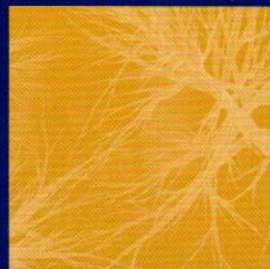
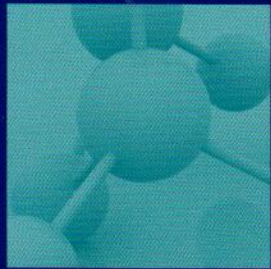




**Boston Biomedical
Research Institute**



syn·er·gy

ANNUAL REPORT 2006



Boston Biomedical Research Institute

Boston Biomedical Research Institute is an independent not for profit institution dedicated to basic biomedical research to promote the understanding, treatment and prevention of specific human diseases, and to the training of research scientists. Investigations focus on structure and function of proteins that control cellular communication, muscle contractility, cell movement, growth and differentiation and on the underlying causes of human disease from the study of disease models and development of novel therapeutics. In a uniquely collaborative environment that fosters innovative multidisciplinary research, our mission is to advance the frontiers of human knowledge in the biomedical sciences and to develop cures for a wide range of diseases such as cancer, cardiovascular disease and degenerative diseases including muscular dystrophy and Alzheimer's disease.

Archimedes, the ancient Greek mathematician, astronomer, physicist, engineer and philosopher, is a major figure in the history of science. Between 287 and 212 B.C., Archimedes invented statistics, identified the equilibrium of fluids, the law of buoyancy and the notion that objects have a center of gravity, among other important discoveries.

For all of his accomplishments, he is, perhaps, best-known for the boast in his treatise on the mathematical law of levers: "Give me a place to stand, and I will move the earth."

Leverage is an essential element in the human drive to change the physical world. Can anyone imagine the Great Pyramids being built without it? Leverage is also an important metaphorical means to describe human organizational behavior. Boston Biomedical Research Institute was founded on the principle that significant leverage could be gained by bringing together scientists interested in studying various aspects of human disease outside the academic setting. In the minds of the founders of Boston Biomedical, this leverage transcended the administrative power that comes from grouping together. It imagined a leveraging of the intellectual force that each individual scientist would bring to the Institute, so that the whole would be greater than the sum of its parts. That notion has been an important element of our success.

An effective way to move objects with substantial mass is through leverage and the adjustment of the fulcrum. Likewise, enabling Boston Biomedical to become even more successful in the future as an organization required an adjustment in the placement of the organizational pivot. Luckily, we have our own version of Archimedes in Dr. Charles Emerson, Boston Biomedical's Director. Charlie has led the strategic planning effort to blaze a trail that will allow our scientists to leverage their intellectual capital even further. The result is the identification of four disease-based programmatic foci that enable the leveraging of Boston Biomedical Research Institute's existing scientific expertise and illuminate multidisciplinary research programs through which scientists can explore opportunities to develop new therapies to treat or combat disease. In May, the Board of Trustees endorsed the strategic plan by voting to commit a significant amount of Institute resources to launching the new programs. It is truly exciting to watch as they

gain momentum. Boston Biomedical is extremely fortunate to have someone with Charlie's capacity for thinking strategically about how best to do science in the future.

Leverage requires force, something our Board of Trustees has in abundance. I am awed by the commitment of time, emotion, energy, thoughtfulness and creativity that Trustees brought individually and collectively to the strategic planning effort over the past year. I cannot imagine how much more challenging my job as President of the Board would have been without many strong backs at the oars. We are fortunate to have three new Trustee rowers in our midst: Nick Brill, Doug Fambrough and Paul Airasian. Each of them began pulling their weight as soon as they sat down, and we are much stronger with their involvement. After 26 years of dedicated service on the Board, including distinguished service as President, Dave Gibbs decided to step down earlier this year. Without Dave's almost single-handed efforts, it is doubtful that Boston Biomedical Research Institute could have made the move to Watertown. The Board will miss his energy and dedication.

As an organization, we depend on the generosity and thoughtfulness of its donors and friends to enable it to do more than survive. In order for Boston Biomedical to thrive, it must have resources that are not available through research grants. On behalf of all those who benefit from that generosity, please accept my deepest appreciation. You are part of the effort to improve human health for generations to come. To me, the power that leverage can generate is incalculable.

JOHN R. LAYTON

John R. Layton
President



Our passion for scientific discovery that enriches our understanding of the world and makes people's lives better is the common factor that binds all of us to Boston Biomedical.

How each of us came to this passion, I am certain, is uniquely personal. In my case, I grew up with medicine and science in my blood. Both my grandfathers were physicians, and my father was a physician-scientist specializing in cancer. My childhood memories are permeated with the visions of animated discussions at the dinner table about the latest medical advances; a household phone that constantly rang, often with dreaded news that in a flash could have my father racing back to the hospital at all hours of the night; images of my father hovering over a new type of microscope (that now resides in my office) as he enthusiastically focused on unraveling the mysteries of the malicious cancer cell; and the grateful patients and families that flooded our doorsteps with gifts at the holidays.

My passion for science came as a college student, when I was "let loose" at Dartmouth Medical School, in the research lab of Andrew Szent-Georgyi, a muscle biologist well known to many at Boston Biomedical. There, I discovered a creative world of science, in which discoveries were being made by individuals who were not unlike me and who were having the time of their lives and sharing in their excitement with an interested world. To my very good fortune, I had many mentors who encouraged me to think boldly and to do battle with the unknown in an environment of passionate and stimulating colleagues. And this is precisely why I came to Boston Biomedical Research Institute, to be part of such a community of interactive, supportive and passionate scientists dedicated to creative discovery.

Over the past year, I have been fully engaged working with the Boston Biomedical community to develop a strategic plan that will lead the Institute into the future. I have been gratified and excited that our scientists, administrators and trustees have joined together with great passion and energy to define new ways to foster the creativity and productivity of our scientists and to safeguard the vibrant, interactive and supportive community that makes Boston Biomedical unique as a leading biomedical research institute. Our work together has been at times hard, but in the end, we have successfully developed four programmatic

research initiatives that will uniquely position our science at the forefront of our field for the coming decade. These programs, which are introduced in this Annual Report, combine the superlative talents of our faculty and staff to create true "synergy" for which the results and discoveries promise to far exceed the sum of their individual parts. These discoveries will break new ground to increase our understanding of disease processes and most certainly will lead to major therapeutic advances to combat human disease. Our planning has seeded new scientific collaborations and interactions that were never before imagined and that will most certainly yield important discoveries. We also focused our attention on the critically important and exciting task of recruiting a new generation of scientists to help build our new programs and invigorate our science for the future. And, our planning has greatly heightened our awareness of the importance of philanthropy as a vital source of funding to support the innovative, cutting edge discovery science of our investigators, the purchase of advanced instrumentation, and the recruitment of a new generation of top scientists to the Institute.

I want to thank our donors, the faculty, trustees, and staff for all of their hard work and steadfast support over the peaks and valleys of the past year to make our strategic planning process a singular success. I particularly want to thank Dr. Judah Folkman for his always thoughtful advice, guidance and encouragement. In the coming year, I look forward to our continued work together in the passionate pursuit of scientific discovery, as we implement our new programs and recruit new faculty. Boston Biomedical now has a roadmap for our science, and the future is indeed very bright.



Charles P. Emerson, Jr., Ph.D.
Director



syn·er·gy

The interaction of two or more agents or forces so that their combined effect is greater than the sum of their individual effects.



The scientists at Boston Biomedical Research Institute study disease by forging a connection between basic discovery and medical application. Boston Biomedical scientists work collaboratively across the four programmatic initiatives of Cancer, Proteomics, Cardiovascular, and Regenerative Biology to better understand how specific genes and their encoded proteins function in biological processes like muscle contraction, cell shape and movement, embryonic development and tissue regeneration, protein function and modification, and cellular communication. As a result, Boston Biomedical brings a unique synergy of collaboration to its mission, bringing its research teams closer each day to finding cures for life-debilitating and deadly diseases including, but not limited to, Alzheimer's disease, muscular dystrophy, hypertension, stroke, autoimmune disorders and cancers of all types.

**CANCER
PROTEOMICS
CARDIOVASCULAR
REGENERATIVE BIOLOGY**



CANCER

Boston Biomedical continues to build on its unique strengths of examining the molecular mechanisms that promote the generation of abnormal cells, which leads to tumor formation, and how these aberrant cells move and change shape. By discovering how cells normally respond to protein signals and how they migrate, Boston Biomedical's Cancer Initiative can better identify the components of faulty signaling pathways that contribute to cancer onset and progression. Boston Biomedical's discovery efforts focused on how to impede tumor development and the spread of cancer cells to other areas of the body are critical in the development of new effective oncology therapeutics.

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Hartmut Wohlrab PH.D., SENIOR SCIENTIST



PROTEOMICS

By expanding Boston Biomedical's core protein biophysics expertise into systems biology and proteomics, a branch of molecular biology focused on interacting groups of proteins in cells and organisms, our research continues to make dramatic advancements in the areas of smooth muscle biology, asthma, stem cell signaling and cancer. Mapping the intricate matrix of signaling pathways is pivotal to gaining a better understanding of tumorigenic growth and the lifespan of deadly stem cell cancers such as those that occur in the muscles, brain, pancreas and lungs.

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CARDIOVASCULAR

Further identifying proteins that help develop and destroy cardiac muscle cells is a central mission for the Cardiovascular Initiative. By examining the roles specific molecules have in normal and abnormal heart activity, they will be able to better understand the many diseases that ultimately lead to heart failure. Boston Biomedical's Cardiovascular Initiative's discoveries are certain to produce better treatments for heart disease, heart attacks and hypertension than are available today.

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REGENERATIVE BIOLOGY

The Institute's ongoing effort to understand how body structures, diseases and other processes lead to the body tissue loss or dysfunction will lead to the successful treatment of Alzheimer's disease, muscular dystrophy, diabetes and stroke. By learning how muscles grow and deteriorate and what role specific proteins play in these processes, Boston Biomedical's Regenerative Biology team will discover how to promote muscle regeneration.

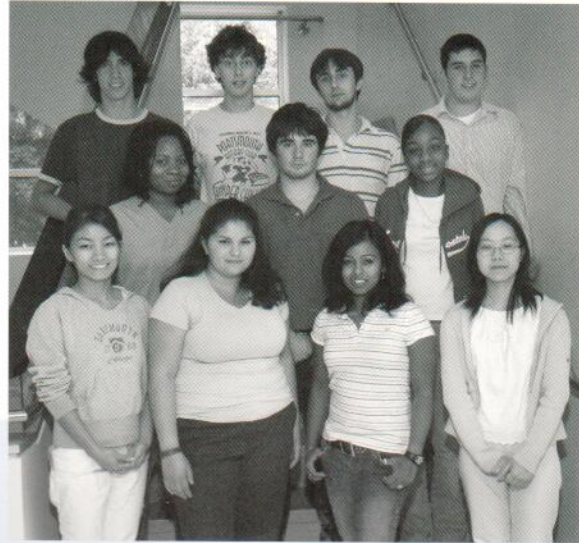
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OUTREACH PROGRAMS

Boston Biomedical Research Institute is committed to bringing the excitement of science to young people and introducing them to careers in scientific research.

Our Science Education Outreach Programs include student internships, college scholarships for high school seniors pursuing a degree in science, a summer internship program for high school science teachers, and various lectures for individuals to learn from our scientists. Boston Biomedical Research Institute's Outreach Program was launched in 2000 and is conducted in collaboration with local schools in the metropolitan Boston area.



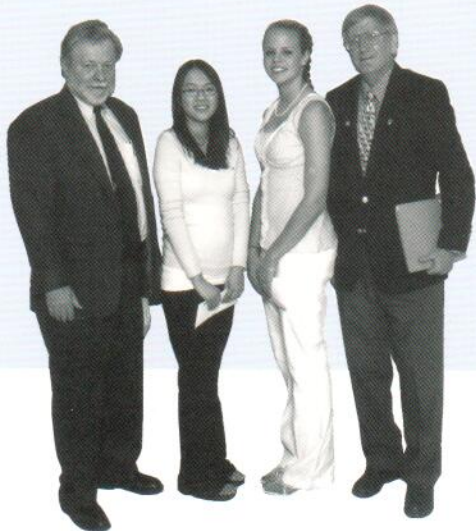
Summer Intern Students Top: (l-r) Levi Thornton, David Lapham, Anthony Buda, Matthew Kaye. Middle: (l-r) Nakesha King, Pat Doonan, Nikki Louis. Bottom: (l-r) Jenny Jiang, Tanina Bianchi, Tanya Girgenrath, Eleanor Wu. Not pictured: Scott Kaye.



Watertown High School Student Science Expo presenter, Noah Jefferson.



Senior Scientist, Henry Paulus and Watertown High School student presenter.



Director, Charles Emerson, Scholarship winners Helen Pham and Stephanie Colantonio with Corporator George Buckley.

WATERTOWN HIGH SCHOOL STUDENT SCIENCE EXPO

The Watertown High School Student Science Expo is a favorite day at the Institute! This year more than 50 students shared their year long projects with Boston Biomedical's friends and family.

Postdoctoral fellow, Jennifer Chen, Ann Armstrong, Corporator, Kitty Flather, Trustee, Doug Fambrough, Suzie Reno and George Tarvezian.



THE NEXT GENERATION OF DISCOVERY

Boston Biomedical Research Institute's next generation of research scientists, our postdoctoral fellows, invited our family and friends to explore their labs and to look into their microscopes to learn first hand about the discoveries that will bring forth the cures for tomorrow.



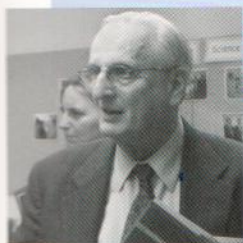
Trustee, Paul Airasian and Director, Charles Emerson.



Postdoctoral fellow, John Sumida.

EXPLORING SCIENCE

"From Discovery to Cure - Understanding the Drug Discovery Pipeline." Drs. Marshall Posner and Kenneth Kaitin joined Director, Charles Emerson along with cancer survivor and clinical trial participant George Jones in a panel conversation moderated by Nationally Syndicated Columnist, Judy Foreman.



Renowned Cancer Researcher and Boston Biomedical Research Institute Trustee, Judah Folkman.



Senior Scientist, Nilima Sarkar, Presenter, George Jones and his wife June.



Director, Charles Emerson, Trustees, Doug Fambrough and Tom Leggat.

WALK FOR SCIENCE EDUCATION

The Walk for Science Education, held on May 19, 2006 at Artesani Park in Watertown, raised over \$12,000 for Boston Biomedical Research Institute's Educational Outreach Program.

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Enanta, a local pharmaceutical company
 participated in this year's *Walk for
 Science Education*, a highlight of
 Boston Biomedical Research Institute's
 Educational Outreach Program.



It is an understatement that Boston Biomedical Research Institute is experiencing exciting times, which is why we are thrilled to be heading the new Advancement Committee.

Working collaboratively with the Office of Institutional Advancement, this new committee has been actively identifying and pursuing new funding sources to launch the new programmatic initiatives of the strategic plan. It is our goal to assist the Institute and our talented researchers to obtain the critical funds needed for new equipment, high risk pilot projects and the recruitment of new scientists.

Over the past year, the Office of Institutional Advancement, directed by Terence F. McGowan, has successfully implemented new programs and held several successful events that have brought new friends and donors, as well as garnered great attention, to Boston Biomedical.

In October, Trustee Allie Flather Blodgett, with the help of Trustee Jane H. Stephenson, graciously opened her home to more than fifty Boston Biomedical donors and guests. This delightful evening gave us the opportunity to share with the Institute's new and current friends our Director's vision along with Dr. Eric Sundberg's exciting program work related to superantigens and their impact in the treatment of cancer and arthritis.

Fall also featured an installment in our Exploring Science Lecture Series, *From Discovery to Cure – Understanding the Drug Discovery Pipeline*. Judy Foreman, of the nationally syndicated column "Health Sense," hosted this panel discussion. It also featured our own Dr. Charles P. Emerson, Jr., Dr. Kenneth I. Kaitin, Tufts Center for the Study of Drug Development Director, as well as Dr. Marshall R. Posner, Medical Director of Dana-Farber Cancer Institute's Head and Neck Oncology program. George Jones, Dr. Posner's former patient and clinical trial participant, also shared his personal experience as a cancer survivor. This thought provoking panel discussion placed Boston Biomedical and the importance of basic science as the starting point for all therapeutic development in the fight against disease.

This past spring, we featured several post-doctoral fellows at the annual *Next Generation of Discovery* open house event. Guests toured labs and saw first hand the work of six exceptional young

scientists that will bring a better understanding and more effective treatments for cancer, heart disease and infertility.

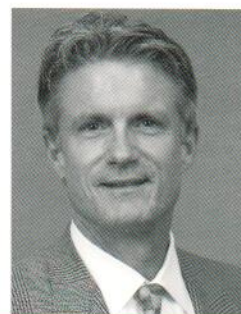
May saw a return of our *Walk for Science Education*, held on the one day that month when it did not rain. More than sixty walkers from Boston Biomedical, our community and Watertown High School walked five kilometers around the Charles River in Artesani Park and raised much needed funds for our educational outreach program. This past year marked a new record in corporate sponsorships including gifts from Argosy Publishing, The Atrium School, Cell Signaling Technology, Igo's Welding Supply Company, Incorporated, Lexus of Watertown, Perkins + Will, Storbase Communications, and Watertown Savings Bank.

We also have taken triumphant steps in our pursuit of foundation support, receiving \$275,000 in new partner funding. It is our great honor to add the Concern Foundation, Elsa U. Pardee Foundation, and Simeon J. Fortin Charitable Foundation to our list of new contributors. This year Boston Biomedical also received two fellowship grants from the American Heart Association, with one of our recipients scoring in the top one percent of all applicants.

As we move forward to reach out to new friends and collaborators, we invite you to join the critical mission that will allow our scientists to continue their collaborative efforts as they pursue an even higher level of scientific knowledge that promises to eradicate many of the most deadly human diseases.

Nathaniel S. Howe, Jr.
Chair

Stuart H. Watson
Vice Chair



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IXIS Asset Management

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Chemicalogic Corporation
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Boston Biomedical Research Institute Trustees and Overseers Seated (l-r) John B. French, Nathaniel S. Howe, Jr., Jane H. Stephenson, Charles P. Emerson, Jr., John R. Layton, Jillian Hosford Darling, Stuart H. Watson. Standing (l-r) Douglas M. Fambrough, Josefina Bondoc DeBaere, Nicholas S. Brill, Thomas R. DiBenedetto, Allie Flather Blodgett, John Gergely, Thomas E. Leggat, W. Lynn Jachney, Paul M. Airasian. Not pictured: Elkan R. Blout, Janet L. Denlinger, Ernest Henderson, III, Eli Manchester, Jr., Victoria Bailey Miller, Geoffrey Nunes.

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(L-R) New Trustees, Nicholas Brill and Douglas Fambrough were elected to the Board at the Annual Meeting.

New Corporator Diane Devlin and New Trustee, Paul Airasian joined Boston Biomedical Research Institute in May. New Corporator, Michael Raso, was elected to the Corporation (not pictured).



The Board of Trustees is excited about the progress made in the strategic planning process during fiscal year 2006. This dynamic process has produced the programmatic initiatives that will lead the Institute's scientific agenda well into the next decade.

The Board of Trustees embraces the challenges and opportunities to assist Boston Biomedical Research Institute in achieving the goals of the strategic plan, enabling the Institute to be a leader in cutting edge biomedical research while securing its financial strength for the future.

Boston Biomedical improved its financial strength in the fiscal year ended June 30, 2006 while achieving its financial bond requirements. The Statements of Financial Position indicate that total assets at June 30, 2006 approximated \$45,550,000. Investments approximated \$17,578,000 on June 30, 2006, an increase of approximately \$625,000 over the prior year. The investment portfolio had another strong year with an annual total return of 10.6%.

The Statements of Activities indicate that our revenues from grants and contracts approximated \$11,803,000 for the year ended June 30, 2006, an increase of \$19,000 over the prior year. Revenue from federal agencies represents approximately 95% of such revenue. Boston Biomedical has done well compared to many of its peers as the environment for securing federal funds has become more competitive. During the last fiscal year the Institute continued to diversify its grant revenue sources and was awarded six new grants from the National Institutes of Health, one new grant from the United States Department of Agriculture, two new grants from the Muscular Dystrophy Association and four new foundation awards.

Charitable giving is an important revenue source for Boston Biomedical. Total contributions approximated \$355,000 during fiscal year 2006. Unrestricted and permanently restricted contributions approximated \$343,000 and \$12,000, respectively. These contributions support those very important activities not covered by grants from federal agencies and not for profit foundations and associations: specifically, principal investigator research programs, the Boston Biomedical Scholars program and educational initiatives. Boston Biomedical is extremely grateful for each donor's generous support. We look forward to

continue working with you in the future to help us identify and expand our network of friends, advocates and supporters. This effort is essential to the success of Boston Biomedical over the next five years as it prepares to implement the strategic initiatives and vision of Dr. Emerson and his scientific colleagues. The strategic plan will allow us to strengthen its position of excellence in basic and disease related research.

Unrestricted investment income of \$1,355,000 for the year ended June 30, 2006 reflected strong stock market performance.

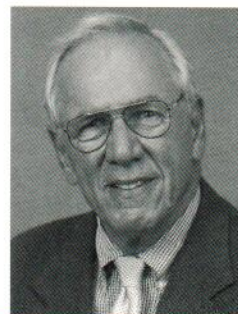
Total expenses of \$13,743,000 increased approximately \$473,000 or 3.6% over the prior year due primarily to growth in research initiatives and higher utility costs. Boston Biomedical continued its commitment to cost containment and improving upon purchasing efficiencies. Boston Biomedical constantly explores new opportunities, utilizing competitive bidding and identifying new potential vendors to ensure it receives the best price, service and quality from all vendors and independent contractors.

Boston Biomedical exceeded its debt service coverage ratio requirement of 110% for the fiscal year and increased its liquidity ratio (a measure of unrestricted cash and investments available to satisfy outstanding bond debt) to 118% as of June 30, 2006 from 112% as of June 30, 2005.

I would like to thank Tom DiBenedetto for his expert leadership of the Investment Committee as well as the other members for their significant contributions. The Investment Committee continued to reposition and diversify the portfolio during the year to help reduce risk while preserving principal, enabling the Institute to maximize its total return.

Geoffrey Nunes

Geoffrey Nunes, Esq.
Treasurer



STATEMENTS OF FINANCIAL POSITION

JUNE 30, 2006 AND 2005

	<u>2006</u>	<u>2005</u>
ASSETS:		
Cash	\$ 1,677,438	\$ 1,760,786
Grants receivable	10,110,175	9,450,544
Unconditional promises to give	463,291	477,069
Investments	17,578,182	16,953,053
Prepayments, deposits and other receivables	155,106	190,267
Trustee-held funds	1,245,704	1,244,970
Property and equipment	13,570,195	14,400,549
Deferred compensation investments	749,796	727,657
Total assets	<u>\$45,549,887</u>	<u>\$45,204,895</u>
LIABILITIES AND NET ASSETS:		
Accounts payable and accrued expenses	\$ 562,106	\$ 684,711
Accrued interest expense	365,723	372,598
Deferred income	10,222,093	9,421,865
Note payable	3,660	6,096
Obligation under capital lease	150,387	189,929
Bonds payable	15,255,000	15,585,000
Deferred compensation payable	749,796	727,657
Total liabilities	<u>27,308,765</u>	<u>26,987,856</u>
NET ASSETS:		
Unrestricted	15,256,875	15,404,448
Temporarily restricted	802,848	643,553
Permanently restricted	2,181,399	2,169,038
Total net assets	<u>18,241,122</u>	<u>18,217,039</u>
Total liabilities and net assets	<u>\$45,549,887</u>	<u>\$45,204,895</u>

Copies of our complete, audited financial statements are available upon request from the Chief Financial Officer, Boston Biomedical Research Institute.

STATEMENTS OF ACTIVITIES

FOR THE YEARS ENDED JUNE 30, 2006 AND 2005

CHANGES IN UNRESTRICTED NET ASSETS:	2006	2005
Revenues:		
Grants and contracts	\$11,803,438	\$11,784,126
Contributions	342,560	529,706
Investment income	1,354,718	1,236,412
Other income including licensing fees, net	41,725	402,566
Total unrestricted revenues	<u>13,542,441</u>	<u>13,952,810</u>
Net assets released from restrictions	53,191	59,632
Total unrestricted support	<u>\$13,595,632</u>	<u>\$14,012,442</u>
Expenses:		
Salaries and benefits	8,411,630	8,090,995
General support and services	2,031,139	1,983,547
Occupancy costs	1,402,108	1,271,870
Interest expense	884,621	900,196
Depreciation	1,013,707	1,023,249
Total expenses	<u>13,743,205</u>	<u>13,269,857</u>
Increase (Decrease) in unrestricted net assets	<u>(147,573)</u>	<u>742,585</u>
 CHANGES IN TEMPORARILY RESTRICTED NET ASSETS:		
Contributions	—	50,000
Investment income	212,486	167,255
Net assets released from restrictions	(53,191)	(59,632)
Increase in temporarily restricted net assets	<u>159,295</u>	<u>157,623</u>
 CHANGES IN PERMANENTLY RESTRICTED NET ASSETS:		
Contributions	12,361	27,925
Increase in permanently restricted net assets	<u>12,361</u>	<u>27,925</u>
Increase in net assets	24,083	928,133
Net assets at beginning of year	<u>18,217,039</u>	<u>17,288,906</u>
 NET ASSETS AT END OF YEAR	<u>\$18,241,122</u>	<u>\$18,217,039</u>

GRANTS AND FELLOWSHIP AWARDS

JUNE 30, 2006

NATIONAL INSTITUTES OF HEALTH

Dr. Bohm/Grabarek	Molecular Basis for Inhibition of Edema Factor	3/04-2/06	100,000
Dr. Coluccio	Molecular Mechanism of a Mammalian Class I Myosin Motor	2/04-1/08	1,668,000
Dr. Dominguez	Atomic Structure of Smooth Muscle Caldesmon	3/00-2/06	1,761,000
Dr. Dominguez	Structural Basis of Actin Cytoskeleton Dynamics	4/05-3/09	1,632,000
Dr. Dominguez	Structure of the Smooth Muscle Myosin Phosphatase	9/03-11/08	2,465,000
Dr. Dominov	Apoptosisin Laminin-Alpha2 Deficiency	4/05-3/10	2,148,000
Dr. Erhardt	Prevention of Myocardial Ischemic Injury by RAF/ERK	4/03-3/07	1,471,000
Dr. Emerson	Control of Muscle Protein Synthesis during Myogenesis	7/05-6/10	4,258,000*
Dr. Emerson	Sonic Hedgehog Target Genes in Development and Cancer	12/03-11/06	1,900,000
Dr. Fessenden	Molecular Mechanisms of RyR Activation by 4-CmC	8/05-4/08	389,000
Dr. Gangopadhyay	CaMK II Variants and Vascular Smooth Muscle Function	4/04-3/07	156,000
Dr. Goetinck/ Wilcox-Adelman	Syndecan-4 Signaling in Cell-Matrix Interactions	3/06-2/09	1,285,000*
Dr. Graceffa	Smooth Muscle Thin Filament	8/01-7/06	1,892,000
Dr. Hansen	Rnd Effector Molecules in Epithelial Cell Transformation	3/03-2/08	2,365,000
Dr. Ikemoto	Structure and Function of Sarcoplasmic Reticulum	4/02-3/07	3,030,000
Dr. Ikemoto	Regulation of Normal and Diseased Cardiac Ca ²⁺ Channels	4/03-3/07	1,682,000
Dr. Kitazawa	Mechanism of Ca ²⁺ Sensitization in Smooth Muscle	6/02-5/07	2,876,000
Dr. Lehrer	Tropomyosin and the Regulation of Muscle Contraction	7/05-6/09	1,950,000*
Dr. Lieto	Role of Unconventional Myosin Myo1c in Cell Motility	9/04-8/07	139,000
Dr. Miller	Neurotoxicogenomics and Child Health	11/01-8/06	1,506,000
Dr. Miller	Pathogenesis of Laminin-Alpha2 Deficiency	9/02-8/06	1,291,000*
Dr. Miller	Molecular Physiology of Respiratory Muscles	4/06-2/11	2,669,000*
Dr. Morgan	Contraction of Vascular Smooth Muscle Cells	4/01-3/06	1,023,000
Dr. Morgan	Signaling & Uterine Contractility during Pregnancy	8/03-6/08	1,696,000
Dr. Morgan	Regulation of Contraction of Blood Vessels	7/05-6/10	2,194,000*
Dr. Rameh Plant	The Role of PtdIns-5-P in Cell Function and Signaling	6/03-3/08	1,752,000
Dr. Raso	Immunotherapeutic Agents to Treat Alzheimer's disease	9/00-8/06	1,958,000
Dr. Smith	Cell Development and Function 3	11/03-12/07	1,343,000
Dr. Stafford	Structure-Function Study of Angiogenic Protein, Ephrin	7/01-6/07	1,261,000
Dr. Sundberg	Development of Superantigen Antagonists	7/04-6/06	364,000
Dr. Tao	Mechanism of Calcium Regulation in Striated Muscle	6/03-5/08	3,109,000
Dr. Tao	A Stroboscopic Time-Resolved Spectrofluorometer	3/04-2/06	158,000
Dr. Wang (Pro. Proj.)	Molecular Mechanism of Smooth Muscle Regulation	12/02-11/07	10,356,000
Dr. Wang	Regulation of Myosin LCK by Phosphorylation	1/02-12/05	96,000

NATIONAL SCIENCE FOUNDATION

Dr. Stafford	Development of Software for Real-Time Display and Analysis of Sedimentation Velocity Data	1/04-8/05	44,000
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UNITED STATES DEPARTMENT OF AGRICULTURE

Dr. Miller	Poultry Muscle Development: Molecular & Cellular Biology	1/06-9/09	360,000*
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AMERICAN HEART ASSOCIATION

Dr. Dominguez	X-Ray Study of Smooth Muscle Actin and its Complex with a Caldesmon Fragment	1/02-12/05	300,000
Dr. Mazurkie	Role of HSP27 in Regulating Smooth Muscle Contraction and Actin Filament Dynamics	7/05-6/07	76,000*
Dr. Smith	Cyclic GMP Signaling by GBP-A and B in <i>Dictyostelium</i>	1/02-12/06	260,000
Dr. Toth	MDM2: A Novel Approach to Prevent Cell Loss in Ischemic Heart Disease	7/04-6/06	72,000

CANCER PREVENTION RESEARCH FOUNDATION

Dr. Gonzalez	Targeting Leptin Signaling for Breast Cancer Prevention	7/05-6/07	70,000*
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CONRAD

Dr. Gonzalez	Leptin Peptide Antagonists	12/02-12/06	460,000
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SIMEON J. FORTIN CHARITABLE FOUNDATION

Dr. Sundberg	Engineered Superantigen for Targeted Tumor Immunotherapy	1/06-12/06	25,000*
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SUSAN G. KOMEN BREAST CANCER FOUNDATION

Dr. Gonzalez	Inhibition of Leptin Signaling for Treatment of Breast Cancer	5/05-4/07	250,000
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MUSCULAR DYSTROPHY ASSOCIATION

Dr. Ai	Regulation of Satellite Cell Development and Muscle Regeneration by Two Extracellular Herparan Sulfate 6-O Endosulfatases	1/06-12/08	135,000*
Dr. Miller	Apoptosis & Congenital Muscular Dystrophy (CMD) & LGND	7/05-6/08	300,000*

ELSA U. PARDEE FOUNDATION

Dr. Sundberg	Engineered Superantigen for Targeted Tumor Immunotherapy	10/05-10/06	176,000*
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*New grants in fiscal 2006

TOTAL \$66,371,000

PUBLICATIONS

JULY 2005 TO JUNE 2006

2006 FACULTY PUBLICATIONS

Adams, G. P., Tai, M. S., McCartney, J. E., Marks, J. D., Stafford, W. F., 3rd, Houston, L. L., Huston, J. S. & Weiner, L. M. (2006). Avidity-mediated enhancement of in vivo tumor targeting by single-chain Fv dimers. *Clin Cancer Res* 12, 1599-605.

Ai, X., Kusche-Gullberg, M., Lindahl, U. & Emerson, C. P., Jr. (2005). Remodeling of heparan sulfate sulfation by extracellular endosulfatases. In *Chemistry and Biology of Heparin and Heparan Sulfate* (Garg, H. G., Linhardt, R. J. & Hales, C. A., eds.), Vol. Chapter 8, pp. 245-258. Elsevier Ltd., New York.

Ai, X., Do, A. T., Kusche-Gullberg, M., Lindahl, U., Lu, K. & Emerson, C. P., Jr. (2006). Substrate specificity and domain functions of extracellular heparan sulfate 6-O-endosulfatases, QSulf1 and QSulf2. *J Biol Chem* 281, 4969-76.

Bannister, M. L. & Ikemoto, N. (2006). Effects of peptide C corresponding to the Glu724-Pro760 region of the II-III loop of the DHP (dihydropyridine) receptor $\alpha 1$ subunit on the domain-switch-mediated activation of RyR1 (ryanodine receptor 1) Ca^{2+} channels. *Biochem J* 394, 145-52.

Buonpane, R. A., Moza, B., Sundberg, E. J. & Kranz, D. M. (2005). Characterization of T cell receptors engineered for high affinity against toxic shock syndrome toxin-1. *J Mol Biol* 353, 308-21.

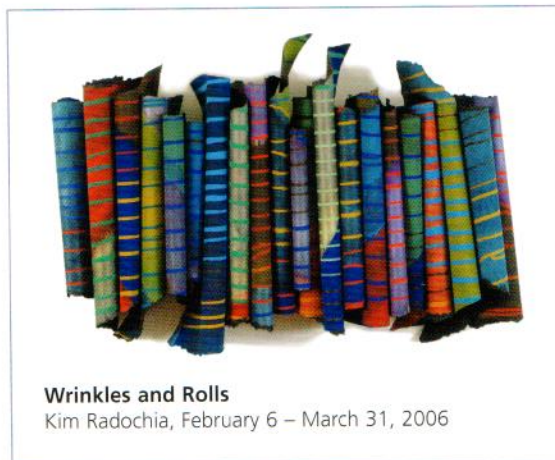
Chereau, D., Kerff, F., Graceffa, P., Grabarek, Z., Langsetmo, K. & Dominguez, R. (2005). Actin-bound structures of Wiskott-Aldrich syndrome protein (WASP)-homology domain 2 and the implications for filament assembly. *Proc Natl Acad Sci U S A* 102, 16644-9.

Cho, S., Swaminathan, C. P., Yang, J., Kerzic, M. C., Guan, R., Kieke, M. C., Kranz, D. M., Mariuzza, R. A. & Sundberg, E. J. (2005). Structural basis of affinity maturation and intramolecular cooperativity in a protein-protein interaction. *Structure* 13, 1775-87.

Clark, R., Ansari, M. A., Dash, S., Geeves, M. A. & Coluccio, L. M. (2005). Loop 1 of transducer region in mammalian class I myosin, Myo1b, modulates actin affinity, ATPase activity, and nucleotide access. *J Biol Chem* 280, 30935-42.

Danesin, C., Agius, E., Escalas, N., Ai, X., Emerson, C., Cochard, P. & Soula, C. (2006). Ventral neural progenitors switch toward an oligodendroglial fate in response to increased Sonic hedgehog (Shh) activity: involvement of Sulfatase 1 in modulating Shh signaling in the ventral spinal cord. *J Neurosci* 26, 5037-48.

Fessenden, J. D., Feng, W., Pessah, I. N. & Allen, P. D. (2006). Amino acid residues Gln4020 and Lys4021 of the ryanodine receptor type 1 are required for activation by 4-chloro-m-cresol. *J Biol Chem* 281, 21022-31.



Wrinkles and Rolls

Kim Radochia, February 6 – March 31, 2006

Boston Biomedical Research Institute Artist Series

Boston Biomedical's Art Program, centered in our lobby gallery, provides exhibit space to local emerging artists whose work is in some way inspired by science or technology. Since 2000, approximately 30 artists working in a wide range of media have exhibited their work in our gallery space. The gallery not only provides a venue for these artists, whose exhibits enrich the experience of our staff and visitors, but also helps us reach new individuals who initially may come to Boston Biomedical to view an exhibit, but depart having learned about the Institute and its basic science mission. Boston Biomedical's Art Program recently expanded to include an artist-in-residence program with the School of the Museum of Fine Arts.

Frank, S. R., Adelstein, M. R. & Hansen, S. H. (2006). GIT2 represses Crk- and Rac1-regulated cell spreading and Cdc42-mediated focal adhesion turnover. *Embo J* 25, 1848-59.

Gallant, C., You, J. Y., Sasaki, Y., Grabarek, Z. & Morgan, K. G. (2005). MARCKS is a major PKC-dependent regulator of calmodulin targeting in smooth muscle. *J Cell Sci* 118, 3595-605.

Gangopadhyay, J. P. & Ikemoto, N. (2006). Role of the Met3534-Ala4271 region of the ryanodine receptor in the regulation of Ca²⁺ release induced by calmodulin binding domain peptide. *Biophys J* 90, 2015-26.

Goldberg, J. M., Manning, G., Liu, A., Fey, P., Pilcher, K. E., Xu, Y. & Smith, J. L. (2006). The dictyostelium kinome--analysis of the protein kinases from a simple model organism. *PLoS Genet* 2, e38.

Goldberg, J. M., Wolpin, E. S., Bosgraaf, L., Clarkson, B. K., Van Haastert, P. J. & Smith, J. L. (2006). Myosin light chain kinase A is activated by cGMP-dependent and cGMP-independent pathways. *FEBS Lett* 580, 2059-64.

Gonzalez, R. R., Cherfils, S., Escobar, M., Yoo, J. H., Carino, C., Styer, A. K., Sullivan, B. T., Sakamoto, H., Olawaiye, A., Serikawa, T., Lynch, M. P. & Rueda, B. R. (2006). Leptin signaling promotes the growth of mammary tumors and increases the expression of vascular endothelial growth factor (VEGF) and its receptor type two (VEGF-R2). *J Biol Chem* 281, 26320-8.

Grabarek, Z. (2006). Structural basis for diversity of the EF-hand calcium-binding proteins. *J Mol Biol* 359, 509-25.

Hoffman, L. M., Jensen, C. C., Kloeker, S., Wang, C. L., Yoshigi, M. & Beckerle, M. C. (2006).



Mindful

Sam Tan, June 8 – July 31, 2006

Genetic ablation of zyxin causes Mena/VASP mislocalization, increased motility, and deficits in actin remodeling. *J Cell Biol* 172, 771-82.

Huang, R. & Wang, C. L. (2006). A caldesmon peptide activates smooth muscle via a mechanism similar to ERK-mediated phosphorylation. *FEBS Lett* 580, 63-6.

Ikebe, M., Li, X. D., Mabuchi, K. & Ikebe, R. (2005). Conformational

change and regulation of myosin molecules. *Adv Exp Med Biol* 565, 61-72; discussion 72, 359-69.

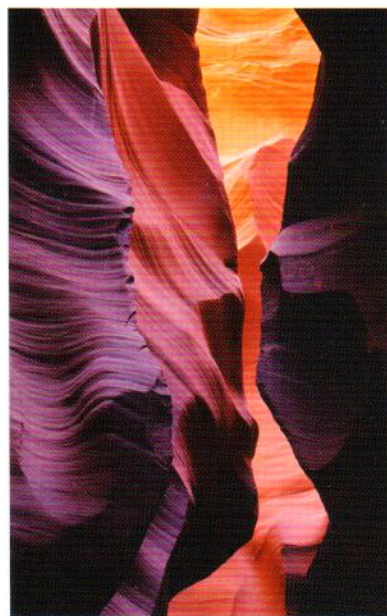
Jang, G. J., Ahn, D. S., Cho, Y. E., Morgan, K. G. & Lee, Y. H. (2005). C2-ceramide induces vasodilation in phenylephrine-induced pre-contracted rat thoracic aorta: role of RhoA/Rho-kinase and intracellular Ca²⁺ concentration. *Naunyn Schmiedeberg Arch Pharmacol* 372, 242-50.

Knight, P. J., Thirumurugan, K., Xu, Y., Wang, F., Kalverda, A. P., Stafford, W. F., 3rd, Sellers, J. R. & Peckham, M. (2005). The predicted coiled-coil domain of myosin 10 forms a novel elongated domain that lengthens the head. *J Biol Chem* 280, 34702-8.

Kordowska, J., Hetrick, T., Adam, L. P. & Wang, C. L. (2006). Phosphorylated I-caldesmon is involved in disassembly of actin stress fibers and postmitotic spreading. *Exp Cell Res* 312, 95-110.

Kordowska, J., Huang, R. & Wang, C. L. (2006). Phosphorylation of caldesmon during smooth muscle contraction and cell migration or proliferation. *J Biomed Sci* 13, 159-72.

Liu, H., Stafford, W. F. & Bouvier, M. (2005). The endoplasmic reticulum luminal domain of the adenovirus type 2 E3-19K protein binds to peptide-filled and peptide-deficient HLA-A*1101 molecules. *J Virol* 79, 13317-25.



Surreal and Sublime

Wandering the Colorado Plateau
Rob Holt, Dec. 5, 2005 – Jan. 31, 2006

Marganski, W. A., Gangopadhyay, S. S., Je, H. D., Gallant, C. & Morgan, K. G. (2005). Targeting of a novel Ca²⁺/calmodulin-dependent protein kinase II is essential for extracellular signal-regulated kinase-mediated signaling in differentiated smooth muscle cells. *Circ Res* 97, 541-9.

Miller, J. B. & Girgenrath, M. (2006). The role of apoptosis in neuromuscular diseases and prospects for anti-apoptosis therapy. *Trends Mol Med* 12, 279-86.

Moza, B., Buonpane, R. A., Zhu, P., Herfst, C. A., Rahman, A. K., McCormick, J. K., Kranz, D. M. & Sundberg, E. J. (2006). Long-range cooperative binding effects in a T cell receptor variable domain. *Proc Natl Acad Sci U S A* 103, 9867-72.

Pant, K., Chereau, D., Hatch, V., Dominguez, R. & Lehman, W. (2006). Cortactin binding to F-actin revealed by electron microscopy and 3D reconstruction. *J Mol Biol* 359, 840-7.

Riobo, N. A., Haines, G. M. & Emerson, C. P., Jr. (2006). Protein kinase C-delta and mitogen-activated protein/extracellular signal-regulated kinase-1 control GLI activation in hedgehog signaling. *Cancer Res* 66, 839-45.

Riobo, N. A., Lu, K., Ai, X., Haines, G. M. & Emerson, C. P., Jr. (2006). Phosphoinositide 3-kinase and Akt are essential for Sonic Hedgehog signaling. *Proc Natl Acad Sci U S A* 103, 4505-10.

Ryu, S. K., Ahn, D. S., Cho, Y. E., Choi, S. K., Kim, Y. H., Morgan, K. G. & Lee, Y. H. (2006). Augmented sphingosylphosphorylcholine-induced Ca²⁺-sensitization of mesenteric artery contraction in spontaneously hypertensive rat. *Naunyn Schmiedebergs Arch Pharmacol* 373, 30-6.

Tan, Y., Chen, M., Li, Z., Mabuchi, K. & Bouvier, M. (2006). The calcium- and zinc-responsive regions of calreticulin reside strictly in the N-/C-domain. *Biochim Biophys Acta* 1760, 745-53.

Terrak, M., Rebowski, G., Lu, R. C., Grabarek, Z. & Dominguez, R. (2005). Structure of the light chain-binding domain of myosin V. *Proc Natl Acad Sci U S A* 102, 12718-23.

Toth, A., Nickson, P., Qin, L. L. & Erhardt, P. (2006). Differential regulation of cardiomyocyte survival and hypertrophy by MDM2, an E3 ubiquitin ligase. *J Biol Chem* 281, 3679-89.

Watanabe, S., Mabuchi, K., Ikebe, R. & Ikebe, M. (2006). Mechanoenzymatic characterization of human myosin Vb. *Biochemistry* 45, 2729-38.

Wohlrab, H. (2005). The human mitochondrial transport protein family: identification and protein regions significant for transport function and substrate specificity. *Biochim Biophys Acta* 1709, 157-68.

Woodsome, T. P., Polzin, A., Kitazawa, K., Eto, M. & Kitazawa, T. (2006). Agonist- and depolarization-induced signals for myosin light chain phosphorylation and force generation of cultured vascular smooth muscle cells. *J Cell Sci* 119, 1769-80.

Yang, Z., Ikemoto, N., Lamb, G. D. & Steele, D. S. (2006). The RyR2 central domain peptide DPc10 lowers the threshold for spontaneous Ca²⁺ release in permeabilized cardiomyocytes. *Cardiovasc Res* 70, 475-85.

Yano, M., Okuda, S., Oda, T., Tokuhisa, T., Tateishi, H., Mochizuki, M., Noma, T., Doi, M., Kobayashi, S., Yamamoto, T., Ikeda, Y., Ohkusa, T., Ikemoto, N. & Matsuzaki, M. (2005). Correction of defective interdomain interaction within ryanodine receptor by antioxidant is a new therapeutic strategy against heart failure. *Circulation* 112, 3633-43.

Yano, M., Yamamoto, T., Ikemoto, N. & Matsuzaki, M. (2005).

Abnormal ryanodine receptor function in heart failure. *Pharmacol Ther* 107, 377-91.

Yoeli-Lerner, M., Yiu, G. K., Rabinovitz, I., Erhardt, P., Jauliac, S. & Toker, A. (2005). Akt blocks breast cancer cell motility and invasion through the transcription factor NFAT. *Mol Cell* 20, 539-50.



Through a Looking Glass

Magdalena Taber

October 6 – November 20, 2005

PATENTS

JULY 1, 2005 TO JUNE 30, 2006

PENDING U.S. PATENTS

Compositions and methods for binding or inactivating Grehlin, Victor Raso, filed 11/6/06

Methods for identifying modulators or Hedgehog autoprocessing, Henry Paulus, Charles Emerson, Xingbin Ai, filed 12/5/05

Methods and compositions for specific inhibition of protein splicing by small molecules for the treatment of tuberculosis, Henry Paulus, filed 1/24/05

Methods for delaying or inducing labor, Kathleen Morgan, Yungpig Li, filed 7/15/03

Development and biological effects of leptin peptide antagonists (LPAs), Ruben Rene Gonzalez, Paul Leavis, filed 5/7/2004

Methods for preventing or reducing ischemia/reperfusion induced myocardial cell death, Peter Erhardt, filed 4/13/2004

Inhibition of FGF signaling, Charles Emerson, Xingbin Ai, filed 2/13/2004

Methods for screening chemical compounds and genes that reverse polyglutamine toxicity, Michael Sherman (with Massachusetts Institute of Technology)

Methods and compositions relating to anthrax pathogenesis, Andrew Bohm (with University of Chicago), filed 11/1/02

ISSUED U.S. PATENTS

US 6,582,945 and US 6,872,554: Immunological control of β -amyloid levels in vivo, Victor Raso, Issued 6/24/2003

US 6,140,091: Anti-idiotypic vaccines to elicit catalytic antibodies, Victor Raso and Henry Paulus, Issued 10/31/2000

US 6,096,711: Heat shock protein induction and applications, Michael Sherman, Issued 8/1/2000

US 6,858,775: Methods for generating split, non-transferable genes that are able to express and active protein product, Henry Paulus (with New England Biolabs), Issued 2/22/05

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