


## State of Washington's Life Sciences Sector

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President, WBBA




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## Washington Biotechnology and Biomedical Association (WBBA)

- Who we are
  - A not-for-profit association of > 460 life science companies, research institutes, universities and support organizations.
- Mission
  - Innovation to Realization; from breakthrough discoveries to better health solutions.
- Objectives
  - Innovation
  - Capital
  - Talent
  - Environment - Policy




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## WA Life Science Overview

- The life science industry - start-ups, academic & research institutions, government labs and multinational corporations.
- Washington state (2006 data sources)
  - ~67,000 biopharma jobs (direct & indirect)
  - ~23,000 medical device jobs (direct & indirect)
  - ~2,500 global health jobs in WA, 3,500 worldwide (direct only); 1,000 created in last 5 years
  - Thousands more research institute jobs
- High-wage, high-education jobs
  - Average wages for life science sector: \$81,499
  - Average wages for other private sector jobs: \$42,178

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## WA's Strengths, cont.

- Diversity & leadership in;
  - "Nexus of Global Health"
  - NIH funding
  - Medical Device sector
  - Biofuels
  - Veterinarian medicine research
  - Immunology, oncology, genomics, systems biology, informatics to name a few key research areas

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## State's Employment

Table 19. Leading States—Bioscience Occupational Employment, FY 2006

Bioscience Occupational Employment			
Leading States	Total Occ. Employment	Leading States	Per 1 M Population
California	69,600	District of Columbia	5,295
Pennsylvania	34,780	Massachusetts	4,784
New York	34,520	Maryland	3,258
Texas	34,170	North Dakota	2,824
Massachusetts	30,780	Pennsylvania	2,804
Illinois	23,757	Connecticut	2,683
Florida	21,870	Minnesota	2,625
New Jersey	18,580	Washington	2,615
North Carolina	18,510	Nebraska	2,512
Ohio	18,460	Utah	2,466

Source: Battelle calculations—based on BLS data and U.S. Census Bureau population estimate.

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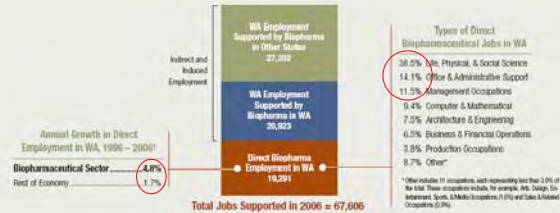
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## Washington Employment

Total Employment Supported in Washington by the Biopharmaceutical Sector



Notes:  
 1. "Rest of Economy" is defined as all sectors less the biopharmaceutical sector.  
 2. As a point of reference regarding the data used for this report for 2006, 504 sectors were identified, including biopharmaceuticals, resulting in total U.S. employment of 174.7 million, GDP of \$132 billion, and output of \$248 billion. Data for Washington D.C. is included in these figures but data for Puerto Rico is not included.  
 3. Types of direct biopharmaceutical jobs are based on computer-reported data, representative of direct employment figures is assumed to be directionally accurate.  
 Sources: Achrstone Consulting Analysis, Minnesota IMPLAN Group, U.S. Bureau of Labor Statistics (please see report for full citations and methodologies)

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## Recent Positive News

- Omeros secures \$68M in first NW IPO in 2 years
- AMRI opens Washington facility
- AVI BioPharma relocates from Portland to Bothell
- Dendreon's Provenge reports positive Phase III results
- Trubion inks partnership with Facet Biotech
- Covance plans to be bigger than Rosetta
- Uptake Medical nabs funding
- Seattle Genetics reaches milestone
- Sonosite receives 510k
- Theraclone inks \$18M deal
- Spiration pulls in \$7M

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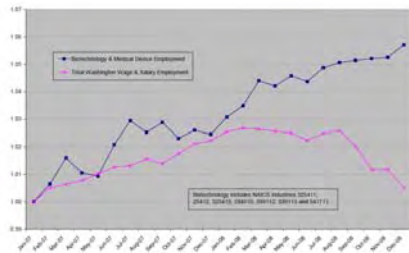
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## Preliminary SB 6015 Economic Findings




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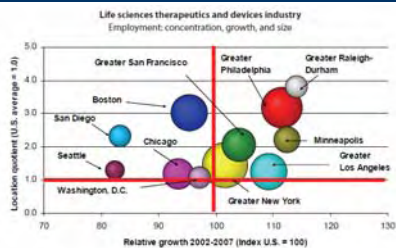
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## Slowest Growing Leading Cluster




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## Life Science Investment is About Economic Development<sup>1</sup>

Our analysis measures the relative strength of Greater Philadelphia's life sciences cluster, comparing its performance to that of other leading metro areas around the country. Among our findings:

- Greater Philadelphia moves up to 2nd place in the Overall Composite Index with a score of 97.7, up from its 3rd-place ranking in our 2005 analysis.
- Greater Philadelphia claims the top spot in our Current Impact Composite Index, increasing its lead over Greater New York to 7 points, after holding a slim lead of only 0.3 point in 2005.
- In the Innovation Pipeline Index, Greater Philadelphia remained in 3rd place, maintaining its 2005 ranking but largely closing the gap with 2nd-ranked Greater San Francisco.
- Greater Philadelphia's weakest performance was in the Small Business Vitality Index, where it placed 9th overall.
- After accounting for the ripple effects, the life sciences sector in Greater Philadelphia was responsible for generating 380,800 jobs, \$20.2 billion in earnings, and \$39.7 billion in output in 2007.
- Fifteen percent of all economic activity and one out of every six jobs in Greater Philadelphia can be traced back to the life sciences.
- Greater Philadelphia is a vibrant life sciences cluster with many advantages that can be further exploited to spur continued growth.

1. Milken Institute 2009 biotech report

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## Recent Challenges Announced

- *Archus shuts down*
- *Merck shuts down Rosetta in Seattle*
- *NorthStar Neuroscience closes its doors*
- *Gov. Gregoire's Baby, Life Sciences Discovery Fund Faces Budget Cuts*
- *Targeted Genetics Lives On*
- *Seattle Genetics partner pulls plug on Phase II*

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## "Global Competition Heats Up"

- Drivers of Success
  - Strong research
  - Venture capital
  - Incentives for commercialization
  - Educated workforce
  - Specialized real estate
  - Tax and other incentives
- Other states
  - NC – a wealth of opportunities
  - Central KY – leader in biotechnology
  - How Austin is becoming a biotech hub
- Other countries
  - China – "an Asian dragon is growing"
  - Japan – BioStrategy 2002
  - India's blossoming biotech boom

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## What is the WBBA doing?



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## Raising Awareness



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## SB 6015 is Enacted



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## SB 6015 Strategy

- Objectives:
  - Comprehensive state economic impact report
  - Provide the Governor and legislature strategic recommendations for WA's Innovation Economy
- Focus:
  - Capital
  - Business Climate
  - Technology Transfer
  - Competitiveness

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## WA Medical Device Angel Network

For an excellent overview of the Life Science industry visit:

Washington Medical Device Angel Network  
September 30, 2009  
Woodmark Hotel, Kirkland  
6-9 pm

Guest Speaker  
Mark Klapp - Life Science Angel Network

Successful Angels Draw on Their Experience:  
James MacEilly (Co-Chairman)  
David Amis  
Mark Klapp

PLEASE RSVP TO:  
jmac@wmdan.org  
(866) 752-6708

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## New Web Site:

- Website launch to debut at the WBBA Annual Meeting, Nov 6



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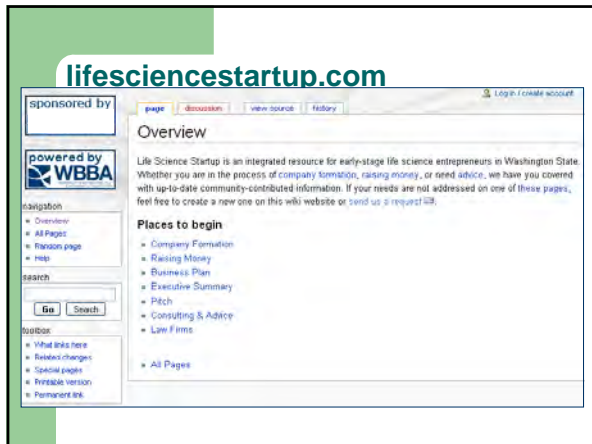
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## Bringing the Community Together

- **WBBA Program Summary**
  - 20 Events To Date >2400 attendees in 2009
- **Recent Event Highlights**
  - 9/11 H1N1 Pandemic Flu Panel
  - 9/22 Governor's Life Science Summit
  - 10/2 "Secrets of accessing NIH Funding"
  - 10/14 Genomic Medicine

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## 2009 Remaining Events

- Nov 12 – Pub Night – TBD, Seattle
- **Nov 6 – WBBA Annual Meeting @ Sheraton Seattle**
- Nov 18 – Domesticating Global Health – Part 1 (of 4) @ SBRI Discovery Room

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## Life Science Innovation NW, 2010

- The NW's premier Life Science Showcase:

- device, biotech, and diagnostic companies
- research institutes,
- emerging technologies,
- cutting-edge developments in global health and with Queensland/WA research collaboration
- Investor and partnering focus
- China delegation

- **Keynote:** Rajiv Shah, Director U.S. Department of Agriculture



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Summary

Thank You

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