliation with the University of Chicago, which became effective July 1, 2013. The University has committed to substantial financial support to the MBL for the coming years, and in 2013 $6.0 million in cash was received as income for operations. MBL realized a $2.0 million loss from operating activities, after including the University support, largely driven by decreases in federal revenue as available grant streams continue to tighten.

The affiliation with the University necessitated a review of the fair market value of MBL’s assets and liabilities, as the MBL results will be consolidated into the University’s financial statements. The result of the review was a revaluation of MBL’s real estate assets, and a $50.0 million increase in land value was recorded on MBL’s balance sheet in 2013. Net assets as of December 31, 2013 were $166.7 million, up from $109.7 million as of December 31, 2012. MBL’s endowment value rose to $76.0 million at the end of 2013, up from $69.4 million at the end of 2012.

MBL has been working closely with the University on intensive strategic planning activities, both scientific and operational, since July 2013. Revenues and expenditures of each major business unit are being reviewed in detail, and an operational modeling exercise has begun to consider new activities and their revenue impacts on the institution. Partnerships between staff and researchers at both institutions have developed, integrating activities and contributing to initial programmatic successes and operational improvements. While there is much work left to be done, leadership of both the MBL and the University are optimistic and enthusiastic about the potential for mutual benefit, and the future growth of the MBL.

— Mary S. Harrington, Treasurer
# Statement of Financial Position
## December 31, 2013

## ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$734,067</td>
</tr>
<tr>
<td>Cash held for others</td>
<td>302,915</td>
</tr>
<tr>
<td>Accounts receivable, net of allowance for doubtful accounts of $35,000</td>
<td>567,396</td>
</tr>
<tr>
<td>Contributions receivable, net</td>
<td>1,765,351</td>
</tr>
<tr>
<td>Receivables due for costs incurred on grants and contracts</td>
<td>3,195,727</td>
</tr>
<tr>
<td>Inventory and prepaid expenses</td>
<td>786,214</td>
</tr>
<tr>
<td>Investments, at fair value</td>
<td>80,846,876</td>
</tr>
<tr>
<td>Charitable remainder trusts</td>
<td>480,797</td>
</tr>
<tr>
<td>Plant assets, net</td>
<td>115,192,315</td>
</tr>
<tr>
<td>Other assets</td>
<td>1,343,419</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$205,215,077</strong></td>
</tr>
</tbody>
</table>

## LIABILITIES AND NET ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>$3,133,860</td>
</tr>
<tr>
<td>Future program resources</td>
<td>302,915</td>
</tr>
<tr>
<td>Deferred income</td>
<td>2,029,653</td>
</tr>
<tr>
<td>Annuities and unitrusts payable</td>
<td>422,372</td>
</tr>
<tr>
<td>Interest rate swap</td>
<td>3,049,573</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>29,615,000</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td><strong>38,553,373</strong></td>
</tr>
</tbody>
</table>

## Net assets:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted</td>
<td>93,244,744</td>
</tr>
<tr>
<td>Temporarily restricted</td>
<td>21,900,525</td>
</tr>
<tr>
<td>Permanently restricted</td>
<td>51,516,435</td>
</tr>
<tr>
<td><strong>Total net assets</strong></td>
<td><strong>166,661,704</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total liabilities and net assets</strong></td>
<td><strong>$205,215,077</strong></td>
</tr>
</tbody>
</table>

## Statement of Activities: Year ended December 31, 2013

### Operating support and revenues:

<table>
<thead>
<tr>
<th>Description</th>
<th>Unrestricted</th>
<th>Temporarily Restricted</th>
<th>Permanently Restricted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal grants</td>
<td>$18,883,765</td>
<td>$ -</td>
<td>$ -</td>
<td>$18,883,765</td>
</tr>
<tr>
<td>Non-Federal grants and contracts</td>
<td>4,913,541</td>
<td>1,136,000</td>
<td>-</td>
<td>6,049,541</td>
</tr>
<tr>
<td>Income from affiliate</td>
<td>6,040,000</td>
<td></td>
<td></td>
<td>6,040,000</td>
</tr>
<tr>
<td>Fees for conferences and services</td>
<td>4,436,109</td>
<td></td>
<td></td>
<td>4,436,109</td>
</tr>
<tr>
<td>Contributions</td>
<td>2,155,322</td>
<td></td>
<td></td>
<td>2,155,322</td>
</tr>
<tr>
<td>Investment earnings used for operations</td>
<td>387,920</td>
<td>2,569,511</td>
<td>-</td>
<td>2,957,431</td>
</tr>
<tr>
<td>Laboratory rentals</td>
<td>1,011,158</td>
<td></td>
<td>-</td>
<td>1,011,158</td>
</tr>
<tr>
<td>Tuition, net</td>
<td>936,346</td>
<td></td>
<td>-</td>
<td>936,346</td>
</tr>
<tr>
<td>Other revenue</td>
<td>615,635</td>
<td></td>
<td>-</td>
<td>615,635</td>
</tr>
<tr>
<td><strong>Total operating support and revenues</strong></td>
<td>45,122,515</td>
<td>(986,944)</td>
<td>327,559</td>
<td>44,463,130</td>
</tr>
</tbody>
</table>

### Expenses:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>27,612,268</td>
</tr>
<tr>
<td>Education</td>
<td>10,000,661</td>
</tr>
<tr>
<td>Visiting research</td>
<td>4,161,126</td>
</tr>
<tr>
<td>Conferences, housing and dining</td>
<td>3,419,631</td>
</tr>
<tr>
<td>Other expenses</td>
<td>1,954,660</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td><strong>47,148,346</strong></td>
</tr>
</tbody>
</table>

### Change in net assets before non-operating activities:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in value of interest rate swap</td>
<td>3,171,103</td>
</tr>
<tr>
<td>Present value adjustment to annuities</td>
<td>(17,903)</td>
</tr>
<tr>
<td>Post retirement - related charges other than periodic pension costs</td>
<td>638,409</td>
</tr>
<tr>
<td>Contributions for investment in plant</td>
<td>19,024</td>
</tr>
<tr>
<td><strong>Total change in net assets</strong></td>
<td><strong>3,810,633</strong></td>
</tr>
</tbody>
</table>

### Non-operating revenue (expense):

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in value of interest rate swap</td>
<td>3,171,103</td>
</tr>
<tr>
<td>Present value adjustment to annuities</td>
<td>(17,903)</td>
</tr>
<tr>
<td>Post retirement - related charges other than periodic pension costs</td>
<td>638,409</td>
</tr>
<tr>
<td>Contributions for investment in plant</td>
<td>19,024</td>
</tr>
<tr>
<td><strong>Total change in net assets from non-operating activities</strong></td>
<td><strong>3,810,633</strong></td>
</tr>
</tbody>
</table>

### Investment income and gains (losses):

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net investment income and gains</td>
<td>1,109,848</td>
</tr>
<tr>
<td>Less: investment earnings used for operations</td>
<td>(387,920)</td>
</tr>
<tr>
<td>Recovery of deficiencies in historical values</td>
<td>299,729</td>
</tr>
<tr>
<td><strong>Investment income and gains</strong></td>
<td><strong>1,021,657</strong></td>
</tr>
</tbody>
</table>

### Changes in net assets:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in net assets</td>
<td>2,806,459</td>
</tr>
<tr>
<td>Fair value adjustment due to Affiliation</td>
<td>50,000,000</td>
</tr>
<tr>
<td><strong>Net assets, December 31, 2013</strong></td>
<td><strong>$93,244,744</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net assets, December 31, 2012</td>
<td>21,900,525</td>
</tr>
<tr>
<td><strong>Net assets, December 31, 2013</strong></td>
<td><strong>$166,661,704</strong></td>
</tr>
</tbody>
</table>
I am pleased to report that in 2013, we raised $6,794,685 in new private support for MBL’s research and education programs. This is a strong accomplishment, given that 2013 was the first year following the very successful Catalyst Campaign.

Funds raised in 2013 include $1.47 million in Annual and unrestricted funds that were immediately available to meet operational needs, and a $1.25 million grant from the Alfred P. Sloan Foundation in support of The Bay Paul Center’s Deep Carbon Project, which seeks to generate new insights about the abundance and diversity of subsurface marine microorganisms.

2013 proved to be a landmark year for the MBL in many ways. As the 125th anniversary of the MBL’s founding, it was a time of reflection about where we’ve been, and for looking ahead to the next generation of MBL science. It was also the start of the MBL’s affiliation with the University of Chicago, and the beginning of a new era in the lab’s history.

Thank you to all our Trustees, Overseers, scientists, alumni, friends, staff, and extraordinary donors! On behalf of the Development Committee of the Board of Trustees, I offer my gratitude and thanks. Your generosity and belief in our work is an inspiration!

Thank you.

— Jeffrey Pierce, Chair
Gifts

Major Gifts
The MBL gratefully acknowledges the generous contributions and pledges of the individuals, foundations, and companies who supported our programs and operations in 2013.

$1,000,000-$2,000,000
ALFRED P. SLOAN FOUNDATION
$1,256,000 grant for support of the Deep Carbon Project; Mitchell Sogin, Principal Investigator.

BURROUGHS WELLCOME FUND
$820,000 in support of the Frontiers in Reproduction and Embryology courses and the Physiology Alumni Fund.

CHARLES M. AND PHYLLIS ROSENTHAL
$550,000 in support of the Ecosystems Recruitment Fund for Postdoctoral Scientists and the Annual Fund.

THE BAY AND PAUL FOUNDATIONS
$500,000 for support of the Bay Paul Center for Molecular Evolution’s expanding investigation of human microbial biome.

THE GRASS FOUNDATION
$450,000 in support of the Neural Systems and Behavior and Neurobiology courses.

ESTATE OF LAURA HUNTER COLWIN
$401,549 for discretionary use.

THE G. UNGER VETLESEN FOUNDATION
$350,000 for support of the Bay Paul Center and the Marine Resources Center.

SIMONS FOUNDATION
$250,000 in support of the Microbial Diversity course.

GEORGE AND KATHY PUTNAM
$129,788 in support of the Strategic Planning Fund and the Annual Fund.

MILLICENT BELL
$125,000 in support of the Strategic Planning Fund and the Annual Fund.

Restricted Gifts

$10,000-$49,999
Anonymous (2)
The Agouron Institute
The American Society for Cell Biology
American Society for Reproductive Medicine
Margaret C. and Francis P. Bowles
Worthington and Dorothy Campbell
Carolyn Cohen
The Company of Biologists Limited
Sally Cross
Saint Michael and All Angels
Episcopal Church
Fund for Science
Howard Hughes Medical Institute
Barbara Woll Jones
Ethan and Lisa Lerner
Marianne F. Milkman
Gordon and Betty Moore Foundation
Richard S. and Susan G. Morse
The Morton Cure Paralysis Fund
Nikon Instruments, Inc.
Saul Pannell and Sally Currier
William Townsend Porter Foundation
Society for Developmental Biology, Inc.
Ivan and Virginia Valiela
Waksman Foundation for Microbiology
Wellcome Trust

$5,000-$9,999
Donald R. Aukamp
William and Susan Cobb
Peter and Ginny Foreman
Joan C. Miller
Joan V. and Gerald S. Ruderman
Edward D. and Nancy M. Salmon
Walter J. and Marjorie B. Salmon
Woods Hole Foundation, Inc.

$50,000-$99,999
James F. Case
Patrick Gage and Irina Wilson
Jeffrey Gardner
Shinya and Sylvia Inoué
Kurt J. and Rhoda S. Isselbacher
Tom and Maryann Jalkut
George Frederick Jewett Foundation East
Jeffrey and Margaret Pierce
Promega Corporation
George and Kathy Putnam
Patricia and Charles Robertson
Ann E. Stuart and John W. Moore

$10,000-$49,999
Anonymous (2)
The Agouron Institute
The American Society for Cell Biology
American Society for Reproductive Medicine
Margaret C. and Francis P. Bowles
Worthington and Dorothy Campbell
Carolyn Cohen
The Company of Biologists Limited
Sally Cross
Saint Michael and All Angels
Episcopal Church
Fund for Science
Howard Hughes Medical Institute
Barbara Woll Jones
Ethan and Lisa Lerner
Marianne F. Milkman
Gordon and Betty Moore Foundation
Richard S. and Susan G. Morse
The Morton Cure Paralysis Fund
Nikon Instruments, Inc.
Saul Pannell and Sally Currier
William Townsend Porter Foundation
Society for Developmental Biology, Inc.
Ivan and Virginia Valiela
Waksman Foundation for Microbiology
Wellcome Trust

$5,000-$9,999
Donald R. Aukamp
William and Susan Cobb
Peter and Ginny Foreman
Joan C. Miller
Joan V. and Gerald S. Ruderman
Edward D. and Nancy M. Salmon
Walter J. and Marjorie B. Salmon
Woods Hole Foundation, Inc.
$1,000-$4,999
American Society of Naturalists
Porter W. Anderson, Jr.
Gloria S. Borgese
Paul N. Cherwin
Bradley and Katie Cohen
Marion Cohen
Organization for Computational Neurosciences
The Cooperative Bank of Cape Cod
David and Karen Davis
Stephen and Lois Eisen
Christopher Foreman
Prosser Gifford
Mary L. Goldman and Debra Weiner
Robert D. and Anne E. Goldman
Piroska Hardwicke
J. Woodland Hastings
Carmela J. Huettner
Hugh E. and Frances M. Huxley
Hyockman Kwon
Hans Lauffer
Paul B. Lazarow
Lhing-Yew Li
Anna Lysakowski
Eve Marder
William N. and Marianne W. Mebane
John Mills
Pentair Aquatic Eco-Systems
Sidney K. Pierce, Jr.
Thomas D. and Patricia S. Pollard
Rhys E. Probyn
The Rockefeller University Press
Robert D. Schatz
Sara Schupf
Alexandra E. Shea
Society of General Physiologists
Raymond E. Stephens
Andrew and Ursula Szent-Györgyi
Ronald D. Vale and Karen Dell
Washington & Jefferson College
Robert and Patricia Waterston
Alfred M. and Naida D. Weisberg
John W. Weisel
Ralph G. Yount

Other Gifts
Anonymous (1)
Robert S. Adelstein
American Society for Microbiology
Tammy S. and Douglas Amon
Clay M. Armstrong and
Clara Franzini-Armstrong
Samuel C. and Elizabeth F. Armstrong
Carol Arnosti and Andreas P. Teske
Clive R. Bagshaw
Brenda J. Bodian
Giovanna Breu
Scott G. and Penelope P. Chrysler
David Clarke
Sarah Cohen
Seymour S. Cohen
Edward and Carolyn Conrad
Arthur Roger Cooke
Jon C. Cooper
Roger W.Craig
John and Gwen Daniels
Elizabeth M. Davis
Carolyn and Anatol Eberhard
Sharyn A. Endow
Andrew and Amy Feinberg
Sarah Q. Foster
Anne Freeman
Christopher J. Freeman
Friends of The Falmouth Public Library
Chandler M. Fulton and Elaine Lai
James N. and Nancy Galloway
Ann M. Gardener
Sallyann Garner
Mark Gasarch
Yale Goldman
Bruce and Mary Goodman
Laura Grosch and Herb Jackson
Stephen and Dayna Harris
Peter Hartline and Rebecca Kucera
James and Martha Hartmann
Ellen Hertzmark
Sarah E. Hitchcock-DeGregori
John and Olivann Hobbie
Richard Holt
Jason Hoobler
Jennifer M. Huettner
Patricia A. Hunt
Hunter College
David Isenberg and Paula Blumenthal
Kenneth Jackson
Joseph Johnston
Freda Kamin
Frank S. and Nancy Karger
Richard F. Karger
Doreen R. Kelly
John Kendrick-Jones
Thomas C. and Mary Ann Kenny
Marc W. and Phyllis Kirschner
Kathiann Kowalski
George M. and Sylvia T. Langford
Leonard and Ruth Ann Laster
William J. Lehman
Sherwin Lehrer
Leslie Ann Leinwand
Jack and Francine Levin
Birgit R. and Werner R. Loewenstein
Thomas E. Lovejoy
James and Christine Lynch
John A. Mankovich and Ellen Guthrie
Mary Bates McIntyre
Anne Messer
Steven Miano
Mid-American Water of Wauconda, Inc.
Charles and Judith Miller
David A. and Virginia I. Miller
Russell Miller
Ronald A. Milligan
Milwaukee Valve
James Morrell
Pamela Nelson and
Christopher Olmsted
Kenneth W. and Ann W. Nickerson
Amy Nobu
Alexander Notopoulos and
Alexis Anderson
Joy Olotu
Elizabeth O’Neill-Hennessey
Michelle Peckham and
Helena Aegerter
Cynthia L. Perreault-Micale
Bertha Person
Niles and Mary Peterson
Leslie and Donna Pinsof
Harmony Glazebrook Pittet
James D. Potter
Robert A. Prendergast
Dixon and Rita Purcell
Agnes Jancso Radek
Jack A. Rall
Shirley Raps
Alfred G. and Sarah C. Redfield
Thomas and Sally Reeve
Joe M. Regenstein
William S. and Catherine A. Reznikoff
Fred and Gloria Rhoades
Rex R. Robison
Michael G. Ryan and Linda A. Joyce
Joseph W. and Jean M. Sanger
Susan E. Seaman
Timothy and Kathleen Short
Rolly L. Simpson
Klara Siromok
Avril V. Somlyo
Walter F. Stafford, III
Alan B. and Sala Steinbach
StemCell Technologies Inc.
Ete Z. Szuts and Susan Oleszko-Szuts
Edwin and Heather Taylor
Saul Teichberg
Daniel C. and Patricia A. Thums
Margaret A. Titus
David Trentham
Volker and Mary Ulbrich
Kensal and Barbara van Holde
Peter and Marian Vibert
Leonard and Eve Warren
Cory A. Waters
Edward and Dia Weil
Michael Wheeler
Clare M. Wilber
John and Patty Wineman
Ann S. Wolff

Gifts in Kind
Paul Besse
Brenda J. Boyleyn
Fine Science Tools
Barbara Wolf Jones
Kerry Walton
World Precision Instruments
Carl Zeiss Microscopy, LLC

In 2013, the MBL continued to benefit from major multi-year gifts pledged in previous years from the following:
Anonymous (1)
Burroughs Wellcome Fund
The Ellison Medical Foundation
The Grass Foundation
Howard Hughes Medical Institute
Gordon and Betty Moore Foundation
George and Kathy Putnam
Alfred P. Sloan Foundation
The G. Unger Vetlesen Foundation
Gifts to Named Fellowships, Scholarships, and Other Funds

 Fellowships, scholarships and other funds enable the MBL to stay competitive by attracting and supporting top researchers and students. We gratefully acknowledge donors to the following funds:

AFAR Aging Research Program Fellowship
American Federation for Aging Research

American Society for Cell Biology Summer Research Awards
The American Society for Cell Biology

Associates Scholarship Institutional Fund
Tammy S. and Douglas Amon
Samuel C. and Elizabeth F. Armstrong
Friends of The Falmouth Public Library
John and Olivann Hobbie
Hunter College
Barbara Woll Jones
Thomas C. and Mary Ann Kenny
Leonard and Ruth Ann Laster
James and Christine Lynch
Joan C. Miller
Russell Miller
Niles and Mary Peterson
Shirley Raps
Susan E. Seaman
David C. and Patricia A. Thums
Clare M. Wilber

Frederik B. and Betsy G. Bang Research Awards
Jack and Francine Levin

Diane and Norman Bernstein Endowment Fund for the Marine Resources Center
Joshua and Lisa Bernstein
Norman and Diane Bernstein

Thomas A. and Gloria S. Borgese Rare Book and Journal Fund
Gloria S. Borgese
Patricia A. Case Endowed Scholarship
James F. Case
William D. Cohen Endowed Fund for Undergraduate Education
Everett and Anne Bergman
Marion Cohen
Sarah Cohen
Cornell Research Development Award
Molly N. Cornell
Norman and Sally Cross Scientific Aquaculture Endowment
Sally Cross
Bernard Davis Scholarship Fund
Porter W. Anderson, Jr.
Elizabeth M. Davis
Eugene Floyd DuBois Memorial Fund
Harmony Glazebrook Pittet
Embryology Fund
The Company of Biologists Limited Society for Developmental Biology, Inc.

Herman Epstein Endowed Memorial Lectureship
Freda Kaminer
George D. and Bernice Pappas
Bertha Person
Falmouth Forum Endowment Fund
Anonymous (1)

Falmouth Forum Fund
The Cooperative Bank of Cape Cod
Prosser Gifford
Doreen R. Kelly

The Fischbach Research Awards
Simons Foundation

Frontiers in Reproduction Scholarship Fund
American Society for Reproductive Medicine
Burroughs Wellcome Fund
Patricia A. Hunt
Rolly L. Simpson

General Education Endowment
Anonymous (1)
Ann Sutherland and Raymond Keller

Albert and Ellen Grass Faculty Grant Program
The Grass Foundation

Daniel S. and Edith T. Grosch Scholarship Fund
Laura Grosch and Herb Jackson

Aline D. Gross Scholarship
Freda Kaminer
Alfred M. and Naida D. Weisberg

Hartline MacNichol Reasearch Awards
Peter Hartline and Rebecca Kucera

Tay Hayashi Lectureship in Cell Physiology
Freda Kaminer

Hibbitt Endowed Education Fund
David and Susan Hibbitt

The John E. Hobbie Fund for Science
Frank C. and Sheila G. Carotenuto
David Clarke
Thomas E. Lovejoy
Michael G. Ryan and Linda A. Joyce

Robert Huettner Rare Book Endowed Fund
Carmela J. Huettner
Jennifer M. Huettner

Shinya and Sylvia Inoué Fund for Cellular Dynamics Imaging
Lawrence B. Cohen
Dan Kiehart and Patricia Lee Saylor
Edward D. and Nancy M. Salmon

Irvin Isenberg Lecture
David Isenberg and Paula Blumenthal
Freda Kaminer

Holger and Friederun Jannasch Scholarship in Microbial Diversity
Carol Arnosti and Andreas P. Teske

Benjamin Kaminer Scholarship
Freda Kaminer
Bertha Person

Masakazu Konishi Endowed Lectureship in Neural Systems and Behavior
Marc F. Schmidt

Lucy B. Lemann Institutional Fund
Mary L. Goldman and Debra Weiner

Edwin S. Linton Scholarship Fund
Washington & Jefferson College

Logan Science Journalism Program
Giovanna Breu
Howard Hughes Medical Institute
Kathlenn Kowalski
Waksman Foundation for Microbiology

Marine Biological Laboratory General Endowment
Mary Bates McIntyre

Joe Martinez, Jr. and James Townsel Endowed Lectureship (SPINES)
Anne Engen
Paul A. Gray
Joe L. Martinez and Kimberly Smith-Martinez

S. O. Mast Endowed Scholarship
Fred and Gloria Rhoades

Microbial Diversity Course Endowment
Caroline S. Harwood and E. P. Greenberg

Roger D. Milkman Endowed Lecture in Microbial Diversity
Mariaman F. Milkman

James A. and Faith Miller Research Awards
David A. and Virginia I. Miller

Mountain Memorial Fund
Brenda J. Bodian

Neural Systems and Behavior Course Scholarship Fund
James and Cynthia Angstadt
Janis C. Weeks and William M. Roberts

Nikon Research Awards
Nikon Instruments, Inc.

Physiology Course Endowment
Thomas D. and Patricia S. Pollard

George and Kathy Putnam Biodiversity Informatics Fund
George and Kathy Putnam

Abigail Salyers Endowed Scholarship in Microbial Diversity
American Society for Microbiology
Edward and Carolyn Conrad
Ann M. Gardener
Jeffrey Gardner
Ling-Yew Li
John A. Mankovich and Ellen Guthrie
Carolyn S. Habermehl
William S. and Catherine A. Reznikoff
**Sheldon J. Segal Friday Evening Lecture Fund**
Stanley Mierzwa
Harriet F. Segal
Laura Segal and Matthew Petrie

**Semester in Environmental Science Fund**
Bradley and Katie Cohen
John and Gwen Daniels
Stephen and Lois Eisen
Andrew and Amy Feinberg
Christopher Foreman
Peter and Ginny Foreman
Sarah Q. Foster
Anne Freeman
Christopher J. Freeman
Sallyann Garner
Mark Gasarch
Bruce and Mary Goodman
Stephen and Dayna Harris
James and Martha Hartmann
Ellen Hertzmark
Kenneth Jackson
Frank S. and Nancy Karger
Richard F. Karger
Steven Miano
Mid-American Water of Wauconda, Inc.
John Mills
Milwaukee Valve
Donald and Patricia Mintmire
James Morrell
Amy Nobu
Alexander Notopoulos and Alexis Anderson
Leslie and Donna Pinsof
Thomas and Sally Reeve
Robert D. Schatz
Sara Schupf
Alexandra E. Shea
Timothy and Kathleen Short
Edward and Dia Weil
Michael Wheeler
John and Patty Wineman
Ann S. Wolff

**Semester in Environmental Science General Endowment**
Margaret C. and Francis P. Bowles
The Clowes Fund, Inc.

**Society of General Physiologist Scholarships**
Society of General Physiologists

**Burr and Susie Steinbach Research Awards**
Volker and Mary Ulbrich

**Jane Lazarow Stetten Scholarship Fund**
Paul B. Lazarow

**Ann E. Stuart and John W. Moore Fund**
Ann E. Stuart and John W. Moore

**Andrew Szent-Györgyi Endowed Lecture in Physiology**
Robert S. Adelstein
Clay M. Armstrong and Clara Franzini-Armstrong
Clive R. Bagshaw
Carolyn Cohen
Seymour S. Cohen
Arthur Roger Cooke
Jon C. Cooper
Roger W. Craig
Carolyn and Anatol Eberhard
Sharyn A. Endow
Chandler M. Fulton and Elaine Lai
Yale Goldman
Piroksa Hardwicke
J. Woodland Hastings
Sarah E. Hitchcock-DeGregori
Hugh E. and Frances M. Huxley
Shinya and Sylvia Inoué
John Kendrick-Jones
Marc W. and Phyllis Kirshner
Hyockman Kwon
George M. and Sylvia T. Langford
William J. Lehman
Sherwin Lehrer

**Leslie Ann Leinwand**
Birgit R. and Werner R. Loewenstein
Eve Marder
Anne Messer
Ronald A. Milligan
Kenneth W. and Ann W. Nickerson
Elizabeth O’Neill-Hennessey
Michelle Peckham and Helena Aegerter
Cynthia L. Perreault-Micale
James D. Potter
Robert A. Prendergast
Dixon and Rita Purcell
Agnes Jancso Radek
Jack A. Rall
Alfred G. and Sarah C. Redfield
Joe M. Regenstein
Edward D. and Nancy M. Salmon
Joseph W. and Jean M. Sanger
Klara Sirokman
Avril V. Somlyo
Walter F. Stafford, III
Alan B. and Sala Steinbach
Raymond E. Stephens
Andrew and Ursula Szent-Györgyi
Ete Z. Szuts and Susan Oleszko-Szuts
Edwin and Heather Taylor
Saul Teichberg
Margaret A. Titus
David Tretham
Kensal and Barbara van Holde
Peter and Marian Vibert
Cory A. Waters
Robert and Patricia Waterston
John W. Weisel
Ralph G. Yount

**Eva Szent-Györgyi Scholarship Fund**
Freda Kaminer
Andrew and Ursula Szent-Györgyi

**William Townsend Porter Scholarship**
William Townsend Porter Foundation

**J.P. and Madeleine Trinkaus Endowed Scholarship**
Ann Sutherland and Raymond Keller

**John J. Valois Marine Resources Center Endowment**
Anonymous (2)
Duncan P. and Dorothy D. Aspinwall
Freda Kaminer
Jahn Pothier

**Stanley W. Watson Education Fund**
Anonymous

**Whitman Center General Endowment**
Richard L. and Alice M. Chappell
Robert D. and Anne E. Goldman
Hans Lauffer
Bryan D. and Elaine K. Noe
Joshua J. Zimmerman and Teresa L. Z. Jones

**Walter L. Wilson Endowed Scholarship Fund**
Paul N. Chervin

**Young Scholars Program**
David and Karen Davis

**Gifts to the MBL Annual Fund**

*Through their annual unrestricted gifts, annual fund donors enable the MBL to cover costs not met by grants or fees, seed key strategic initiatives, and provide important support to its scientists and programs.*

**The Chairman’s Circle**
$25,000 or more
Anonymous (1)
Millicent Bell
Patrick Gage and Irina Wilson
David and Susan Hibbitt
Ethan and Lisa Lerner
Edward and Linda Owens
Saul Pannell and Sally Currier
Jeffrey and Margaret Pierce
George and Kathy Putnam
Patricia and Charles Robertson
Charles M. and Phyllis Rosenthal
John and Valerie Rowe

**The Director’s Circle**
$10,000 - $24,999
Anonymous (3)
Alison and Robert Ament
Porter W. Anderson, Jr.
Norman and Diane Bernstein
Marianne and Eric Billings
Martha W. and William C. Cox
John E. and Judith F. Dowling
Gerald D. and Ruth L. Fischbach
Craig and Nancy Gibson
William I. and Lauren Huyett
Richard S. and Susan G. Morse
Robert A. Prendergast
Elise and Stanley Rose
Vincent J. Ryan and Carla E. Meyer
Walter J. and Marjorie B. Salmon
James and Mary Sharp
William T. Speck and Evelyn Lipper
Jan and Marica Vilcek
Dyann and Peter Wirth

The President’s Club
$5,000 - $9,999
Anonymous (1)
Donald R. Aukamp
Joshua and Lisa Bernstein
George H. Billings
Francis P. and Margaret C. Bowles
Ed and Amy Brakeman
Mary and Jonathan Conrad
Michael Fenlon and Linda Sallop
Pamela and David Follett
Sibyl C. Goldman
Robert and Trudy Gottesman
Thomas F. and Virginia C. Gregg
Laurie J. Landeau and
Robert J. Maze
H.F. and Marguerite Lenfest
Monique Liuzzi Sautter
Walter E. and Shirley A. Massey
Jean H. Pierce
Joan V. and Gerald S. Ruderman
Robert Samuelson and
Kristin Campbell
Bonnie W. and Stephen A. Simon
Carolyn and John Simpson
John J. and Frederica W. Valois
Earl H. Weidner
Gerald and Ann Weissmann

The Lillie Society
$2,500 - $4,999
David and Sandra Bakalar
John and Lisa Batter
George and Harriet Berkowitz
Eloise E. Clark
Bernice Cramer and Paul Friedman
Sally Cross
Richard B. and Marcia H. DeWolfe
Joseph and Sarah Dowling
Kenneth H. Foreman and
Anne E. Gibril
Charles M. Ganson
Philip Grant
Mary Greer
Caroline Harwood and
E. Peter Greenberg
Pamela C. and Gregory J. Hinkle
Gary and Susan Jacobson
Barbara Woll Jones
Saul and Gitta Kurlat
Deena and Alan Latties
Anna L. and Tom Lawson
Jennifer Letitia
Joseph Levine and
Steven A. Cadwell
William W. and Noelle Locke
George and Harmon Logan
Nawrie Meigs-Brown and
David Brown
Alice Netter
R. Dana Ono and Anne Wagner
Arthur B. Pardee and
Ann B. Goodman
Gregory Weyerhaeuser Piasecki
Robert W. and Carroll C. D. Pierce
John S. Price
John and Joan B. Ripple
Harris and Jeanne Rippus
Cecily Cannon Selby
Dusan Stefoski and Craig Savage
Ann E. Stuart and John W. Moore
Gerard L. and Mary Swope
John F. Swope
Annette Williamson and
Michael McColm
Kathrin R. Winkler and
Angus Campbell
Nancy Wolf and Arie Greenfield
Barbara Wu and Eric Larson

The Whitman Society

LIFE MEMBERS
Frank M. and Julie S. Child
Margaret Clowes
J. Woodland Hastings
William Jeffery and Meredith
Yeager-Jeffery
Hans Lauffer

$1,000 - $2,499
Louise Adler
Garland E. Allen
James L. and Helene M. Anderson
Peter B. and Margaret T. Armstrong
Samuel C. and Elizabeth F. Armstrong
Elizabeth Heald Arthur
Robert W. and Jean Ashton
David Baltimore and Alice S. Huang
Patricia Ann Barlow
Bruce A. Beal and
Francis Cunningham
Jonathan and Elizabeth Billings
Max M. Burger
Colleen M. Cavanaugh and
Philip M. Gschwend
Richard L. and Alice M. Chappell
James M. and Ruth C. Clark
Alexander W. Clowes and
Susan E. Detweiler
Mary Clutter
Beth Colt and P.K. Simonds
Carmela J. Huettner
Elena Citkowitz
A. Sidney and Alice Knowles
Hans and Donna Kornberg
Stephen M. and Cynthia R. Krane
Edward A. and Kathryn F. Kravitz
Ezra and Aimlee D. Laderman
Leonard and Ann L. Lassiter
Burton J. and Ann K. Lee
Rodolfo R. and Gillian K. Llinás
Werner R. and Birgit R. Loewenstein
Laszlo Lorand
Michele Lorand and Paul Ringel
William K. and Winnie C. Mackey
Jerry and Lalise Melillo
Matthew Meselson and
Jeanne Guillemin-Meselson
Jason and Jennifer Meyers
Gerrish H. Milliken
Timothy Mitchison and
Christine Marie Field
Hendrickson
Peter W. and Elizabeth Renaghan
Lawrence C. and Victoria H. Rome
Jack and Rosalyn Rosenbluth
Edward D. and Nancy M. Salmon
Audrey M. Schneiderman
Harriet F. Segal
Shawmut Design and Construction
Osamu and Akemi Shimomura
Corinne Steel
Marjorie E. Steinberg
Raymond E. Stephens
Edwin and Heather Taylor
Edward and Louise Tsui
Leonard and Eve Warren
Alfred M. and Joyce V. Zeien

Alfred L. and Joan H. Goldberg
Timothy H. and Mary Helen M.
Goldsmith
Susan P. and Thomas Goux
Katherine Graubard and
William H. Calvin
William H. and Margaret J. Greer
GreyBird Ventures
Linda L. and Stephen A. Greyser
Susan Harding Hawkins
Robert and Margot Haselkorn
Diane E. Heck
John G. Hildebrand and Gail D. Burs
John and Olivann Hobbie
Joseph F. Hoffman and
Elena Citkowitz
Carmela J. Huettner
Shinya and Sylvia Inoué
Kurt J. and Rhoda S. Isselbacher
Freda Kaminer
A. Sidney and Alice Knowles
Hans and Donna Kornberg
Stephen M. and Cynthia R. Krane
Edward A. and Kathryn F. Kravitz
Ezra and Aimlee D. Laderman
Leonard and Ann L. Lassiter
Burton J. and Ann K. Lee
Rodolfo R. and Gillian K. Llinás
Werner R. and Birgit R. Loewenstein
Laszlo Lorand
Michele Lorand and Paul Ringel
William K. and Winnie C. Mackey
Jerry and Lalise Melillo
Matthew Meselson and
Jeanne Guillemin-Meselson
Jason and Jennifer Meyers
Gerrish H. Milliken
Timothy Mitchison and
Christine Marie Field
Hendrickson
Peter W. and Elizabeth Renaghan
Lawrence C. and Victoria H. Rome
Jack and Rosalyn Rosenbluth
Edward D. and Nancy M. Salmon
Audrey M. Schneiderman
Harriet F. Segal
Shawmut Design and Construction
Osamu and Akemi Shimomura
Corinne Steel
Marjorie E. Steinberg
Raymond E. Stephens
Edwin and Heather Taylor
Edward and Louise Tsui
Leonard and Eve Warren
Alfred M. and Joyce V. Zeien

Bertha Person
Frank Press
Ronald J. Przybylski
Michael and Diane Rabinowitz
Edward Rastetter and Karen
Linas
Margot Haselkorn
Diane E. Heck
John G. Hildebrand and Gail D. Burs
John and Olivann Hobbie
Joseph F. Hoffman and
Elena Citkowitz
Carmela J. Huettner
Shinya and Sylvia Inoué
Kurt J. and Rhoda S. Isselbacher
Freda Kaminer
A. Sidney and Alice Knowles
Hans and Donna Kornberg
Stephen M. and Cynthia R. Krane
Edward A. and Kathryn F. Kravitz
Ezra and Aimlee D. Laderman
Leonard and Ann L. Lassiter
Burton J. and Ann K. Lee
Rodolfo R. and Gillian K. Llinás
Werner R. and Birgit R. Loewenstein
Laszlo Lorand
Michele Lorand and Paul Ringel
William K. and Winnie C. Mackey
Jerry and Lalise Melillo
Matthew Meselson and
Jeanne Guillemin-Meselson
Jason and Jennifer Meyers
Gerrish H. Milliken
Timothy Mitchison and
Christine Marie Field
Hendrickson
Peter W. and Elizabeth Renaghan
Lawrence C. and Victoria H. Rome
Jack and Rosalyn Rosenbluth
Edward D. and Nancy M. Salmon
Audrey M. Schneiderman
Harriet F. Segal
Shawmut Design and Construction
Osamu and Akemi Shimomura
Corinne Steel
Marjorie E. Steinberg
Raymond E. Stephens
Edwin and Heather Taylor
Edward and Louise Tsui
Leonard and Eve Warren
Alfred M. and Joyce V. Zeien
Joan Sharp  
Jerry W. Shay  
Richard and Elizabeth Shriner  
Alan R. and Phyllis J. Silver  
Eric J. Simon  
Rolly L. Simpson  
Lexie S. Wallin  
Julian Sosnik  
John W. and Cathleen Speer  
Cynthia and Peter Starosta  
Barbara A. Stay  
Lucy Steere  
Alan B. and Sala Steinbach  
William K. and Jane B. Stephenson  
Ann Stern  
Judith G. Stetson  
Elijah W. Stommel and Jasmin Bihler  
Andrew Weissmann  
Samuel and Anne Ward  
Gary Ward and Zail Berry  
Kerry Walton  
Robin A. Wallace  
Richard and Susan Valente  
Volker and Mary Ulbrich  
Eric and Marianne Billings  
James M. and Ruth C. Clark  
Flagship Roofing & Sheetmetal Co., Inc.  
Robert and Margot Haselkorn  
Gerard Wilson  
Charles R. and Ellen G. Wytenbach  
Charles Yanofsky  
Isabel and Richard Yoder  
Abigail Young  
Harold H. Zakon and M. Lynne McAnelly  
Michael J. and Naomi Zigmond  
Kenneth H. and Patricia E. Zimble  
Bruce and Elizabeth I. Zimmerli  
Jeffrey A. and Johanna A. Zinn  
Up to $100  
Anonymous (2)  
Aggregates  
Helen Ahearn  
Elizabeth I. Arnold  
Mike and Elana Arnold  
Viviana M. Berthoud  
Olive C. Beverley  
Thomas and Janet Brady  
Charles and Helen Bresnahan  
Judy A. Bruguiere  
Slade M. Burton  
Catherine Emily Carr  
Chappell Hill-Chauncy Hall  
John M. and Therese M. Clarkin  
Janet Clay  
Mort and Susan Cohen  
Katherine Coleman  
Concord Christian Academy  
Pircilla N. and Alan Conger  
Lou-Anne Conroy  
Gail Cooper  
Margaret S. Cooper  
Mary Couch  
Dorothy I. Crossley  
Paul Cruikshank  
Robert A. and Donna Curtis  
Syrel Dawson  
Frank Egloff  
Lynne Eichenfield  
Falmouth Newcomers Club  
Ruth Alice Fitz  
John H. Ford  
Alvin K. Fossner  
Peter Franklin  
Larry Jay Friedman  
Michael and Bridget Gabriel  
Lisa Gallagher and Gregory Ruffa  
Patricia E. Garrett and Oliver W. Woshinsky  
C. Vernon Gav  
Sarah C. Goodrich  
Muriel Gould  
William Grifferi  
Lawrence I. and Esta S. Grossman  
Ronald J. Haley  
David S. Hays  
Rodney Hinkle and Kirstin A. Moritz  
Lawrence and Layna Hobbie  
Ann Snow Hobbis  
Betsy and John Honey  
Jennifer M. Huettner  
Carolyn L. Johnson  
Dean and Mary Johnston  
George and Sally Judd  
Leonard K. and Sheila F. Kaczmarek  
Edna S. Kaneshiro  
Doreen R. Kelly  
Patricia E. Keoughan  
Mark D. Kirk  
Jane and Daniel MacNeil  
Katherine MacQueen  
Patrick J. and Lorraine Mahoney  
Charles K. and Susanne J. Mann  
Dawn Morin Marick  
Joseph C. and Connie Martyna  
William and Kathleen McGoeY  
Joseph and Darlene McGuire  
Gary McHatton  
Carol McKeon  
Cornelia Hanna McMurtie  
Samuel McMurtie, Jr.  
Margaret A. Mills-Michael  
Stephen A. and Marjorie H. Moore  
Thomas C. and Elizabeth D. Moseley  
Christoph Mueller  
Mary U. Musacchia and James E. Faber  
Iris Nelson-Schwartz  
Brian and Mary Nickerson  
Eliot Nierman  
Northeast Unlimited Tours  
Charles and Patricia P. Parmenter  
Leonard M. Passano  
Joyce S. Pendery  
Ronald J. and Dawn G. Pfahl  
William G. Phillips  
Daniel A. and Linda K. Pollen  
Catherine Prendergast  
Anne T. Pressman  
Julian B. Prusser  
Cynthia and Russell D. Rankin  
Fred J. and Catherine E. Ravens  
Virginia R. Reynolds  
Mary Elizabeth Rice  
Viviana I. Risca  
Ruth L. Szaz  
Mary L. Scalera  
Mary E. Schifman  
John F. and Diane S. Schoenfelder  
School of the Holy Child  
Franklin Sher  
Matthew Simon  
Stephanie M. Sit  
Sven and Anna Spoerri  
John J. Stegeman  
Walter Sullivan  
Frank and Loretta Tang  
Belle K. Taylor  
The Auction Company, Inc.  
Susan and Robert Veeder  
Irvin and Vida Wagner  
Kathleen C. Wagner  
Mary J. Walsh  
Cory A. Waters  
George Weinbaum  
Phyllis R. Wendorff  
David Alan A. WinspeY  
Ashley V. Wyres  
Ursula Wyres  
Alexander and Judith S. Ziss  
Ronald Zweig and Christina Rawley  
2013 MBL 125th Anniversary Concert  
The MBL wishes to thank Patrick Gage and Irina Wilson for their generosity in presenting the 2013 Anniversary concert, with students and faculty of the renowned Curtis Institute of Music performing on stage as Curtis On Tour. We are also deeply grateful to the following sponsors, hosts, friends, patrons, and many others who made the 2013 MBL Anniversary concert a great success, raising more than $34,000 for the MBL Annual Fund.  
PRESENTING SPONSORS  
Patrick Gage and Irina Wilson Gage  
CONCERT SPONSORS  
Alan M. and Deena Gu Lattes  
CONCERT HOSTS  
Anonymous  
John S. Price  
PrintSynergy Solutions  
Shawmut Design and Construction  
Dyann and Peter K. Wirth  
CONCERT FRIENDS  
David and Sandra Bakalar  
Barbo’s Furniture  
Norman and Diane Bernstein  
Eric and Marianne Billings  
James M. and Ruth C. Clark  
Flagship Roofing & Sheetmetal Co., Inc.  
Robert and Margot Haselkorn  
Gerard L. and Mary Swepe  
Tsio Koubis & Associates, Inc.  
PATRONS OF THE CONCERT  
Elizabeth W. Brine  
Annie Chalkley
Gifts to the MBL Alumni Fund

MBL alumni and faculty from 37 states and two countries made gifts to the Alumni Fund to support students in the 2013 MBL Discovery Courses.

Anonymous (5)  
Robert F. Aarstad  
Benjamin S. Abrams  
C. Ronald Anderson  
Robert Angerer  
Anthony Apicella  
Erlin and Barry Aprson  
Irina Arkhipova  
Oge Arum  
Katherine Bachman and Robert Fleming  
Robert Barker and Marla Schay Barker  
Norman Bauman  
Elizabeth Kujawinski Behn  
Edward Joseph Behrmann  
Jerry A. Bell and Mary Ann Stepp  
Gerald Bergtrom  
Edward M. Blumenthal  
Elizabeth A. Booth and Dustin L. Dovala  
John and Renee Breznak  
Andrew Brittingham  
John and Renee Breznak  
Burt V. Bronk  
Robert H. Brydges  
Amy K. Butler  
Otgert Camara  
Richard Chadwick  
Cenbei Chanag  
A. Kent Christensen  
George A. Clark  
Susan D. Clements-Rabatin  
John M. and Annette W. Coleman  
Stephen D. Collins  
Edwin L. Cooper  
Jeffrey T. Corwin  
Pamela A. Coutchie  
Nessly C. and Susan W. Craig  
Christopher S. Cronan  
John Cunniff  
Mary Ellen M. Cunningham  
Gregory Alan Dasch  
Jennine Dawicki McKenna  
Charles Derby  
Bruce A. Diner  
Long Ding  
Theima D. and Jonathan S. Dixon  
Thuy A. Doan  
Tabitha Doniach  
Laneta Dorflinger  
David D. Dow  
David and Sherri Durica  
Marcia Edwards  
Judith S. Eisen  
Stanley Goodman Elbaum  
Helen Mittlacher Erickson  
Ali Erglu  
Alan Scott Fanning  
Karl W. Flessa and Mari N. Jensen  
Kenneth Freedman and Steven Weiss  
Hugo D. and Anita R. Freudenthal  
Anne E. Fry  
Yoshiko Fujita  
Paul E. Gallant  
Maureen A. Gannon  
Mark Gaynor  
Susan Gerbi-McIlwain  
Robert E. Knowlton  
Birgit Kovacs  
George H. Kowallis  
Keith G. Kozminski  
Susan A. Laessig  
Deborah A. Lans  
Men-Janee Lee and Giuseppe Del Priore  
Ardean Leith  
Ellen K. LeMoyne  
Steven William L’Hernault  
Anne M. Linton  
Jennifer Lippincott-Schwartz  
William Longabaugh  
Howard W. Lowy  
Jane Luchchento and Bruce Menge  
William B. Ludington  
Gary E. Lyons  
John L. Magnani  
Phillip B. and Yvonne R. Maples  
Deborah Margules  
Eugene M. Martin  
Sandra K. Masur  
Allen Wray Mathies, Jr.  
Mats & Associates, LLC.  
Joan Mattson  
Anne E. McBride  
Edwin McCleskey  
Christine L. Howe  
Deborah Hursh and Mark Morton  
Haruhiko Itagaki  
Daniel E. James  
Nancy A. Johnson  
Rena T. Jones  
Caramai N. Kamei  
Gordon I. Kaye  
Robert G. Kemp  
R. Emmet and Gail Kenney  
Clifford H. Kern, III  
Lynda A. Kiefer  
Jennifer M. King  
Marc W. and Phyllis Kirschnr  
Alan Klotz  
Collin Knauss  
James J. Kneirim  
Paul M. and Carol L. Knopf  
Robert E. Knowlton  
Seymour and Victoria E. Holtzman  
Raymond W. Holton  
Ralph Hillman  
Scott B. Herrick  
Gordon E. Hering  
William Allen Held  
John E. Hall  
E. Janet Hager  
John E. Hall  
Willam Allen Held  
Gordon E. Hering  
Scott B. Herrick  
Ralph Hillman  
Raymond W. Holton  
Seymour and Victoria E. Holtzman  
Timothy E. Holy  
Matthew McFarlane and Jennifer Nadeau  
Everett Mendelsohn  
Lynn Miller  
Tetsuto Miyashita  
Marius R. Moran  
Yasuhiro Morita  
David E. Naylor  
Ralph F. Nelson  
Jeanne M. Neronne  
Jeniel E. Nett  
Susan Offner  
Stephen H. Ogilvy  
Jennifer B. Palenchar  
Louis Pierro  
Sara C. Pimental  
Mark Plummer  
William K. Plunkett  
William F. Pompeii, III  
James D. Potter  
George Radcliffe  
Jane E. Radix  
Karen Russell Randall  
Jean F. and Ronald R. Regal  
Vincent Rehder  
Marian C. Rice  
Mary Esther Rice  
Austen R. Riggs  
Viviana I. Risa  
Ellen Adeline Robey  
Ramona M. Rodriguez  
Richard E. Rohr  
Allen Rosenspire  
Laurens N. Ruben  
John G. Rutherford, Jr.  
Carol Ann Ryder  
Jan S. Ryeze  
Scott Reid Saleska  
Robert J. Saquetton  
Paul R. Schloerb  
Loren J. Schmidt  
Joseph H. Schneider  
Andrew Schutrumpf  
David R. Sherwood  
David Sibley  
Philip J. Skehan, Jr.  
James Stock
Memorial and Tribute Gifts

These donors have chosen to support the MBL as a special way to remember or honor a relative or friend.

Associates Scholarship Fund
John and Olivia Hobbie, Hunter College, Barbara Woll Jones, Joan C. Miller, Russell Miller, Shirley Raps and Susan E. Seaman in memory of: Alice M. Chappell

Thomas A. and Gloria S. Borgese Rare Book and Journal Fund
Gloria S. Borgese in memory of: Thomas A. Borgese Edna Kean

Robert Huettner Rare Book Endowed Fund
Carmela J. Huettner in honor of and in memory of: Robert Huettner
Jennifer M. Huettner in memory of: Robert Huettner

Benjamin Kaminer Scholarship Fund
Bertha Person in honor of: Freda Kaminer

Abigail Salyers Endowed Fund in Microbial Diversity

Rare Books Fund
Pamela Nelson and Christopher Olmsted in memory of: Leonard Nelson

Semester in Environmental Science
John and Gwen Daniels in honor of: William C. Daniels
Andrew and Amy Feinberg and Milwaukee Valve in honor of: Kenneth H. Foreman

Anne Freeman in honor of: Christopher J. Freeman
Christopher J. Freeman in memory of: Beth Chenicek


Sustainable Aquaculture Fund
Scott G. and Penelope P. Chrysler in honor of: William Mebane

Whitman Center General Endowment Fund
Hans Laufer in memory of: Eli K. Dabara
Lionel Roseff

Annual and Alumni Funds
Gifts made in honor of: Maggie Carmody
Joan Sharp
James J. Cinno

Stanley J. Bielen

Marcia Donovan
Dorothy A. Strach

Philip B. Dunham
Leslie B. Voss

Frank Egloff
Frank Egloff, II

Pamela C. Hinkle
Rodney Hinkle and Kirstin A. Moritz

John E. Hobbie
Lawrence and Layna Hobbie

Shinya Inoue
Elizabeth I. Arnold

Edward A. Kravitz
Jeffrey T. Corwin

William B. Kristan
George Wittenberg and Alyson H. Bonavoglia

Sandra Magowan
Lynne Eichenfield

Joe L. Martinez
Ramona M. Rodriquiz

John W. Moore
Jennifer R. Morgan and Ian G. Davison

Mark S. Mooseker
Christine L. Howe

Jeffrey Pierce
Suzanne Hammett

Tom and Lisa Hammett

Jonathan and Dorothy Hasson

Steven J. Zottoli
Jason and Jennifer Meyers

Gifts made in memory of:

Robert B. Barlow
Marion K. Gordon

Michael and Carol Oberdorfer

Lester Barth
Iris Nelson-Schwartz

Lucena Barth
Iris Nelson-Schwartz

Elaine K. Bernstein
Carol Bernstein Eckstein

Jim Burton
Slade M. Burton

Alice M. Chappell
Jeffery and Valerie Oppenheim

Robert A. Cowan
Patrica Cowan

Christopher Dillmann
Susan Dillmann

Eric C. Dillmann
Susan Dillmann

Jeanette Fossner
Alvin K. Fossner

Mordecai L. Gabriel
Elinor R. Gabriel

David L. Garbers
Carey R. and Ryan Petrie
Margaret C. Gildea
   Frank Egloff, II
Richard W. Glade
   Barbara B. Glade
Rose Grant
   Philip Grant
Robert Hill
   Nancy S. and Richard Milburn
Richard A. Huettner
   Jennifer M. Huettner
Robert Huettner
   Jennifer M. Huettner
Hugh E. Huxley
   Stefan J. Medwasowski
Holger W. Jannasch
   Lynda A. Kiefer
Diane Jaworski
   Ernest G. and Pauline B. Jaworski
James W. Lash
   Joel S. Gordon
Esther M. Lederberg
   Matthew Simon
Paul G. LeFevre
   Vanessa LeFevre
Anthony Liuzzi
   Monique Liuzzi Sautter
Joyce Lorand
   Laszlo Lorand
   Michele A. Lorand and Paul Ringel
Luigi Mastroianni
   Santo V. Nicosia
Harold M. Mills
   Margaret A. Mills-Michael
Alberto Monroy
   Ronald J. and Dawn G. Pfohl
Frank Morrell
   Thomas P. and Jane W. Bleck
Eugene P. Odum
   Douglas G. and Kathleen Alexander
Abigail Salyers
   Irina Arkhipova
Arthur K. Saz
   Ruth L. Saz
Sheldon J. Segal
   Harold and Marion Barr
Stephen Simon
   David and Susan Hibbitt
Cynthia C. Smith
   Susan and Robert Veeder
Malcolm S. Steinberg
   John L. Magnani
   Marjorie E. Steinberg
Alfred Stracher
   George and Sally Judd
   Frederick R. and Kathryn G. Rickles
Cornelius F. Strittmatter
   Robert H. Broyles
Robert Weale
   Harris and Jeanne Ripps
Lillian Wendorff
   Phyllis R. Wendorff
Charles G. Wilber
   Clare M. Wilber
Elif Yavuz
   Emily Ann Coplan Harrison
Donald J. Zinn
   Jeffrey A. and Johanna A. Zinn

New Century Society
The New Century Society recognizes and honors those who have made bequests and other deferred gift arrangements that will benefit the MBL in the future. We thank all the members of the New Century Society for their generosity.

Anonymous (6)
Peter B. and Margaret T. Armstrong
Patricia Ann Barlow
Joan R. Berman
Margaret C. and Francis P. Bowles
Ronald Calabrese and
Christine Cozzen
Giacelia C. Candelas
Adolph S. Cavallo
Paul N. Chervin
Julie S. and Frank M. Child
Lawrence B. Cohen
Seymour S. Cohen
John E. and Judith F. Dowling
Joseph and Sarah Dowling
Paul R. Dupee, Jr.
Barbara E. Ehrlich
David and Lois Epel
Martha S. Ferguson
Gerald D. and Ruth L. Fischbach
Yvonne R. Fuortes
Bruce and Barbara Furie
Susan Gerbi-McIlwain
Sol H. Goodgal
Philip Grant
J. Woodland Hastings
Gertrude W. Hinsch
Joseph Hoffman and Elena Citkowitz
M Howard and Frances F. Jacobson
Daniel and Jean Johnston
Sally S. and Ramsey E. Joslin
Jane C. Kaltenbach-Townsends
Darcy B. Kelley
Richard G. Kessel
Andrew M. Kropinski and
Peggy A. Pritchard
Hans Laufer
Paul B. Lazarow
Edward R. and Gloria A. Leadbetter
Marian E. LeFevre
Howard W. Lowy
Gordon MacIver and
Eleanor MacIver
Robert E. and Marjorie J. Mainer
Melanie and Klein Merriman
John W. Moore and Ann E. Stuart
Arthur B. Pardee and
Ann B. Goodman
Jeanne S. Poindexter
Thomas D. and Patricia S. Pollard
Robert A. Prendergast
Ronald J. Przybylski
Michael and Diane Rabinowitz
Michael G. Ryan and Linda A. Joyce
Cecily Cannan Selby
Enid K. Sichel
Philip J. Stehman, Jr.
Roger D. and Carol J. Sloboda
Marjorie E. Steinberg
John Tochko and
Christina Myles-Tochko
John J. and Frederica W. Valois
Susan Volman
Byron and Joyce Waksman
Earl H. Weidner
Clare M. Wilber
John S. Willis

Bequests Realized in 2013
Worthington Campbell, Jr.
James F. Case
Monica Riley
Corporate Lending Program

The quality and success of the MBL educational program is maintained through research equipment, reagents, and computers valued at approximately $27 million loaned by:

AD Instruments
Adams & List Associates
Agilent Technologies, Inc.
A-M Systems
Advanced Microscopy Group – a Thermo Fisher Company
Andor Technology
Applied Biosystems – a Thermo Fisher Company
Applied Precision / GE Healthcare
Applied Scientific Instrumentation, Inc.
Aquaneering
ATCC
AutoMate Scientific, Inc.
Axiom Optics
BD Biosciences
Beckman/Coulter, Inc. Flow Cytometry
Beckman/Coulter Inc.
Bioptechs
Bio-Rad Laboratories
BioTek Instruments, Inc.
Bitplane Inc.
BioVision Technologies Inc.
Boston Electronic Corporation
Brownlee Precision Company
Bruker - NANO
Cambridge Electronic Design Ltd.
Carl Zeiss Microscopy, LLC
Cell Signaling Technology Inc.
Charles River Laboratories, Inc.
Chroma Technology Corporation
Coherent
Conoptics Inc. USA
Coriell Institute for Medical Research
CrystalLaser
Dagan Corporation
Digitimer Ltd.
Drummond Scientific Co., Inc.
Electron Microscopy Sciences
EMD Millipore / CellASIC
Eppendorf North America
FEI Company – TILL Photonics
FHC, Inc.
Fine Science Tools
Fisher Scientific
Fluidity Software, Inc.
GE Healthcare
GeneTools LLC
Grass Technologies / Astro-Med, Inc.
Growth Curves USA
Hamamatsu Corporation
Hamilton Thorne, Inc.
HANNA Instruments
Harvard Apparatus, Inc.
HEKA Instruments, Inc.
Histochemical Society
Horiba Jobin Yvon Inc.
Intelligent Imaging Innovations Inc.
INTRACEL Limited
Invitrogen Corp. / Life Technologies – a Thermo Fisher Company
Jackson ImmunoResearch Laboratories, Inc.
Jelight Company, Inc.
Journal of Histochemistry and Cytochemistry
Keyence Corporation of America
Kramer Scientific
Leica Microsystems Inc.
Leica Microsystems Biosystems Division
Leica Microsystems Confocal Systems North America
Leica Microsystems Nanotechnology Division
LI-COR Biosciences, Inc
Life Technologies - a Thermo Fisher Company
Lonza Walkersville Inc.
Luigs & Neumann
Lumen Dynamics Group
Mathworks
MatTek Corporation
MBF Bioscience
Micro Video Instruments Inc.
Mightex Systems
Milenyi Biotec Inc
Millipore Corporation
Molecular Devices, LLC
Molecular Probes / Life Technologies - a Thermo Fisher Company
MyNeuroLab / Leica Biosystems Inc.
Nanodrop / Thermo Fisher Scientific
NanoSight USA West
Narishige USA, Inc.
National Instruments
Neuralynx Inc.
Neovarsen
New Era Pump Systems Inc.
Newport Corporation
Nikon, Inc.
Nikon Confocal Systems
Noldus Information Technology
Olympus America, Inc. – Scientific Equipment Group
Omega Optical, Inc.
Parker Hannifin Corp.
Pathology Devices, Inc.
PC’s for Everyone
PCO-TECH Inc. (Cooke Corporation)
Pearson / Brock Education
Pentair
PerkinElmer Life and Analytical Sciences
Photometrics
Photon USA, Inc.
Prairie Technologies, Inc.
Prior Scientific, Inc.
PROMEGA
Protech International, Inc.
QIMAGING
Quest Scientific Instruments Inc.
Rapp OptoElectronic GmbH
Research Precision Instruments Co., Inc.
Roche Diagnostics Corp.
SAGE Publications
Scientifica Ltd.
Semrock, Inc. - a unit of IDEX Corporation
Siskiyou Corporation
Solamere Technology Group Inc.
Soma Scientific Instruments, Inc.
Spectra Physics, A Division of Newport Corp.
Spectral Applied Research Inc.
SPOT Imaging Solutions
Stoeleting Co. / ANY-maze
Sutter Instrument Company
Technical Manufacturing Corporation
Tecniplast
Ted Pella, Inc.
The Jackson Laboratory
Thermo Fisher
Thorlabs Imaging Systems
Titer tek Instruments, Inc.
Tokai Hit
Toohey Company
Tucker-Davis Technologies
Unisense A/S
Varian / Agilent Technologies
Veeco Instruments GmbH
Vibratome / Leica Biosystems, Inc.
Viewpoint Life Sciences
Vutara
VWR International
Warner Instruments
WaveMetrics, Inc.
Wescor, Inc. – an ELITech Group Company
World Precision Instruments, Inc.
Yokagawa Corporation of America
Leadership

As of December 31, 2013

CHAIRMAN OF THE BOARD OF TRUSTEES
John W. Rowe, Columbia University

VICE-CHAIR OF THE BOARD OF TRUSTEES

SPEAKER OF THE MBL SOCIETY
Colleen M. Cavanaugh, Harvard University

PRESIDENT AND DIRECTOR
Joan V. Ruderman, Marine Biological Laboratory

TREASURER
Maureen Nunez, MBL

SECRETARY
David Fithian, The University of Chicago

BOARD OF TRUSTEES
Robert H. Ament, Esq., Ament Law Firm, LLC
Millicent Bell, Boston, MA
Rita R. Colwell, University of Maryland
Thomas S. Crane, Esq., Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, PC
Paul R. Dupee, Haddeo Partners, LLP
Gerald R. Fink, Whitehead Institute, Cambridge, MA
L. Patrick Gage, enGage Biotech Consulting
James N. Galloway, University of Virginia
David A. Greene, The University of Chicago
Caroline S. Harwood, University of Washington
Robert Haselkorn, The University of Chicago
H. David Hibbitt, Bristol, RI
Eric D. Isaacs, Argonne National Laboratory
Ethan A. Lerner, Massachusetts General Hospital
George W. Logan, Charlottesville, VA
Walter G. Massey, School of the Art Institute of Chicago
John W. McCarter, Jr., Northfield, IL
Ambrose K. Monell, Palm Beach, FL
Richard S. Morse, Jr., Woods Hole, MA
R. Dana Ono, VMM Capital Partners, LLC
Saul J. Pannell, Wellington Management Company, LLC
Jeffrey H. Pierce, Pierce Aluminum Co.
Robert A. Prendergast, Falmouth, MA
George Putnam, New Generation Advisors, LLC
Patricia K. Robertson, Rockland, DE
Elise Rose, Falmouth, MA
Charles M. Rosenthal, First Manhattan Company
John W. Rowe, Columbia University
Walter J. Salmon, Harvard Business School
James A. Sharp, Carl Zeiss Microscopy, LLC
Dyann F. Wirth, Harvard Global Health Institute

TRUSTEES EMERITI
Frederick Bay
Norman Bernstein
Margaret C. Bowles
Alexander W. Clowes
Seymour S. Cohen
Mary B. Conrad
Eric H. Davidson
Gerald D. Fischbach
Robert D. Goldman
Mary Greer
Ruth Hubbard
Kurt J. Isselbacher
M Howard Jacobson
George M. Langford
Burton J. Lee
Irwin B. Levitan
Paul A. Marks
Robert E. Mainer
Jean H. Pierce
Thomas D. Pollard
Frank Press
Vincent J. Ryan
John W. Saunders
David Sheprow
Gerald Weissmann
Christopher M. Weld
Annette L. Williamson
Alfred M. Zeien

DIRECTOR EMERITI
Gary G. Borisy
John E. Burris
Paul R. Gross
William T. Speck

PRESIDENT EMERITUS
John E. Dowling
Staff who joined or left the MBL during 2013.

ASSOCIATES EXECUTIVE BOARD

Thomas F. Gregg, President
Huson R. Gregory, Vice President
Michael Fenlon, Secretary
Robert C. King, Treasurer
Donald R. Aukamp
Syrel Dawson
Paul J. De Weer
Joe A. DeGiorgis
Michael J. Fishbein
Barbara W. Jones
Hans Kornberg
Ruth Ann Laster
Jeffrey O. Oppenheim
Marjorie B. Salmon

ex-officio members
Joan V. Ruderman, President and Director
John W. Rowe, Chairman of the Board of Trustees
Pamela Clapp Hinkle, Director of Development and External Relations

SCIENTIFIC LEADERSHIP

The Josephine Bay Paul Center for Comparative Molecular Biology and Evolution
Mitchell Sogin, Director**, Senior Scientist
David Mark Welch, Director**, Associate Scientist
Mark Allegrao, Senior Scientist
Joshua W. Hamilton, Senior Scientist**
Anton Post, Senior Scientist
Linda Amaral Zettler, Associate Scientist
Irina Arkhipova, Associate Scientist
Julie Huber, Associate Scientist
Scheri Simmons, Assistant Scientist**

Ecosystems Center
Christopher Neill, Director, Senior Scientist
John Hobbie, Distinguished Scientist
Jerry Melillo, Distinguished Scientist
Zoe Cardon, Senior Scientist

Linda Deegan, Senior Scientist
Anne Giblin, Senior Scientist
Edward Rastetter, Senior Scientist
Gaius Shaver, Senior Scientist
Joseph Vallino, Senior Scientist
Jianwu Tang, Assistant Scientist

**Staff who joined or left the MBL during 2013.
Photos

Cover: MBL's R/V Gemma (Daniel Cojanu)

Inside front cover: MBL Campus on Eel Pond, Woods Hole, MA (Tom Kleindinst)

P1: MBL President and Director Joan Ruderman (Bachrach Studios)

P2: clockwise: The University of Chicago and the Marine Biological Laboratory sign an agreement to affiliate (Bruce Gilbert); Massachusetts Senator Elizabeth Warren visits the MBL (Tom Kleindinst)

P3: clockwise: Arctic LTER greenhouses in peak autumn. (Sadie Iverson); The University of Chicago campus (UChicago); Flukes statue (MBL Communications Office); Rachel Carson statue (Tom Kleindinst)

P4: clockwise: Moon jellyfish (Brad Gemmell); Field experiments were conducted in a remote area near Utah's Bear Lake where the ecosystem's productivity is limited by both water and nitrogen availability. (Zoe Cardon); MBL’s Microbial Diversity course (Tom Kleindinst)

P5: clockwise: Heavy oiling of Bay Jimmy, Plaquemines Parish, Louisiana (Wikimedia); cuttlefish (C. Vallino); Rain over a soybean field at Tanguro Ranch in the Upper Xingu watershed, Mato Grosso, Brazil. (Christopher Neill); Polarization sensitive absorption of a Siemens star pattern etched into a thin metal film (Shalin Mehta)

P6: clockwise: Bdelloid rotifer Adineta vaga, birefringence image, polarized light microscope. (M. Shribak and I. Arkhipova); cuttlefish embryo (Nipam Patel)

P8: Collosphaera huxleyi microbe (David Patterson, ICoMM)

P10: Jeff Pierce (Dan Cutrona)