

## MARYLAND'S ROLE AS A BIO- SCIENCE LEADER

*"As we seek to grow this sector of our creative economy, we have a special opportunity both to secure our economic future and to assert some moral leadership to place our State at the forefront of research and discovery."*

- Governor Martin O'Malley



### BIOSCIENCE IN MARYLAND

According to a recent report from the Brookings Institute, the Baltimore/Washington Bioscience industry ranks:

- 1st in the number of life sciences professionals per capita
- 3rd in the number of biotechnology firms in the country
- 3rd for research, testing and labs employment including diagnostics; and
- 5th for biotechnology employment in the United States.



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## Preparing Maryland's 21st Century Bioscience Workforce

On May 23, more than 100 Bioscience stakeholders joined Governor Martin O'Malley and GWIB Chair William "Bill" Robertson for the Bioscience Industry Initiative Workforce Summit at the University of Maryland Biopark. Attendees included industry stakeholders, workforce and economic development officials, and the education community.

The Summit addressed Maryland's bioscience workforce issues and explored recommendations for improving the development and retention of a highly skilled workforce. Presenters included President David Ramsay, University of Maryland in Baltimore; Secretary David Edgerley, Department of Business and Economic Development; Secretary Thomas Perez, Department of Labor, Licensing and Regulations; and Committee Co-chairs Dr. Edward M. Rudnic of MiddleBrook Pharmaceuticals and Charles Fleischman.

The committee's work focuses on establishing workforce creation policies to sustain Maryland's position as a national leader in the increasingly global and high-tech economy of the 21st century. Governor O'Malley has

made workforce creation a top priority for the administration.

*"Our challenge – and really our opportunity – is to continue developing our workforce so our State will not only meet the demands of the 21st century global economy, but exceed them."* said Governor O'Malley.

Bioscience is a fast growing industry, and Maryland's highly educated workforce and world class research institutions have positioned the state as an industry leader. However, there are workforce challenges that must be addressed if Maryland is to maintain its competitive position in this growing field. Employment in bioscience is growing, but current education and training programs are not creating an adequate pipeline of qualified workers for the future.

The Summit's materials are available on the web site:

[www.gwib.maryland.gov](http://www.gwib.maryland.gov)

*Pictured above from left to right: Dr. Edward M. Rudnic, Governor O'Malley, Charles Fleischman.*

*Pictured to the left: Governor Martin O'Malley and GWIB Chair Bill Robertson*

## Did you know?

- Computer and math occupations are the second fastest growing types of jobs in Maryland. They are expected to grow at 3% a year through 2014. (DLLR)
- Maryland's IT sector employed almost 90,000 people in 2007. (DLLR)
- Employees in Maryland's IT sector earn more than double the average salary in Maryland. (DLLR)
- There is a 53% gap between the need for computer science teachers in Maryland and the projected pool of applicants. (MSDE)
- Nationally, women only account for 1 of every 4 computer and math workers. (2007 CPS)

# Bringing the IT Workforce Online

## IT leaders address workforce issues and suggest solutions.

On June 19, more than 80 leaders from Maryland's Information Technology industry gathered at the University of Maryland, Baltimore County (UMBC) to discuss workforce issues facing this growing industry.

GWIB's Information Technology Industry Initiative convened the Workforce Symposium to bring together representatives from a variety of enterprises, including private, public, large and small companies. Also in attendance were representatives from education, state government, and IT related associations.

Employment in this industry is expected to grow 30 percent between 2004 and 2014. In 2006, there were

approximately 42,000 non-IT professionals in occupations within the Information Technology sector. There are approximately 100,000 professionals serving in IT occupations outside of the industry.

To meet the industry's increasing workforce needs, companies are extending recruitment efforts outside of the state to obtain employees with appropriate skills. Globalization of the information, a 24/7 work environment and increased off-shoring and outsourcing of work to other countries has also contributed to the workforce shortages.

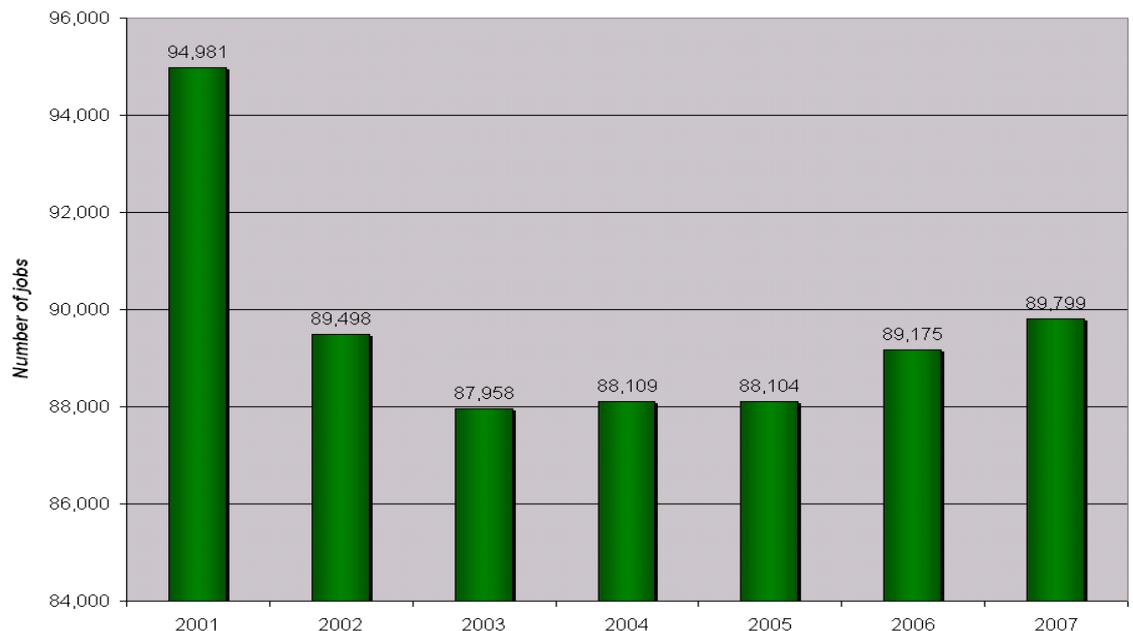
*"For this industry to continue to grow, we have to create better alignment between the IT industry*

*and education, finding ways to keep pace with a constant need for training and retraining, and ensuring that we are able to grow our own pipeline of skilled workers to meet future demand,"* said John Nyland, Co-Chair of the IT Industry Initiative Steering Committee.

Strategies and solutions that emerged from the Symposium are guiding the development of an action plan to recruit, train and retain highly qualified professionals for IT occupations within and outside of the IT sector, and to develop a pipeline of qualified IT workers to support an expanding industry.

Details about the symposium's findings will be available on the GWIB

## Employment in Maryland's IT Sector



Source: Maryland Department of Labor, Licensing, and Regulation



## Energy Initiative Generates Momentum

On April 21, members of GWIB's Energy Initiative Steering Committee and representatives from industry, trade associations, education, and government met on the campus of the Community College of Baltimore County (CCBC) for the committee's kick-off event.

A number of presentations addressing Maryland's workforce shortages in the

Energy industry were made by industry and government professionals. Following the presentations, attendees generated more than twenty-three issues and recommendations to be addressed in the coming months.

The Committee includes representatives from utilities that produce electricity from fossil, nuclear, and all forms of renewable fu-

els, as well as related construction, manufacturing and service organizations that support the energy industry. Also included are a wider range of green businesses that manufacture, install, maintain and/or provide green products and services that improve energy efficiency and contribute to a cleaner environment.

## Frederick County's Online Employment Guide

Fort Detrick, the Frederick U.S. Army Medical installation will be undergoing tremendous expansion and job growth in the coming months due to the Base Realignment and Closure (BRAC) activities. With more than 200 new positions that will need to be filled, the Frederick County Workforce Services has developed an online guide to employment opportunities available on the base.

This centralized "one-stop" guide will connect the region's talent force with the many and varied employment opportunities as they become available. Potential employees can locate and apply for jobs with the federal agencies, private contractors, and other partners on the guide, which is available on the Frederick Works website:

[www.frederickworks.com](http://www.frederickworks.com)

## Addressing Maryland's Energy Challenges

Given current consumption patterns and existing generation capacity, Maryland could face electricity shortages and rolling blackouts as soon as 2011. The O'Malley administration recognizes that potential solutions to this looming crisis lie in energy efficiency and conservation, expanded use of renewable energy, construction of new generating plants and improvement to the transmission and delivery of electricity.

A skilled workforce is needed for implementation of these solutions, but Maryland is presently lacking the workers needed to build the infrastructure, install equipment and operate and repair the facilities. Adding to the shortage, a significant portion of the current energy workforce are eligible to retire, and their numbers will be increasing over the next ten years.

Furthermore, an insufficient number of skilled craft workers are coming through the

training and development pipeline to meet replacement and growth needs.

Renewable energy and energy efficiency (RE&EE), the foundation of a green economy, has the potential to stimulate job growth across a wide range of industry sectors such as green construction, manufacturing, installation, and green services from energy audits to weatherization. Most green jobs will be "built on the skill base of the existing workforce" and will place greater demands on an already tight workforce talent pool.

Preparing a skilled workforce for green collar jobs face a similar challenge of creating a pipeline with the capacity to educate, train, and certify workers. The Energy Steering Committee will be exploring potential solutions for these issues in the coming months.



## BIO 2020 AT A GLANCE

- Creates the “Maryland Biotechnology Center”
- Expands and improves Maryland’s Biotech Investment Tax Credit.
- Grows Maryland’s Technology Incubator Network.
- Continues to grow Maryland’s Nation-Leading Stem Cell Research Fund.

## Governor O’Malley Announces BIO 2020 Initiative

Governor Martin O’Malley, joined by scientists and researchers at the Johns Hopkins Institute for Cell Engineering, recently unveiled a new vision for the bioscience industry in Maryland. Under the BIO 2020 Initiative, the State of Maryland will invest \$1.1 billion in Maryland’s bioscience industry over the next 10 years – the largest per capita investment in the biosciences made by any state in the country – to attract and grow biotechnology companies in Maryland.

“The BIO 2020 Initiative is a comprehensive, targeted plan to leverage Maryland’s science and technology assets and nationally acclaimed workforce to attract and grow the bioscience opportunities of tomorrow in Maryland,” said Governor Martin O’Malley. “Maryland is already nicknamed the ‘home of the genome’ and now must work to strengthen our position as a national and world leader in the research and development of ‘personalized medicine,’ groundbreaking new science which holds within it the potential to reshape the landscape of 21st century medicine.”



## No Spare Marylander: Maryland’s Untapped Populations

### Mock Job Fair Prepares Inmates for Reentry Into Community and Workplace

Inmates from the Maryland Correctional Institution-Jessup (MCIJ) recently participated in a mock job fair in order to prepare for successful reintegration into society and the highly competitive job market. The event brought together potential employers, state and local agency staff and private-sector employers with inmates looking to hone the interpersonal and interview skills they had learned in their academic and occupational training programs.

With workforce shortages facing many industries, the private sector employer representatives were interested in finding an untapped source of potential employees in this population of soon-to-be-released inmates. In attendance were representatives construction, small business, hospitality, transportation, professional services, customer service, printing, and others. The mock job fair was coordinated by staff from MCIJ, the Maryland State Department of Education (MSDE) Correctional Education Program and the Department of Public Safety and Correctional Services and offered many employers their first opportunity to interact with this group of people.

### Employment Among People with Disabilities

In 2006, more than 376,000 Maryland residents between the ages of 16 and 64 were living with some type of disability. Only about 43% of these people were working, meaning that almost 216,000 Maryland residents with disabilities who were not working. By comparison, around 78% of Maryland adults without disabilities were employed in 2006.

Data Source: 2006 American Community Survey

### Quarterly GWIB Meeting Dates

**September 17, 2008**

3:30 p.m. to 5:30 p.m.

Anne Arundel

Community College

**December 10, 2008**

3:30 p.m. to 5:30 p.m.

Anne Arundel

Community College



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