



Pennsylvania Life Sciences by the Numbers

- 2,309 life science business establishments
- 85,151 direct employment
- \$1.38 billion in National Institutes of Health Grants (Top 2 Recipients)
 - University of Pennsylvania # 2
 - University of Pittsburgh #7
- Ranked 5th nationally for clinical trials. In 2013, almost 2,000 trials with \$401 million in investment and \$1 billion in economic impact.



Pennsylvania Bio by the Numbers

- Established over 25 years ago by two researchers at Penn State
- Second largest life sciences trade association in the U.S.
- 683 Member Companies – 61% are CORE or Research & Development based companies
- 11 full time staff and 2 part time
- State affiliate for BIO, PhRMA, AdvaMed, MDMA



Commonwealth of Pennsylvania Programs



- Keystone Opportunity Zones – State & local tax sheltered business zones
- Keystone Innovation Zones – Provides tax credits for companies in targeted zones
- Research & Development Tax Credit – Tax credit for R & D spending (\$55 million annual credit available)
- Redevelopment Assistance Capital Program – Grant program available through competitive application process (\$125 million annually)

Academic and Industry Collaboration

- **Pennovation Center** – Housed in the Pennovation Works, this newly developed 23 acre site will be a business incubator and laboratory to align and integrate researchers and entrepreneurs. The 58,000 sq. ft. space will consist of two floors of co-working space designed to support individual entrepreneurs and start-ups. A third floor will be occupied by the Penn Engineering Field Research Center.



Academic and Industry Collaboration

- **Science Center and Wexford Science & Technology** – The oldest incubator entity in the U.S., The Science Center, will join with Wexford to build out the established campus by nearly 4 million square feet with office, laboratory, residential, retail, and structured parking.



Academic and Industry Collaboration

- **Independence Blue Cross and Thomas Jefferson Health Innovation Collaboration** – A \$2 million partnership funded evenly between the two entities will support an entrepreneur-in-residence at Jefferson and funds a fall 2015 “hackathon”, an entrepreneurship curriculum, and a business speaker series for medical students and faculty.

Independence 

 **Jefferson™**
HEALTH IS ALL WE DO

Academic and Industry Collaboration

- **Independence Blue Cross and the University of Pennsylvania.** IBC invested along with the University of Pennsylvania in a start-up incubator called DreamIt Health.

Independence 



Academic and Industry Collaboration

- **Drexel University's Innovation Neighborhood** – A 12 acre campus to be built featuring shared space for start-up life science and medical device companies. It will include offices, labs, shops, and residences.



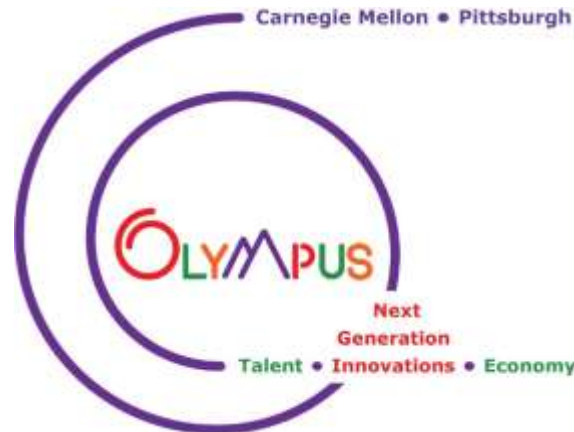
Academic and Industry Collaboration

- **The Germinator Project** – Janssen funded the non-profit BioStrategy Partners which pays for early-stage research at Temple University, Thomas Jefferson University, Penn State Hershey Medical Center, Lankenau Medical Center, and The Wistar Institute.



Academic and Industry Collaboration

- **Carnegie Mellon University Project Olympus** – Housed in the Carnegie Mellon Innovation Center, this program operates at the earliest stages of the value creation chain. It works to augment and accelerate the process of moving cutting-edge research to development and business stages through licensing, creating start-ups , and through collaboration and strategic partnerships.



Academic and Industry Collaboration

- **Innovation Institute** – Founded by the University of Pittsburgh to advance Pitt's entrepreneurship, commercialization, and economic development.





LIFE SCIENCES FUTURE

- Over 650 attendees from all segments of the life sciences
 - PhRMA, Biotech, Medical Device, Diagnostic, academic research institutions & investment companies
- Opening presentation by Acting FDA Commissioner Dr. Stephen Ostroff
- 15 Company Presentations
- 20 Investment & Venture Companies participated in Funding Meet-Ups
- Rare Disease Roundtable Discussion
- Vaccine Panel Discussion
- Short Takes – A version of TedTalks covering issues facing the life sciences



LIFE SCIENCES FUTURE



Symposium – Partnerships in Science



LIFE SCIENCES FUTURE

- ½ day event bringing academia and industry together
- Academic and Industry Presentations:
 - Penn State IP Auction
 - Pennovation Update
 - DreamIt Health Panel “From Garage to Boardroom”
 - Germinator Project
 - Exploring Career Opportunities Panel & Meet Up
- Company Reverse Pitches:
 - AstraZeneca
 - CSL
 - BTG International Inc.
 - Bristol-Myers Squibb
 - GlaxoSmithKline
 - Johnson & Johnson
 - Merck
 - Pfizer
 - Shire

