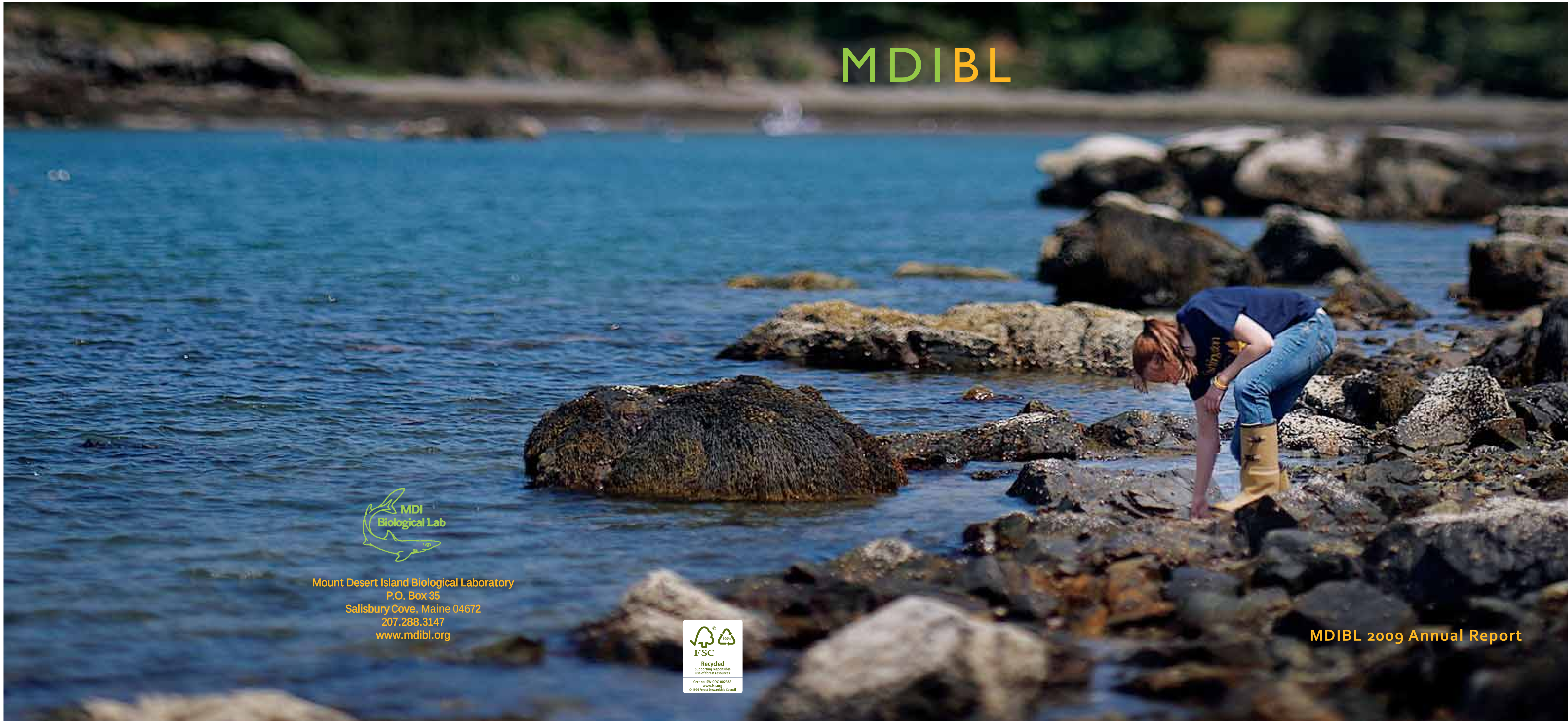
MDIBL
MDI Biological Lab
Mount Desert Island Biological Laboratory
P.O. Box 35
Salisbury Cove, Maine 04672
207.288.3147
www.mdibl.org
FSC
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MDIBL 2009 Annual Report

All Life is Connected

Research at the Mount Desert Island Biological Laboratory is based on the fundamental tenet that all life arose from a common ancestor. Humans are connected to even the most primitive organisms through this shared ancestry; all cells function in fundamentally similar ways, and all genomes have common attributes. MDIBL scientists study diverse animals such as sea urchins, roundworms, and marine and freshwater fishes - animals which on the surface seem to have little in common with each other, much less with humans. However, because they share many genes with us, they also share a remarkable amount of our biology.

Sea urchins, roundworms, and fish are less complex than humans and other mammals. This relative simplicity makes them powerful experimental models for understanding basic biological functions, human health and disease, and adaptations to environmental change. Research at MDIBL addresses fundamental questions, such as how do organisms develop? How do animals repair and regrow lost or damaged body parts? How and why do animals age? How do animals cope with naturally changing environmental factors as well as those introduced by humans?

As an institution, MDIBL focuses on understanding the connections that link all life and on using this understanding to improve human and environmental health. The Lab also promotes connections among scientists: leading researchers from all over the world come to MDIBL to work together, share their ideas and expertise, and train students. Thanks to the generous donors who recognize the importance of these connections, MDIBL continues to grow and deepen our understanding of life's interconnectedness.

Kevin Strange, Ph.D.
Director, MDIBL

MDIBL: Capitalizing on Our Common Ancestry

"Humans share a remarkable number of genes with even the simplest organisms."

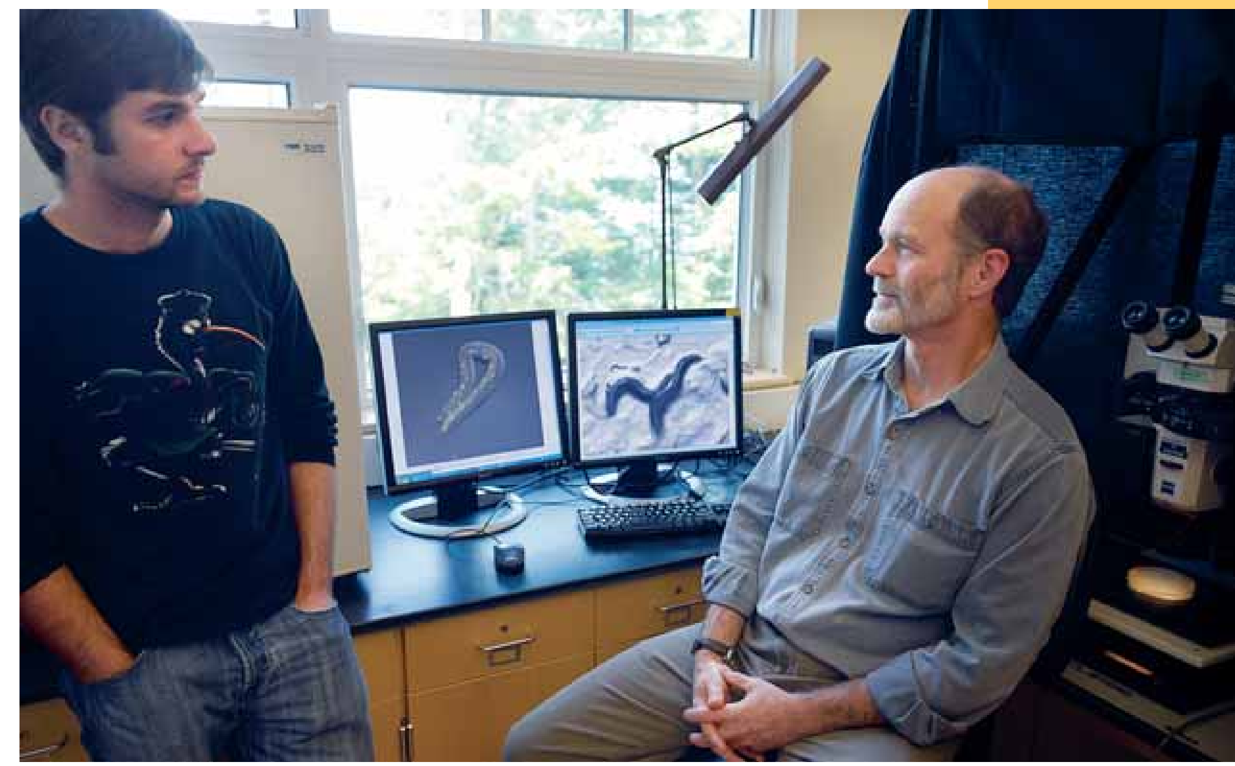
In his book *On the Origin of Species*, Charles Darwin proposed in 1859 that all life on earth arose from a common ancestor. Over the last two decades, the genomes of dozens of organisms, including humans, have been sequenced. Genome sequencing combined with powerful computational tools has provided overwhelming evidence for Darwin's theory.

"Humans share a remarkable number of genes with even the simplest organisms," says Kevin Strange, Ph.D., Director of MDIBL. "By studying animals far less complex than humans and other mammals, we can rapidly and economically gain new insights into how and why disease occurs." For example, Dr. Strange studies the roundworm *C. elegans*. This tiny animal has 20,000 genes while humans have around 21,000. Humans and roundworms share about 75 percent of their genes. Because of this shared genetic information and the organism's relative simplicity, *C. elegans* is a powerful model for understanding the biology that underlies all life.

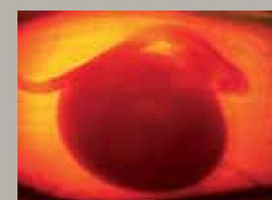
Dr. Strange's lab uses *C. elegans* to understand how cells cope with changes in their environment. These changes or "stressors" disrupt normal cellular function and can rapidly cause cell injury and death. His lab is particularly interested in understanding how cells sense stress and how they protect themselves from its damaging

effects. Dr. Strange's research focuses on osmotic stress, which occurs when cells lose or gain water. He has shown that loss of cell water or dehydration causes rapid and widespread damage to cellular proteins.

"It's remarkable how quickly cells detect and repair or destroy damaged proteins so they can survive dehydration," Dr. Strange says. "When we understand how they do this, we'll understand human kidney function and disease much better. Understanding these repair mechanisms will also provide insight into human aging and disorders such as type 2 diabetes and Huntington's, Alzheimer's, and Parkinson's diseases. This knowledge will make a difference."



"We've studied enough organisms to establish that limb regeneration was once the norm for all vertebrates."



Randall Dahn, Ph.D., was the first scientist to document that skates and other primitive marine organisms grow complete new limbs as adults. The skate (a cousin of the sting ray) has wing-like fins that are the evolutionary forerunner of our arms and legs. Dr. Dahn, who joined the MDIBL faculty in 2008, remembers his discovery "was a complete shock, in a way, because it had been published for a century that the only animals that could regenerate whole limbs were certain salamanders and newts. We simply weren't expecting anything different."

Yet Dr. Dahn (pictured opposite on right) experimented with skates after he read a non-scientific account by a home-aquarium keeper who had a stingray that lost one of its "wings" or limbs to a shark. To the author's amazement, the stingray grew a new one in its place. Dr. Dahn has since found that at least one species in every major group of limbed vertebrates is able to regenerate its limbs.

"We've studied enough organisms to establish that limb regeneration was once the norm for all vertebrates," he states. "We also know that these 'primitive' organisms share the vast majority of their genomes with more highly evolved organisms like mammals. Now we're working on finding out exactly which genetic pathways control regeneration and

(Above from top):
1) *A skate embryo develops within a protective pouch known as a skate egg case or mermaid's purse.*
2) *A newly hatched skate swims around its egg case.*
3) *Axolotl, a type of aquatic salamander, regenerates its limbs and other body parts.*

whether we can use that knowledge to create new therapies." A $1.6 million award from the U.S. Department of Defense is supporting the expansion of MDIBL's Center for Regenerative Biology and Medicine and Dr. Dahn's groundbreaking research.

"MDIBL is the best place for this kind of work," says Dr. Dahn. "Here, I am surrounded by researchers who understand the importance of looking beyond conventional scientific models. Like the other scientists at MDIBL, I hope to harness the Great Experiment of evolution to advance human medicine."

MDIBL: Understanding Development and Aging

MDIBL scientist James Coffman, Ph.D., uses sea urchins as a model to study the basic processes behind every organism's development and growth. His work has contributed to our understanding of human embryology, cancer, and environmental science, and his new studies of sea urchin larvae has implications for the growing field of aging research.

"Sea urchins are a premier experimental model," according to Dr. Coffman. "They are a fundamental tool of developmental biology, and they continue to drive the field." Sea urchin embryos are easily obtained - adults readily release millions of sibling eggs - and transparent, so that every stage of development can be fully observed.

A sea urchin embryo develops into a mature "pluteus" or larva in three to four days. The soft, free-swimming pluteus bears the beginnings of the sea urchin shell or "test" within it. After about forty days, it completes its transformation into a hard-shelled adult. When larvae do not make this transition, they slowly deteriorate and die. Because the larvae are also transparent and they pass through their life span so quickly (unlike mature sea urchins, which can live for a century), Dr. Coffman is exploring their use as a model for studying how growth, development, and aging are related.

"Without basic science, we are largely clueless as to how the universe and life works."

Dr. Coffman (pictured below on left) is motivated by the pursuit of new knowledge. "Without basic science," he says, "we are largely clueless as to how the universe and life works. What we understand is miniscule next to what we don't yet understand. Science is the best way to overcome our ignorance."

MDIBL: Defining Dioxin's Damage

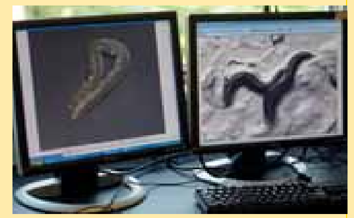
Dioxins are among the most potent toxic chemicals known. Produced by industrial processes that use or burn products containing chlorine, including trash incinerators and paper mills, they are among the organic pollutants targeted by the United Nations for global elimination. Dioxins do not readily breakdown in the environment, and cumulative, long-term exposure is known to cause cancer and birth defects as well as damage to reproductive functions and the immune and endocrine systems. They permeate our food supply, and the World Health Organization reports that we all carry some in our bodies.

MDIBL scientists Antonio Planchart, Ph.D., and Carolyn Mattingly, Ph.D. (pictured right), are using zebrafish to discover the connection between dioxin and birth defects in the jaw and face. "Craniofacial" abnormalities, including cleft palate, are among the most common birth defects in humans. "It's been known for a long time that dioxin causes birth defects," says Dr. Planchart, "and that it disrupts craniofacial development. But what hasn't been known is exactly how it does that. We want to find out which underlying signals drive that area of development."

Zebrafish have a long history of being used in research on craniofacial development. Because their embryos are transparent, it is easy to monitor development. And because zebrafish mature quickly and their genome has been sequenced, it is easier to create new, genetically modified strains than it is with a model like a mouse. "Once we identify the genes that are affected by dioxin," Dr. Planchart says, "we can explore their role in craniofacial development by activating and de-activating them in zebrafish. When we understand their function, we can look for those pathways in human development, and see how they lead to deformities in children."

"What hasn't been known is exactly *how* dioxin causes birth defects."

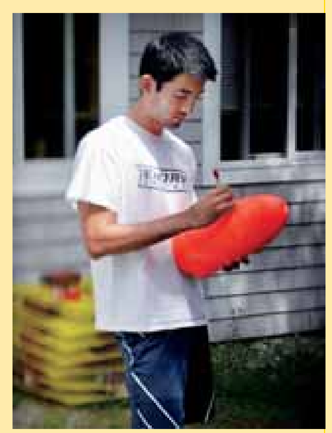
MDIBL: Leading Environmental Research



MDIBL's leadership role in environmental toxicology goes back nearly fifty years and continues today. The first phase of research began in the 1960s and 70s as the public grew increasingly aware of environmental pollution from industrial and agricultural chemicals. Two of the Lab's early year-round scientists, the late William Kinter, Ph.D., and his postdoctoral fellow, David Miller, Ph.D., had just shown that DDT caused eggshell thinning in raptors like the bald eagle when they turned their attention to reports of population declines among seabirds in 1976. "Our thought," Dr. Miller recalls, "was that young birds would be particularly sensitive to environmental stress and that one source could be pollution, especially around oil rigs and spills."

The results of their work with herring gull chicks changed thinking about how oil affected wildlife. As Dr. Miller says, "At the time we started, the feeling was that external oiling of feathers after a spill and resulting hypothermia was the big issue. Our work showed that even when birds were lightly oiled, they ingested toxic amounts of oil, and that young birds were most sensitive."

"Our work showed that even when birds were lightly oiled, they ingested toxic amounts of oil."



MDIBL researchers continue to be interested in the effects of petroleum and in finding the best organisms in which to study those effects. David Julian, Ph.D. (pictured below in center), a Visiting Fellow from the University of Florida, is exploring how the presence of oil may change an organisms's ability to respond to other forms of environmental stress. He studies bloodworms in the sulfide-rich mudflats of Frenchman Bay in addition to the well-defined model organism *C. elegans,* a small roundworm, to learn which genes allow some species of animals to tolerate conditions that would be lethal to other species.

"This ability to combine field work with wild organisms and lab studies using a genetically tractable species like *C. elegans* is one of the unique aspects of MDIBL," according to Dr. Julian. "Scientists here have a very open mind about what can be learned from other organisms. We're kindred souls."

MDIBL: Creating Courses for the Real World

MDIBL scientists address pressing environmental issues in a multitude of ways. From local projects such as studying the genetic effects of mine waste at the EPA Superfund site on Cape Rosier, Maine, to establishing the massive Comparative Toxicogenomics Database to identify connections between chemicals, genes, and disease, our researchers continually apply their expertise to understanding the interplay between environment and health.

MDIBL's strengths in toxicology, genetics, and bioinformatics are at the core of a new course in 2010, "Environmental Genomics." The first of its kind in the world, the course is led by MDIBL Visiting Faculty members Joseph Shaw, Ph.D., and John Colbourne, Ph.D., both from Indiana University, and Ben King, M.S., MDIBL's biostatistician. The course teaches researchers how to study changes in gene function on the level of entire populations when organisms are exposed to complex environmental conditions. Such experiments require that populations be split into smaller groups, exposed to one or more conditions, and then analyzed to determine the activity level of each gene in the genome. Large numbers of samples must be taken and huge amounts of data reviewed.

> "In the real world, multiple factors are always at work."

Course participants will use new, super-efficient technologies to collect and analyze the data they generate at MDIBL. They will study the effect of different heavy metals in varying concentrations and combinations on groups of *Daphnia pulex*, or waterfleas, another important genetic model.

"In the past, it's always been expensive and time-consuming to do this kind of research," says Ben King (pictured top right). "That's why people use the reductionist approach and study one substance at a time. But that doesn't mimic the real world, where multiple factors are always at work. We can use these new techniques to better model biological responses to environmental exposure."

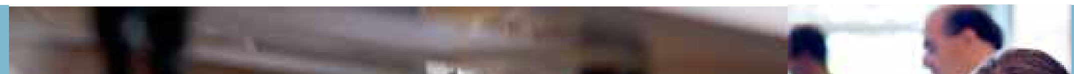
MDIBL: Bringing Scientists Together

"Why am I coming to MDIBL? For an intellectual change of scenery," says Ken Poss, Ph.D., Associate Professor of Cell Biology at Duke University and a Howard Hughes Medical Institute Early Career Scientist. Dr. Poss (pictured right) is the first Maren Fellow in Regenerative Biology at MDIBL. "It will be great to visit a place where people regularly think about and study fish and other model organisms, comparative biology, and regeneration. I have a lab of 15 people studying tissue regeneration in the zebrafish model system, and there are some gaps in how we think about our research animals and our regeneration questions. I expect that the interactions and work we develop at MDIBL will help us fill those gaps."

Those interactions, combined with the Lab's facilities and expertise with comparative model organisms, continue to draw fifty to sixty top-notch scientists to MDIBL every year as visiting faculty. Visiting scientists immerse themselves in the round-the-clock life of the Lab - they live in its simple cottages, mentor students, share ideas, and build collaborations with resident scientists and other visiting investigators. Like Dr. Poss, a new member of the visiting faculty in 2010, they look forward to refreshing their thinking and discovering new approaches and challenges in their research.

Visiting scientists immerse themselves in the round-the-clock life of the Lab.

Christine Keating, Ph.D. (pictured below left) Associate Professor of Chemistry at Penn State, is another new visiting scientist in 2010. As a materials chemist and the first Bodil Schmidt-Nielsen Bioengineer-in-Residence, she represents a new emphasis at MDIBL on collaborations across disciplines. "I hope to learn about everything going on at the Lab," she says. "I plan to seek out opportunities for interaction with members of the MDIBL scientific community in areas such as nanostructure-enabled biosensors and artificial cells that can act as models for living biological cells."



MDIBL: Connecting with Rural Students

Billy Hudson, Ph.D., the 2003 recipient of the Homer Smith Award for his outstanding contributions to kidney research and the Elliott V. Newman Professor of Medicine at the Vanderbilt University School of Medicine, will be coming to MDIBL in 2010 as the first Epstein Fellow in Molecular Physiology. "We would like to go back to the sea to explore the mysteries of the kidney ultrafiltration mechanism, as did Homer Smith [a long-time MDIBL investigator], but using modern molecular approaches to study marine animals."

Yet the connections between Dr. Billy Hudson (pictured bottom far right) and MDIBL extend beyond shared research goals. In 2007, Dr. Hudson founded the "Aspirnauts" program in his native Arkansas. The program enriches science and math education in rural areas in innovative ways, such as turning long schoolbus rides into productive learning time with wireless internet connections and laptops.

"Science education is at a near crisis in the United States," says Dr. Hudson. "Rural students are particularly underserved. I've walked a mile in these kids' shoes, and I know the importance of mentors and exposure to science professions in setting high goals and finding a path to a meaningful career.

"Science education is at a near crisis in the United States and rural students are particularly underserved."

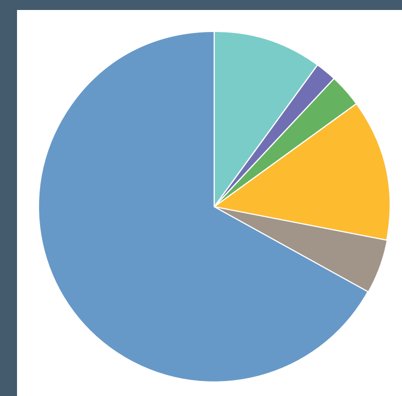
For the past two years, some of the Aspirnaut students (pictured right top) have participated in MDIBL's summer fellowship program. MDIBL provides the kind of opportunities for mentorship and exposure to research that Dr. Hudson knows is so vital to raising aspirations and creating new scientists. "The Aspirnauts who were at MDIBL last summer have introduced marine biology to the other students," Dr. Hudson reports. "Now we have a seventh grader - in Arkansas - who says he wants to be a marine biologist."

MDIBL is also expanding its programs for underserved rural high school students from Maine. The Academy of Genomics will bring twelve rising high school juniors from across the state to MDIBL for a week in August to learn laboratory techniques for genetic sequencing and how to incorporate bioinformatics into genomic research. The program is supported by the National Center for Research Resources through the Maine INBRE program, which links MDIBL, as lead institution, with The Jackson Laboratory and eleven Maine colleges and universities to increase capacity to conduct biomedical research statewide.

2009 Financial Statement

The Mount Desert Island Biological Laboratory
Statement of Financial Position
December 31, 2009
(with comparative financial information as of December 31, 2008)

	2009	2008
ASSETS		
Cash & Cash Equivalents	7,895,250	6,483,080
Accounts Receivable (net of reserve)	29,818	139,597
Grants Receivable	384,882	1,079,457
Contributions Receivable	4,935	5,515
Pledges Receivable	257,474	522,186
Gift Shop Inventory	16,097	18,743
Prepaid Expenses	74,000	74,000
Investments	3,248,634	2,339,066
Note Receivable - Plant Fund	21,048	25,546
Bond Issuance Costs	173,375	173,528
Land, Buildings & Equipment (net)	11,634,446	12,252,709
Total Assets	**23,739,959**	**23,113,427**
LIABILITIES & NET ASSETS		
Liabilities		
Accounts Payable & Accrued Expenses	272,989	282,311
Revenues Received in Advance	124,303	122,836
Deferred Grants	327,448	105,410
Note Payable - Endowment Fund	21,048	25,546
Bonds Payable	5,000,000	5,000,000
Total Liabilities	5,745,788	5,536,103
Net Assets		
Unrestricted	7,878,008	8,063,405
Temporarily Restricted	7,291,747	6,793,745
Permanently Restricted	2,824,416	2,720,174
Total Net Assets	17,994,171	17,577,324
Total Liabilities & Net Assets	**23,739,959**	**23,113,427**



Unrestricted Operating Support (FY '09)

Federal Grants & Contracts	67%
State Grants	10%
Non-government Grants & Contracts	2%
Contributions	3%
Program & Service Fees	13%
Restricted/Reserve Funds Utilized	5%
Other Income	0%
Total Unrestricted Revenues	*100%*

The Mount Desert Island Biological Laboratory
Statement of Activities
Year ended December 31, 2009
(with summarized financial information for the year ended December 31, 2008)

	2009 Unrestricted	Temporarily Restricted	Permanently Restricted	Total	2008 *
OPERATING ACTIVITIES					
Operating Support & Revenue					
Grants & Contracts	4,185,340			4,185,340	5,088,916
Indirect Costs Recovered - Grants & Contracts	2,083,170			2,083,170	2,290,868
Contributions & Private Grants	326,385	311,822	104,242	742,449	560,992
Fees for Research, Courses & Accommodations	1,047,963	1,835		1,049,798	1,091,470
Interest Income	8,056	83,992		92,048	169,591
Long-term Investment Return Utilized	94,256			94,256	93,173
Miscellaneous Revenue	14,503	1,750		16,253	21,122
Net Assets Released from Restrictions	277,446	(277,446)		0	0
Total Operating Support and Revenue	8,037,119	121,953	104,242	8,263,314	9,316,132
Operating Expenses					
Research Programs & Core Services	2,500,098			2,500,098	2,877,776
Research Training & Educational Programs	623,505			623,505	640,153
Research Subawards	1,381,496			1,381,496	1,716,628
Facilities & Dining	815,229			815,229	775,227
Development & Public Relations	390,995			390,995	363,900
General Administration	1,419,315			1,419,315	1,290,017
Bond & Mortgage Interest	392,818			392,818	126,728
Miscellaneous Expenses	16,240			16,240	14,831
Depreciation & Amortization	1,035,451			1,035,451	918,919
Total Operating Expenses	8,575,147	0	0	8,575,147	8,724,179
Change in Net Assets from Operating Activities	(538,028)	121,953	104,242	(311,833)	591,953
NON-OPERATING ACTIVITIES					
Government Grants for Capital Purposes	267,146			267,146	1,262,298
Net Assets Released from Restrictions for Capital Purposes	135,450	(135,450)		0	0
Long-term Investment Return	35	555,755		555,790	(769,409)
Long-term Investment Return Utilized by Operations		(94,256)		(94,256)	(93,172)
Transfers	(50,000)	50,000	0	0	0
Change in Net Assets from Non-Operating Activities	352,631	376,049	0	728,680	399,717
Total Change in Net Assets	**(185,397)**	**498,002**	**104,242**	**416,847**	**991,670**
Net Assets, Beginning of Year	8,063,405	6,793,745	2,720,174	17,577,324	16,585,654
Net Assets, End of Year	**7,878,008**	**7,291,747**	**2,824,416**	**17,994,171**	**17,577,324**

* prior year has been restated in current format

The financial statements of the Mount Desert Island Biological Laboratory for the fiscal year ending December 31, 2009, were audited by Horton, McFarland, and Veysey, LLC, and are available upon request.

2009 Faculty

Sharon Ashworth, Ph.D.[1]
University of Maine

David W. Barnes, Ph.D.
Mount Desert Island Biological Laboratory

Edward J. Benz, Jr., M.D.
Dana-Farber Cancer Institute

Nancy Berliner, M.D.
Brigham and Women's Hospital

James L. Boyer, M.D.
Yale University School of Medicine

Jon Chorover, Ph.D.
The University of Arizona

Andrew E. Christie, Ph.D.
Mount Desert Island Biological Laboratory

J. Sook Chung, Ph.D.[1]
The University of Maryland

James B. Claiborne, Ph.D.
Georgia Southern University

Glen Collier, Ph.D. [1]
The University of Tulsa

Clare B. Congdon, Ph.D.
University of Southern Maine

Gary W. Conrad, Ph.D.
Kansas State University

Suzie Currie, Ph.D.[1]
Allison University

Christopher P. Cutler, Ph.D.
Georgia Southern University

Randall D. Dahn, Ph.D.
Mount Desert Island Biological Laboratory

David Dawson, Ph.D.
Oregon Health and Science University

Hugo de Jonge, Ph.D.[1]
Erasmus University Medical Center

Susan L. Edwards, Ph.D.[1]
Appalachian Statue University

David H. Evans, Ph.D.
University of Florida

Susan K. Fellner, M.D.
University of North Carolina at Chapel Hill

John N. Forrest, Jr., M.D.
Yale University School of Medicine

Leon Goldstein, Ph.D.
Brown University

Daniel K. Hartline, Ph.D.
University of Hawaii at Manoa

R. Patrick Hassett, Ph.D.[1]
Ohio University

George W. Kidder III, Ph.D.
Mount Desert Island Biological Laboratory

Rolf K. H. Kinne, M.D., Ph.D.
Max Planck Institute

Christopher Lage, Ph.D.[1]
University of Maine at Augusta

Lucy Lee, Ph.D.[1]
Wilfrid Laurier University

Petra H. Lenz, Ph.D.
University of Hawaii at Manoa

Weiming Li, Ph.D.[1,2]
Michigan State University

Carolyn J. Mattingly, Ph.D.[2]
Mount Desert Island Biological Laboratory

Rebeka R. Merson, Ph.D.[1,2]
Rhode Island College

David S. Miller, Ph.D.
National Institute of Environmental Health Sciences

Antonio J. Planchart, Ph.D.
Mount Desert Island Biological Laboratory

Robert L. Preston, Ph.D.
Illinois State University

J. Larry Renfro, Ph.D.
University of Connecticut

Jack R. Riordan, Ph.D.
University of North Carolina at Chapel Hill

Mario Schiffer, M.D.[1]
Hannover Medical School

Joseph R. Shaw, Ph.D.
Indiana University

Rebecca Shearman, Ph.D.[1]
Wesleyan University

Patricio Silva, M.D.
Temple University

Bruce A. Stanton, Ph.D.
Dartmouth Medical School

Nicole Theodosiou Napier, Ph.D.[1]
Union College

David W. Towle
Mount Desert Island Biological Laboratory

Caroline Wilson, Ph.D.[1]
Denison University

Mary Kate Worden, Ph.D.
University of Virginia

2009 Senior Staff

Kevin Strange, Ph.D.
Director (as of July 23, 2009)

John N. Forrest, Jr., M.D.
Director (through July 23, 2009)

Patricia H. Hand, Ph.D.
Administrative Director

Charles G. Wray, Ph.D.
Associate Administrative Director

Jerilyn M. Bowers
Director of Development & Public Affairs

Steve Bryant
Systems Administrator

Mark A. Hanscome
Physical Plant Supervisor

George W. Kidder III, Ph.D.
Scientific Instrumentation Officer

Claudine D. Lurvey
Director of Finance

Michael P. McKernan
Director of Education & Conferences

2009 Staff

Michelle D. Bailey
Animal Specialist

Lynne Beverly-Staggs
Research Assistant

Timothy J. Billings
Physical Plant Staff

Alyssa M. Burnett
Database Administrator

Peter J. Burt
Accounting Assistant

1 New Investigator Award recipient, supported by the Salisbury Cove Research Fund

2 NIEHS Center for Membrane Toxicology Studies Fellowships

Christine Chapline
Research Assistant

Alison E. Coluccio
Research Assistant

Allan P. Davis, Ph.D.
Scientific Curator

Christopher S. Durkin
Summer Technician

Robin P. Ertl, Ph.D.
Research Associate

Bonnie L. Gilfillan
Manager of Annual Giving

Gary L. Gorczyca
Physical Plant Staff

Nina E. Griffin
Research Assistant

Ann Cox Halkett
Foundations Manager

Darcy E. Herrick
Summer Technician

Catherine A. Kelley
Research Assistant

Benjamin L. King
Biostatistician

Mary Klemt
Administrative Assistant

Jennifer A. Litteral
Research Assistant

Sarah A. Mass Scheuplein, Ph.D.
Post Doctoral Fellow

Nancy D. Madore
Culinary Specialist

Christopher M. McCarty
Graduate Research Assistant

Roy A. McMorran
Systems Administrator

Judith A. Medlin
Administrative Assistant

Mark F. Nicknair
Custodian

David W. Opdyke
Financial Assistant

Angela Parton
Senior Research Assistant

Amy D. Pelletier
Sponsored Programs Accountant

Aimee E. Picard
Executive Assistant

Amy J. Rhoads
Summer Technician

Kelly L. Robertson
Administrative Assistant

Anthony J. Robertson, Ph.D.
Research Associate

Michael C. Rosenstein
Software Systems Engineer

Thomas S. Rush
Physical Plant Staff

Adam M. Sayre
Audio Visual Assistant

Wayne C. Sinclair
Physical Plant Staff

Christine M. Smith
DNA Sequencing Center Supervisor

Thomas C. Weigers
Scientific Software Engineer

2009 Student Fellowship Recipients

HIGH SCHOOL RECIPIENTS

MDIBL High School Research Fellowship:

Ethan M. Clement
Sheridan High School
Mentor: Robert L. Preston, Ph.D.

Sarah B. Ellis
Omaha High School
Mentor: J. Denry Sato, D. Phil.

Henry D. Edelstein
Brookline High School
Mentor: John N. Forrest, Jr., M.D.

Megan H. Kelley
Fayetteville-Manilus High School
Mentor: John N. Forrest, Jr., M.D.

Jeremy Quail
Math, Science and Engineering High School
Mentor: Hermann Haller, M.D.

NIEHS Short Term Educational Experiences for Research (STEER):

Ellen W. Daily
Waterville Senior High School
Mentor: Jane Disney, Ph.D.

Evelyn Dickinson
Mt. Ararat High School
Mentor: Andrew E. Christie, Ph.D.

Edal P. Fontaine
Rockland District High School
Mentor: Robert L. Preston, Ph.D.

Marina S. Karnofsky
Mount Desert Island High School
Mentor: Caroline H. Wilson, Ph.D.

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