

R30B35
University of Maryland Biotechnology Institute
University System of Maryland

Operating Budget Data

(\$ in Thousands)

	<u>FY 08</u> <u>Actual</u>	<u>FY 09</u> <u>Working</u>	<u>FY 10</u> <u>Allowance</u>	<u>FY 09-10</u> <u>Change</u>	<u>% Change</u> <u>Prior Year</u>
General Funds	\$19,960	\$20,625	\$21,192	\$567	2.8%
Contingent & Back of Bill Reductions	0	0	-22	-22	
Adjusted General Fund	\$19,960	\$20,625	\$21,170	\$545	2.6%
Other Unrestricted Funds	10,542	10,038	10,038	0	
Adjusted Other Unrestricted Fund	\$10,542	\$10,038	\$10,038	\$0	0.0%
Total Unrestricted Funds	30,501	30,663	31,230	567	1.9%
Contingent & Back of Bill Reductions	0	0	-22	-22	
Adjusted Total Unrestricted Funds	\$30,501	\$30,663	\$31,208	\$545	1.8%
Restricted Funds	15,249	15,900	15,900	0	
FY2009 Cost Containment	0	0	-8	-8	
Contingent & Back of Bill Reductions	0	0	-8	-8	0%
Adjusted Restricted Fund	\$15,249	\$15,900	\$15,892	-\$8	-0.1%
Adjusted Grand Total	\$45,750	\$46,563	\$47,100	\$537	1.2%

- General funds for the University of Maryland Biotechnology Institute (UMBI) increase \$0.6 million, or 2.8%, in the fiscal 2010 allowance. However, after adjusting \$21,899 to delete the deferred compensation match in fiscal 2010, the underlying increase is \$0.5 million, or 2.6%, over fiscal 2009.
- In terms of total funds, UMBI's budget increases \$0.5 million, or 1.2%, after adjusting \$29,382 to delete the deferred compensation match in fiscal 2010.

Note: Numbers may not sum to total due to rounding.

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Personnel Data

	<u>FY 08 Actual</u>	<u>FY 09 Working</u>	<u>FY 10 Allowance</u>	<u>FY 09-10 Change</u>
Regular Positions	276.45	276.45	276.45	0.00
Contractual FTEs	<u>38.10</u>	<u>38.10</u>	<u>38.10</u>	<u>0.00</u>
Total Personnel	314.55	314.55	314.55	0.00

Vacancy Data: Regular Positions

Turnover and Necessary Vacancies, Excluding New Positions	11.83	4.28%
Positions and Percentage Vacant as of 12/31/08	7.33	2.7%

- The fiscal 2010 allowance does not provide any new positions.

Analysis in Brief

Major Trends

Research Funding Declines: Contract and grant revenues declined 12.3% from \$22.8 million in fiscal 2007 to \$20.3 million in fiscal 2008. The number of multi-project funding awards declined from 17 to 15 awards.

Commercialization of Technology Remains Strong: The number of active sponsored research agreements with industry increased from 19 to 21 in fiscal 2008. Seven patents were issued, and the number of licensing agreements and executed options increased from 48 to 56 in fiscal 2008.

Participation in K-12 Educational Programs Increases for Students and Decreases for Teachers: The number of K-12 students participating in educational programs increased from 12,307 in fiscal 2007 to 12,687 in fiscal 2008. After two years of continual growth, the number of K-12 teachers participating in UMBI's program declined 3.1%, to 528 teachers in fiscal 2008.

Issues

Blue Crab Advanced Research Consortium: Research findings of the consortium helped determine the best way to grow crabs in the hatchery, release them into the Chesapeake Bay, and ensure optimal survival rates. Between fiscal 2002 and 2007, the Blue Crab Advanced Research Consortium received \$16.1 million in earmarked funds from the National Oceanic and Atmospheric Administration but did not receive federal appropriations in fiscal 2008 or 2009 and has been operating on a no-cost extension while gradually scaling down operations.

External Review: A seven member review team conducted the first external review of UMBI in May 2008. The review team made numerous recommendations including several related to developing and implementing key metrics to improve performance and accountability.

Relocation of UMBI: UMBI is one of two University System of Maryland (USM) independent research institutions, and while UMBI does not grant degrees, faculty members contribute to the education and training of USM graduate and undergraduate students. UMBI, USM, and students would benefit from UMBI relocating to one or more of the USM institutions.

Recommended Actions

1. Add language restricting expenditures of current unrestricted funds.

R30B35 – USM – University of Maryland Biotechnology Institute

Analysis of the FY 2010 Maryland Executive Budget, 2009

R30B35
University of Maryland Biotechnology Institute
University System of Maryland

Operating Budget Analysis

Program Description

The University of Maryland Biotechnology Institute (UMBI) conducts research in key areas of biotechnology, making fundamental discoveries, generating innovative solutions to practical problems, and developing new technologies for commercial application. UMBI also provides specialized training and mentoring of tomorrow's biotechnology workforce while promoting economic growth in Maryland. UMBI aims to increase revenues from extramural funding sources by building upon its strength in research and economic development activities. UMBI is comprised of four interdisciplinary research centers, each having a unique focus, located throughout the State.

- **Center for Advanced Research in Biotechnology (CARB):** Studies protein engineering, structure, and function; provides advanced technical capabilities to the biotechnology industry. Founded in 1985, the center is located in Shady Grove, Montgomery County.
- **Center of Marine Biotechnology (COMB):** Specializes in research in molecular biology, molecular genetics, and bioprocess development of aquaculture fisheries, marine microbial products and processes, and marine pollution/environmental remediation. Founded in 1985, the center is located at the Columbus Center in Baltimore's Inner Harbor.
- **Medical Biotechnology Center (MBC):** Conducts medical biotechnology research and training. Founded in 1986, the center is housed in UMBI's medical research facility at the University of Maryland, Baltimore (UMB) campus, Baltimore City.
- **Center for Biosystems Research (CBR):** Addresses fundamental biological questions and derives practical solutions benefiting agriculture, industry, human medicine, and the environment. Founded in 1987, the center is located at the University of Maryland, College Park campus (UMCP), Prince George's County.

UMBI provides education and training opportunities for the biotechnology workforce and the next generation of scientists; improves access of minorities to bioscience education; and advances public knowledge of biotechnology-related issues. UMBI's outreach program includes hands-on K-16 science and technology learning opportunities for teachers and students. UMBI faculty members also teach and mentor more than 100 research trainees each year, including degree-seeking students and post doctoral trainees.

Performance Analysis: Managing for Results

Research Funding Declines

As one of two University System of Maryland (USM) research-only institutes, grant and contract revenues are a critical measure for UMBI. **Exhibit 1** shows the total grant and contract revenue from fiscal 2004 through estimated fiscal 2010 revenues. Data attributable to the Institute for Human Virology (IHV), which was administratively moved to the University of Maryland, Baltimore (UMB) in fiscal 2007, is not included in the measure for fiscal 2007 or subsequent years. Revenues in fiscal 2008 declined 12.3%, from \$22.8 million in fiscal 2007, to \$20.3 million. UMBI attributes the decrease to the gradual reduction of some research activities such as the blue crab research, and further states that fiscal 2008 revenues more accurately reflect revenues UMBI generates without IHV.

A trend in federal funding has shifted away from single projects and moved toward multiple projects with multiple principal researchers, presenting a challenge to UMBI. To overcome this shift, UMBI is targeting funding from a variety of sources, such as industry and private foundations. UMBI also tracks the number of these multi-project funding awards as a measure of its interdisciplinary programs. For fiscal 2008, the number of awards declined from 17 to 15 awards.

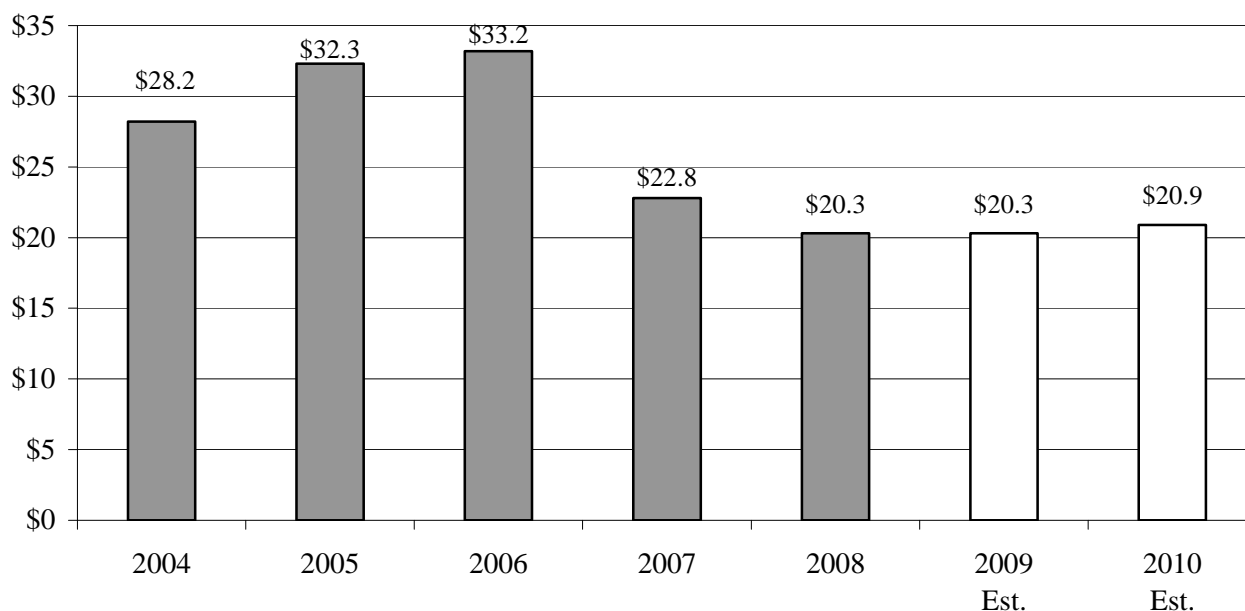
Commercialization of Technology Remains Strong

In order to ensure the vitality of Maryland's biotechnology enterprises, UMBI works with partners, focusing research on finding solutions to problems which have commercial applications. One measure UMBI uses to track progress toward this goal is the number of active sponsored research agreements with industry. The number of agreements increased from 19 in fiscal 2007, to 21 in fiscal 2008.

One indicator UMBI uses to measure the economic impact of its programs is the number of United States government patents issued to UMBI-affiliated discoveries. In fiscal 2008, seven patents were issued. In order to assess the performance for this measure, UMBI compares the patent issue rate to the average rate for United States hospitals and research institutes as reported in a 2003 Association of University Technology Managers licensing survey. This measure is based on the number of patents issued per \$1 million of sponsored research. For fiscal 2008, UMBI's rate was 0.345, exceeding the benchmark rate of 0.150 for United States hospitals and research institutions.

Another economic impact measure is the number of licensing agreements and executed options. This number has significantly increased over the past three years from 18 in fiscal 2004, to 56 in fiscal 2008. UMBI reports that this increase is the result of two factors: (1) a concerted effort to execute agreements; and (2) entities that have funded research expect to execute options to license future technologies developed through that research.

Exhibit 1
Grant and Contract Revenue
Fiscal 2004-2010
(\$ in Millions)



Note: Fiscal 2004 to 2006 include data attributable to the Institute for Human Virology.

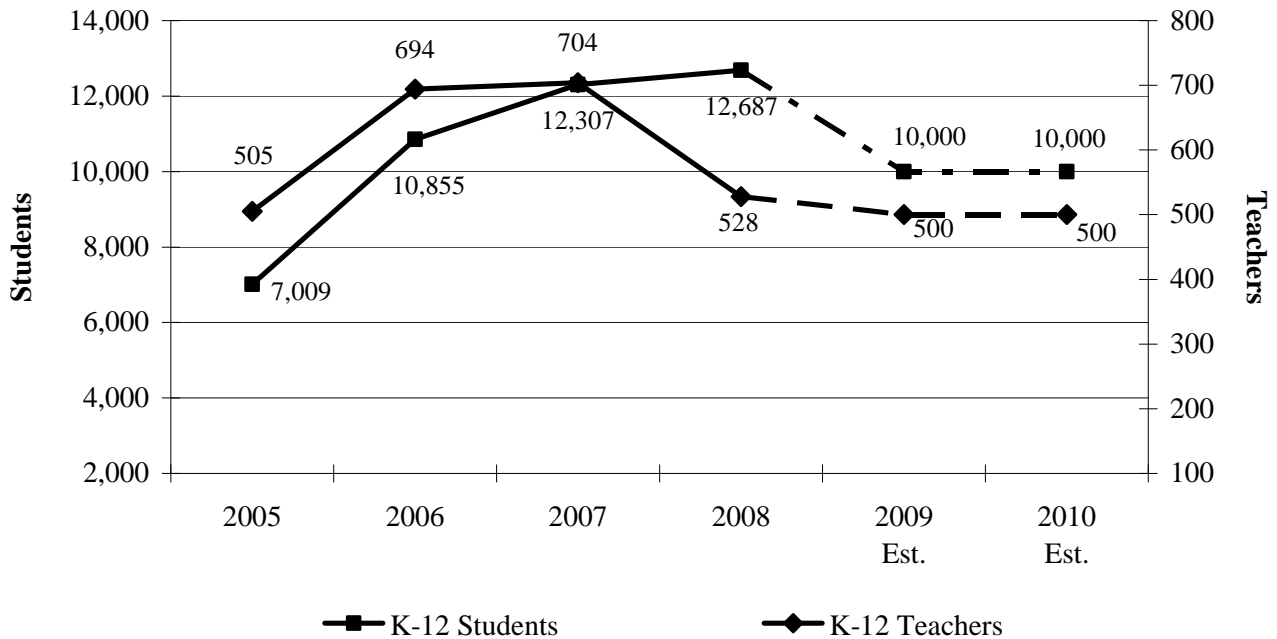
Source: Governor’s Budget Books, Fiscal 2010

It should be noted that UMBI continues to hold the asset portfolio of technologies developed by IHV when it was affiliated with UMBI; therefore, patents issued and licensing agreements include IHV data.

Participation in K-12 Educational Programs Increases for Students and Decreases for Teachers

An important mission for UMBI is stimulating students’ interest in science and technology careers and providing training opportunities to K-12 teachers. Since fiscal 2005, the number of K-12 students participating in science enrichment programs has continually increased, as shown in **Exhibit 2**. Overall, since fiscal 2005, the number of K-12 students participating in UMBI’s educational programs increased 81%, to 12,687 in fiscal 2008. UMBI surpassed its objective of annually providing science enrichment programs to 10,500 K-12 students in fiscal 2006.

**Exhibit 2
K-12 Students and Teachers Participating in Science Enrichment Programs
Fiscal 2005-2010**



Source: Governor’s Budget Books, Fiscal 2010

Since fiscal 2005, 2,431 teachers have taken part in UMBI’s program. However, after two years of continued growth in the number of K-12 teachers participating in UMBI’s training program, the number declined 3.1%, to 528 teachers in fiscal 2008. UMBI attributes this decline to:

- staffing changes resulting in not being able to provide as many laboratory loaner kits, which provides middle and high school teachers lab-based science lesson kits to be used in the classroom;
- temporary closure of the on-site laboratory due to physical and programmatic renovations; and
- expiration, in December 2007, of the memorandum of understanding with MdBioLab, provider of the mobile laboratory which accounted for the majority of teachers served by UMBI.

Fiscal 2009 Actions

Impact of Cost Containment

In June 2008, the Board of Public Works (BPW) approved cost containment measures resulting in a \$36,786 reduction in UMBI's general funds which were to be replaced with revenues previously restricted for Other Post Employment Benefits liability costs. In October 2008, BPW approved a second cost containment measure resulting in a \$325,044, or 1.6%, decrease in UMBI's State appropriations. Reductions were allocated on a pro-rata basis based on general funds and indirect costs, to the research units and central administration.

Furthermore, UMBI was requested to reduce the university's current salary and wage budget by \$194,421 as part of a statewide furlough plan. The President, in consultation with the Chancellor, developed a furlough plan with the number of furlough days based on an employee's annual salary. Hourly employees (*e.g.*, students and hourly temporary staff), those earning under \$40,000 per year, graduate assistants, H-1B visa employees, and employees funded 100% from grants and contracts as of November 13, 2008, are exempt from the furlough. Employees have until June 2, 2009, to take their assigned number of furlough days.

Anticipated Fiscal 2009 Reductions

The Administration's Budget Reconciliation and Financing Act (BRFA) of 2009 includes provisions to transfer \$20.0 million from USM's fund balance to the general fund. UMBI's portion of the transfer is \$378,766, equivalent to 10.1% of the State-supported portion of the fund balance. At the end of fiscal 2009, UMBI's total fund balance (State and non-State-supported) is estimated to total \$9.0 million. It should be noted that UMBI plans to transfer \$652,000 from the fund balance in fiscal 2010, decreasing the total to \$8.3 million.

UMBI did not receive Higher Education Investment Funds (HEIF) but is allocated a portion of the expected underattainment of HEIF revenues. This results in an expected \$45,797 reduction of UMBI's fiscal 2009 budget.

Proposed Budget

As shown in **Exhibit 3**, after adjusting for an anticipated reduction of \$45,797 in fiscal 2009 and \$21,899 to delete the deferred compensation match in fiscal 2010, the general fund allowance for fiscal 2010 is \$0.6 million above the fiscal 2009 level, an increase of 2.9%. However, it is anticipated that the fiscal 2009 budget will be further reduced by \$194,421 due to salary and wage reductions related to the furlough. Restricted funds decrease \$8,367, or -0.1%, due to the deletion of the deferred compensation match.

Exhibit 3
Proposed Budget
USM – University of Maryland Biotechnology Institute
(\$ in Thousands)

	FY 08	FY 09	FY 10	FY 09-10	% Change
	<u>Actual</u>	<u>Working</u>	<u>Adjusted</u>	<u>Change</u>	<u>Prior Year</u>
General Funds	\$19,960	\$20,579	\$21,170	\$591	2.9%
Other Unrestricted Funds	10,542	10,038	10,038	0	0.0%
Total Unrestricted Funds	30,501	30,617	31,208	591	1.9%
Restricted Funds	15,249	15,900	15,892	-8	-0.1%
Total Funds	\$45,750	\$46,517	\$47,100	\$583	1.3%

Note: Fiscal 2009 reflects expected reduction of \$45,797. Does not include reduction due to furloughs. Fiscal 2010 general funds adjusted \$21,899 and restricted funds \$8,367 to reflect the deletion deferred compensation match. Numbers may not sum due to rounding.

Source: Governor’s Budget Books, Fiscal 2010

UMBI’ State-supported budget by program is shown in **Exhibit 4**. Expenditures in physical plant increased at the highest rate of 2.8%, or \$245,972, due to an increase in fuel and utility costs. Other State-supported revenues decrease \$200,000, or 6.0%, due to a one-time transfer from USM in fiscal 2009 to help offset the loss of IHV funds.

Fiscal 2010 Cost Containment

The only contingent across-the-board action affecting UMBI is the reduction of \$30,266 to delete the deferred compensation match. Additionally, for fiscal 2010, language in the BRFA does not allow for bonuses related to individual performance, merit increases, or cost-of-living adjustments (COLA) but allows for salary increases necessary for the retention of faculty members.

Exhibit 4
UMBI State-supported Budget Changes by Program
Fiscal 2008-2010
(\$ in Thousands)

<u>Expenditures</u>	<u>2008 Actual</u>	<u>2009 Working ⁽¹⁾</u>	<u>2008-2009 % Change</u>	<u>2010 Adjusted</u>	<u>2009-2010 Change</u>	<u>2009-2010 % Change</u>
Research	\$10,104	\$9,175	-8.0%	\$9,404	\$113	1.2%
Physical plant	8,202	8,698	6.1%	8,944	246	2.8%
Institutional support	6,346	5,760	-9.2%	5,846	86	1.5%
Public service	259	516	99.2%	523	7	1.3%
Pending reductions		-46		-22	24	-52.2%
Total	\$24,911	\$24,104	-2.8%	\$24,695	\$476	2.0%
<u>Revenues</u>						
General funds	\$19,960	\$20,579	3.7%	\$21,170	\$476	2.3%
Other State support ⁽²⁾	2,376	3,325	39.9%	3,125	-\$200	-6.0%
Transfer (to)/from fund balance	2,575	200	-92.2%	400	200	
Total	\$24,911	\$24,104	-2.8%	\$24,695	\$476	2.0%

UMBI: University of Maryland Biotechnology Institute

(1) Fiscal 2009 reflects expected reduction of \$45,797. Does not include reductions due to furlough.

(2) Other State support is a component of unrestricted revenue. Other unrestricted revenue considered non State-support include designated research initiative fund and self-support activities.

Source: University of Maryland Biotechnology Institute

Issues

1. Blue Crab Advanced Research Consortium

The Blue Crab Advanced Research Consortium (BCARC) is located within COMB with research facilities at the Columbia Center in Baltimore and a hatchery operation at Piney Point in St. Mary's County. BCARC was established in response to the declining blue crab harvests in the Chesapeake Bay in 2001 and, including UMBI, is comprised of six partners in four states: the North Carolina State University, the Smithsonian Environmental Research Center (SERC); the University of Southern Mississippi; the Virginia Institute of Marine Sciences (VIMS); and the Watermen's Association. The purpose of BCARC is to gain a better understanding of the basic biology of the blue crab and the potential of replenishing the declining fisheries of the Bay.

A key finding of the research was determining how blue crabs reproduce. These findings helped researchers determine the best way to grow crabs in the hatchery, release them into the Bay, and ensure optimal survival rates. Watermen provide pregnant females which are then placed in closed system tanks at COMB that create the optimum environment for reproduction. Hatchlings are placed in special tanks and fed specific nutrients for approximately four weeks at which point the crabs are shipped to Piney Point for the nursery phase. Crabs are grown to release size, when the shells are approximately three quarters of an inch wide, and are tagged with tiny microwires injected into the swimming muscles. The crabs are then sent to SERC or VIMS to be released. Watermen work with scientists on tagging, releasing, and monitoring the blue crabs. Over 700,000 blue crabs have been released and monitored in the upper and lower Bay.

Exhibit 5 shows the total funding history of BCARC. BCARC was initially funded in fiscal 2001 with \$100,000 of State funds and \$200,000 from Phillips Seafood. In fiscal 2002, BCARC received additional State and private funding totaling \$450,000 and \$1.5 million from the National Oceanic and Atmospheric Administration (NOAA). Between fiscal 2002 and 2007, BCARC received \$16.1 million in earmark funds from NOAA of which \$11.2 million went to Maryland partners (UMBI, SERC, and the Watermen's Association).

BCARC did not receive federal appropriations in fiscal 2008 or 2009 and has been operating on a no-cost extension while gradually scaling down operations. The research component will continue through November 31, 2009, with operations being streamlined to continue research on the long-term hatchery crab release studies. A total of 10 full-time and 4 part-time employees work at COMB. Due to job openings from new grants, employees with the appropriate skills have been transferred to other funded programs at COMB. While faculty members are applying for grants, these tend to be small and highly competitive. Overall, the research component is diminishing and will not continue.

Exhibit 5
Blue Crab Advanced Research Consortium Funding
Fiscal 2001-2009
(\$ in Thousands)

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Non-federal Funding									
State	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Phillips Seafood	200	50	50	0	0	0	0	0	0
DBED/WMA	0	300	0	0	0	0	0	0	0
Federal Funding									
NOAA	0	1,500	1,982	2,000	2,200	4,750	3,633	0	0
Total Funding	\$300	\$1,950	\$2,032	\$2,000	\$2,200	\$4,750	\$3,633	\$0	\$0

DBED: Department of Business and Economic Development
 NOAA: National Oceanic and Atmospheric Administration
 WMA: Waterman’s Association

Source: University of Maryland Biotechnology Institute

Operations at Piney Point will continue until the end of fiscal 2009. This is due to the Watermen’s Association using its portion of the federal funding to prolong operations in case new funds are secured. Once the facility is shut down, it will be difficult to reactivate operations. Piney Point employs:

- three full-time employees;
- two part-time watermen working from the Watermen’s Association headquarters who interact with Piney Point, the watermen, and UMBI; and
- seasonal workers employed by the Watermen’s Association and SERC.

North Carolina and Virginia have expressed interest in taking over the hatchery program requiring operations to move to the respective state. It is assumed if the operations move to another state then that state’s equivalent to Maryland’s Department of Natural Resources would fund and administer the operations.

It is estimated that the Chesapeake portion of BCARC will need approximately \$2.4 million in fiscal 2010, \$2.7 million in fiscal 2011; and \$2.9 million in fiscal 2012 to continue its research and production at Piney Point.

The President should comment on the current status of BCARC, specifically what initiatives are being undertaken to secure additional funding, the overall outlook for the consortium, and how the findings can support efforts to replenish the blue crab population in the Chesapeake Bay.

2. External Review

The first external review of UMBI was conducted in May 2008. The seven member review team was selected from a list of individuals provided by faculty, center directors, and members of UMBI's Board of Visitors. The review team, comprised of senior management affiliated with similar research programs and/or organizational management experience, conducted a three and a half day on-site review May 2008. The report was submitted in July 2008. UMBI's research programs and centers, and administrative functions were examined. The review team evaluated UMBI's activities, assessed outcomes, and recommended areas of improvement.

The reviewers recommended the establishment of an external scientific advisory panel to help UMBI better define and develop "signature areas" or areas of research excellence. Additionally, UMBI needs to foster collaboration not only internally between the centers but externally within and outside of the University System of Maryland. In response, UMBI established an external scientific advisory board which will help in defining UMBI's signature area. Additionally, a work group will develop recommendations to identify funds to be used for internal collaborative research.

It was recommended that the definition of translational research needs to be better clarified and improvements were needed to make the translational process easier for researchers. A work group was established to better define the parameters for translational research, determine how frequently to conduct evaluations determining UMBI's percentage mix of basic and translational research, and consider how this will factor into promotion and tenure.

Several recommendations were made regarding the need to develop and implement key metrics for performance and to improve accountability. Additionally, it was suggested that UMBI and each research center identify peers so as to be able to benchmark success to those competitors. In response, UMBI is developing external metrics that align with internal performance measures such as those reported in *Managing for Results* and USM's *Dashboard Indicators*. Also, the work group established to address defining translational research was tasked with identifying UMBI's peers.

The reviewers also recommended improving external and internal communications ensuring UMBI's mission is understood by all those within the institute. This has resulted in more interaction between administrators and faculty at all the research centers.

The President should comment on actions being taken in response to the findings and recommendations of the external review.

3. Relocation of UMBI

UMBI is one of two USM independent research institutes. The concept for UMBI was based on a recommendation by a University of Maryland Task Force on Higher Technology/ Biotechnology in 1983 to establish a separate unit within the university. The Maryland Biotechnology Institute would coordinate research within the university, link research disciplines across the biotechnology arena to respond to State, federal, and public needs, and work with industries in applying biotechnology expertise to issues.

In 1984 the University of Maryland Board of Regents approved a resolution regarding the establishment of the University of Maryland, Maryland Biotechnology Institute. In 1985, the institute was formed with \$2.5 million of State funds and consisted of two centers: CARB and COMB. CARB was founded at Shady Grove as a partnership with the University of Maryland, National Institute for Standards and Technology, and Montgomery County. COMB started as a virtual center with faculty located at UMCP, University of Maryland Baltimore County (UMBC), and John Hopkins University. Two additional centers were added: CBR, originally established in 1987 and located in the Plant Sciences Building at UMCP, and MBC, which was created in 1986 and currently houses the National Center for Fluorescence Spectroscopy of UMB's School of Medicine. In 1988, the name was changed to the University of Maryland System, Maryland Biotechnology Institute and in 1993 the name was changed to UMBI to reflect its association with higher education and the importance of training graduate students.

While UMBI does not grant degrees, faculty contribute to the education and training of graduate and undergraduate students within other USM degree granting institutions with the majority of students attending UMB, UMCP, or UMBC. Examples of educational opportunities provided at UMBI's centers include:

- CARB faculty provide research opportunities for doctoral and post-doctoral candidates and training opportunities for undergraduates;
- COMB faculty train and supervise graduate students, most affiliated with UMB or UMCP, and faculty teach all level of courses;
- MBC faculty participate in multidisciplinary and departmental graduate and post-doctoral programs at UMB and provide internship opportunities to students at USM institutions; and
- CBR faculty are affiliated with many graduate programs at UMCP including the College of Life Sciences, the College of Engineering, and the College of Agriculture and Natural Resources.

Faculty members, who may have dual appointments with other USM academic institutions, contribute not only to the development of academic programs but teach courses in various programs such as the Marine, Estuarine, and Environmental Sciences graduate program at UMCP and the Graduate Program in Life Sciences at UMB. Additionally, faculty collaborate with other USM faculty on joint research projects. For instance, being located on UMCP's campus allows CBR to form partnerships with other departments on campus.

Administrative efficiencies would be achieved by relocating UMBI or the four research centers to USM academic institution(s). As shown in **Exhibit 6**, exempt positions, which include executives, professional, and administrative personnel, account for 48% of all filled State-supported positions at UMBI. Cost savings would be achieved through the elimination of duplicative and unnecessary non-faculty positions.

Exhibit 6
Total State-supported Filled Positions by Category
Fiscal 2009

<u>Exempt</u>	<u>Non-exempt</u>	<u>Faculty</u>	<u>Total Filled Positions</u>	<u>Vacant Positions</u>	<u>Total State-supported Positions</u>	<u>% Exempt</u>	<u>% Faculty</u>
66.95	30.91	36.51	134.37	5.78	140.15	47.8%	26.1%

Source: University System of Maryland Institute of Biotechnology

UMBI would benefit from relocating to one or more USM institutions. Either UMBI as a whole entity or the four centers could be transferred to the institution(s) whose mission best aligns with that particular program or center. Benefits to UMBI, USM, and students include:

- increasing efficiencies through the elimination of duplicative administrative functions;
- minimizing the impact of budgetary reductions (as part of a larger institution the effect of a budgetary reduction would be lessened since a decrease would be allocated among all programs and colleges);
- increasing faculty access to resources which may provide an advantage when competing for grants and contracts; and
- increasing undergraduate and graduate students' access to faculty, providing opportunities for students to gain knowledge from experienced research faculty either from class or work on research projects.

USM set the precedent for administratively transferring a program from a research center to an academic institution in July 2007 with the transfer of IHV from UMBI to UMB. This was part of USM's efficiency initiative in which the Board of Regents approved the transfer after the Chancellor conducted a review and concluded that the overall mission of UMB's medical school was more closely aligned with the current and future direction of IHV. Furthermore, as authorized in the Education Article Section 12-104(f), the Board of Regents may establish, merge, consolidate, or close any center or institute.

The Department of Legislative Services (DLS) recommends that UMBI, either as a whole or by individual centers, be relocated to the appropriate USM academic institution(s) whose mission most closely aligns with UMBI or its component centers by June 30, 2010. DLS also recommends restricting expenditures of \$1.0 million until USM submits a report to the budget committees by October 1, 2009, on the relocation of UMBI or centers to the appropriate USM institution(s). To the extent that up to \$1.0 million in cost savings are realized from the relocation, the \$1.0 million restricted until USM submits a report on the relocation shall revert to the general fund.

Recommended Actions

1. Add the following language to the unrestricted fund appropriation:

It is the intent of the General Assembly that the University of Maryland Biotechnology Institute (UMBI), either as a whole or by individual centers, be relocated to the appropriate University System of Maryland (USM) academic institution(s) to be effective by June 30, 2010. Further provided that \$1,000,000 of this appropriation may not be expended until USM submits a report to the budget committees by October 1, 2009, on the relocation of UMBI to the appropriate USM academic institution(s). The report should detail cost savings realized from the relocation of UMBI, or centers, and include information on the rationale for why the selected academic institution(s) most closely aligns with UMBI and/or center(s) and a schedule in which the transfer(s) will be completed. Further provided that the amount saved as a result of the transfer(s), up to the \$1,000,000 herein restricted, shall revert to the general fund.

Explanation: The language expresses the intent of the General Assembly that the University of Maryland Biotechnology Institute (UMBI) or its component centers, be relocated to the appropriate USM academic institution(s) whose mission most closely aligns with UMBI, or centers, effective June 30, 2010. The language restricts expenditures of \$1.0 million until USM submits a report by October 1, 2009, on the relocation of UMBI to an appropriate USM academic institution. The report should provide details on cost savings to be realized from the relocation(s) and information identifying the reasons the USM academic institution(s) was determined to be the most appropriate and a schedule in which the transfers will be completed. Additionally, to the extent that up to \$1.0 million in cost savings are realized from the relocation then up to the \$1.0 million restricted until USM submits a report on the relocation will revert to the general fund.

Information Request	Author	Due Date
Report on the relocation of the University of Maryland Biotechnology Institute	USM	October 1, 2009

Current and Prior Year Budgets

Current and Prior Year Budgets USM – University of Maryland Biotechnology Institute (\$ in Thousands)

	<u>General Fund</u>	<u>Special Fund</u>	<u>Other Unrestricted Fund</u>	<u>Total Unrestricted Fund</u>	<u>Restricted Fund</u>	<u>Total</u>
Fiscal 2008						
Legislative Appropriation	\$21,745	\$0	\$17,113	\$38,858	\$27,500	\$66,358
Deficiency Appropriation	0	0	0	0	0	0
Budget Amendments	261	0	-7,828	-7,567	-11,600	-19,167
Cost Containment	-260	0	0	-260	0	-260
Reversions and Cancellations	0	0	-328	-328	-651	-979
Actual Expenditures	\$21,746	\$0	\$8,957	\$30,703	\$15,249	\$45,952
Fiscal 2009						
Legislative Appropriation	\$20,752	\$0	\$10,595	\$31,347	\$14,673	\$46,020
Cost Containment	-325	0	0	-325	0	-325
Budget Amendments	197	0	-557	-360	1,227	867
Working Appropriation	\$20,624	\$0	\$10,038	\$30,662	\$15,900	\$46,562

Note: Numbers may not sum to total due to rounding.

Fiscal 2008

For fiscal 2008, general funds for the University of Maryland Biotechnology Institute increased \$1,000 through budget amendments. This included a \$260,663 increase for State employee COLA and a decrease of \$259,675 for cost containment. Other unrestricted funds decreased \$7.8 million through a budget amendment. Decreases included:

- \$2.8 million in federal, State, and private indirect costs;
- \$2.6 million in sales and services of educational activities;
- \$2.3 million in miscellaneous income related to reimbursement from the National Institute of Standards and Technology; and
- \$1.7 million in general funds related to the Institute of Human Virology reorganization to University of Maryland, Baltimore.

There was also an increase of \$1.7 million due to withdrawal from the fund balance used as bridge funding to hold UMBI harmless for the loss of the administrative share of indirect cost recovery revenue related to the administrative transfer of IHV to UMB.

Restricted funds decreased a net \$11.6 million through budget amendments. This included a \$12.8 million decrease in federal, State, and private contract and grant activity; and a \$1.2 million increase in contract and grant activity.

Cancellations of unrestricted funds amounted to \$0.3 million due to lower than anticipated revenues. Cancellation of restricted funds totaled \$0.7 million due to not completing the purchase of equipment for the Medical Biotechnology Center.

Fiscal 2009

For fiscal 2009, general funds decreased \$128,000 through budget amendments. This included an increase of \$0.2 million for State employee COLA and decreases of \$0.3 million for cost containment. Other unrestricted funds decreased \$0.6 million through a budget amendment. This included an increase of \$1.3 million from miscellaneous income; decrease of \$0.7 million in federal, State, and private indirect cost recovery; \$0.8 million transfer to the fund balance; and \$0.3 million decrease in sales and services of educational activities.

Restricted funds increased a \$1.2 million through a budget amendment from federal and State contract and grant activity and miscellaneous income.

**Object/Fund Difference Report
USM – University of Maryland Biotechnology Institute**

<u>Object/Fund</u>	<u>FY08 Actual</u>	<u>FY09 Working Appropriation</u>	<u>FY10 Allowance</u>	<u>FY09 - FY10 Amount Change</u>	<u>Percent Change</u>
Positions					
01 Regular	276.45	276.45	276.45	0	0%
02 Contractual	38.10	38.10	38.10	0	0%
Total Positions	314.55	314.55	314.55	0	0%
Objects					
01 Salaries and Wages	\$ 26,317,822	\$ 27,285,124	\$ 27,710,860	\$ 425,736	1.6%
02 Technical and Spec. Fees	20,245	19,611	19,611	0	0%
03 Communication	300,834	174,474	174,413	-61	0%
04 Travel	441,851	462,816	462,816	0	0%
06 Fuel and Utilities	4,593,455	5,231,437	5,594,631	363,194	6.9%
07 Motor Vehicles	123,403	155,823	156,078	255	0.2%
08 Contractual Services	7,523,048	7,145,616	6,923,810	-221,806	-3.1%
09 Supplies and Materials	3,062,716	2,839,654	2,839,654	0	0%
11 Equipment – Additional	1,490,785	1,598,691	1,598,691	0	0%
12 Grants, Subsidies, and Contributions	297,025	415,542	415,542	0	0%
13 Fixed Charges	1,056,673	634,081	634,081	0	0%
14 Land and Structures	522,340	600,000	600,000	0	0%
Total Objects	\$ 45,750,197	\$ 46,562,869	\$ 47,130,187	\$ 567,318	1.2%
Funds					
40 Unrestricted Fund	\$ 30,501,255	\$ 30,662,869	\$ 31,230,187	\$ 567,318	1.9%
43 Restricted Fund	15,248,942	15,900,000	15,900,000	0	0%
Total Funds	\$ 45,750,197	\$ 46,562,869	\$ 47,130,187	\$ 567,318	1.2%

Note: The fiscal 2009 appropriation does not include deficiencies. The fiscal 2010 allowance does not include contingent reductions.