



PLSG Overview

Democratic and Republican Policy Committees
of the PA House of Representatives

Discovery. Market. Community.



PLSG Mission

Create, nurture and help establish a globally dominant life sciences industry in western Pennsylvania.

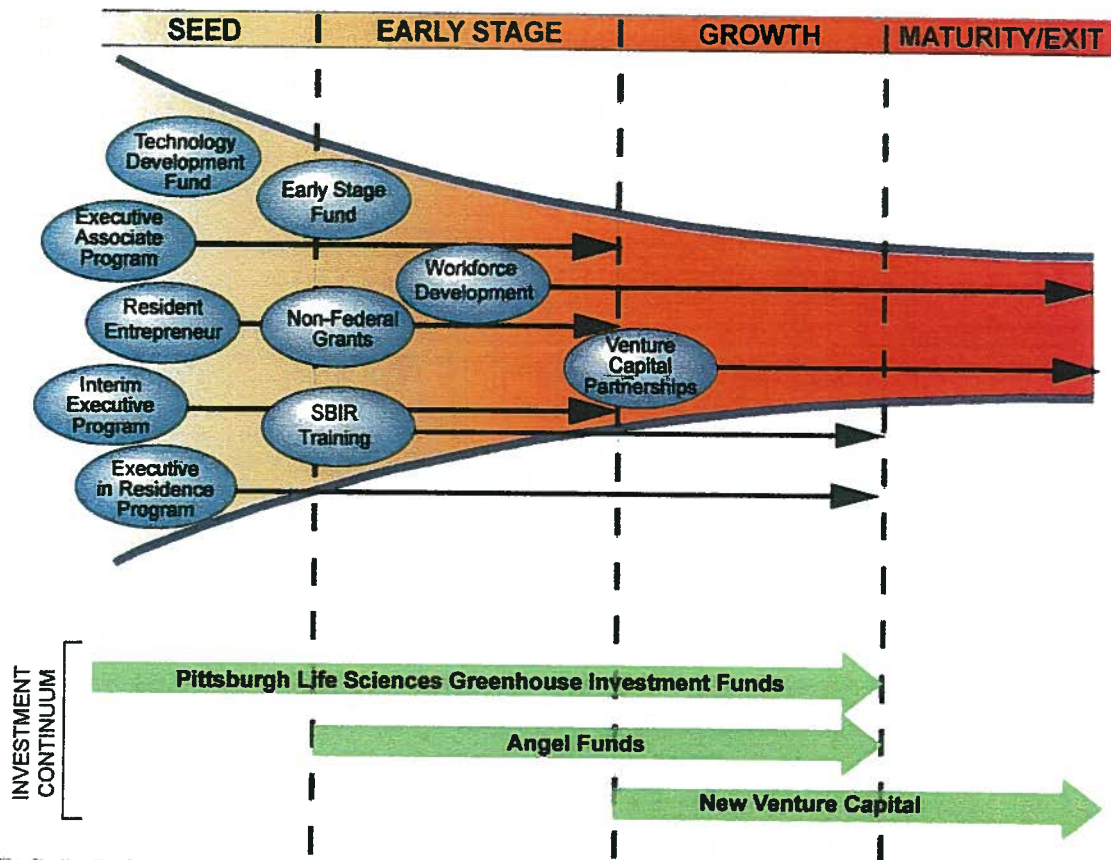


Concept to Commercialization™ Model

INNOVATION

COMMERCIALIZATION

- University Research
- Individual Entrepreneurs
- Company IP
- Imported Technology





PLSG Strategic Overview

Strategic Plan High-Level Objectives:

- Form Companies and Create Jobs
- Obtain a 2% Share of U.S. Life Sciences Venture Capital
- Achieve Sustainability

PLSG Key Strategies

- Capital
- Connectivity
- People
- Space



Capital - PLSG Committed Investment Results

133 investments
in **60** companies,
for **\$15.9M** has leveraged
nearly **\$500M** in additional capital



Connectivity and Technology

- Sources of Innovation
 - University Research
 - Individual Entrepreneurs
 - Company IP
 - Imported Technology
- Imported **13** companies to the region
- **317** companies utilizing PLSG programs and services
- Company creation rate increased from 2-3/year to **15-20/year**



People and Space

- **317** clients in PLSG Concept to Commercialization™ Pipeline
- **33** through the Executive program to date
- **27** companies have utilized the PLSG incubator since inception
- **21,500** sq. ft. of incubator space includes 12,000 sq. ft. of quality wet lab space for our portfolio companies
- **5,000** jobs directly/indirectly created including university faculty and facilities
- Over **6,000** trainees received life sciences workforce training

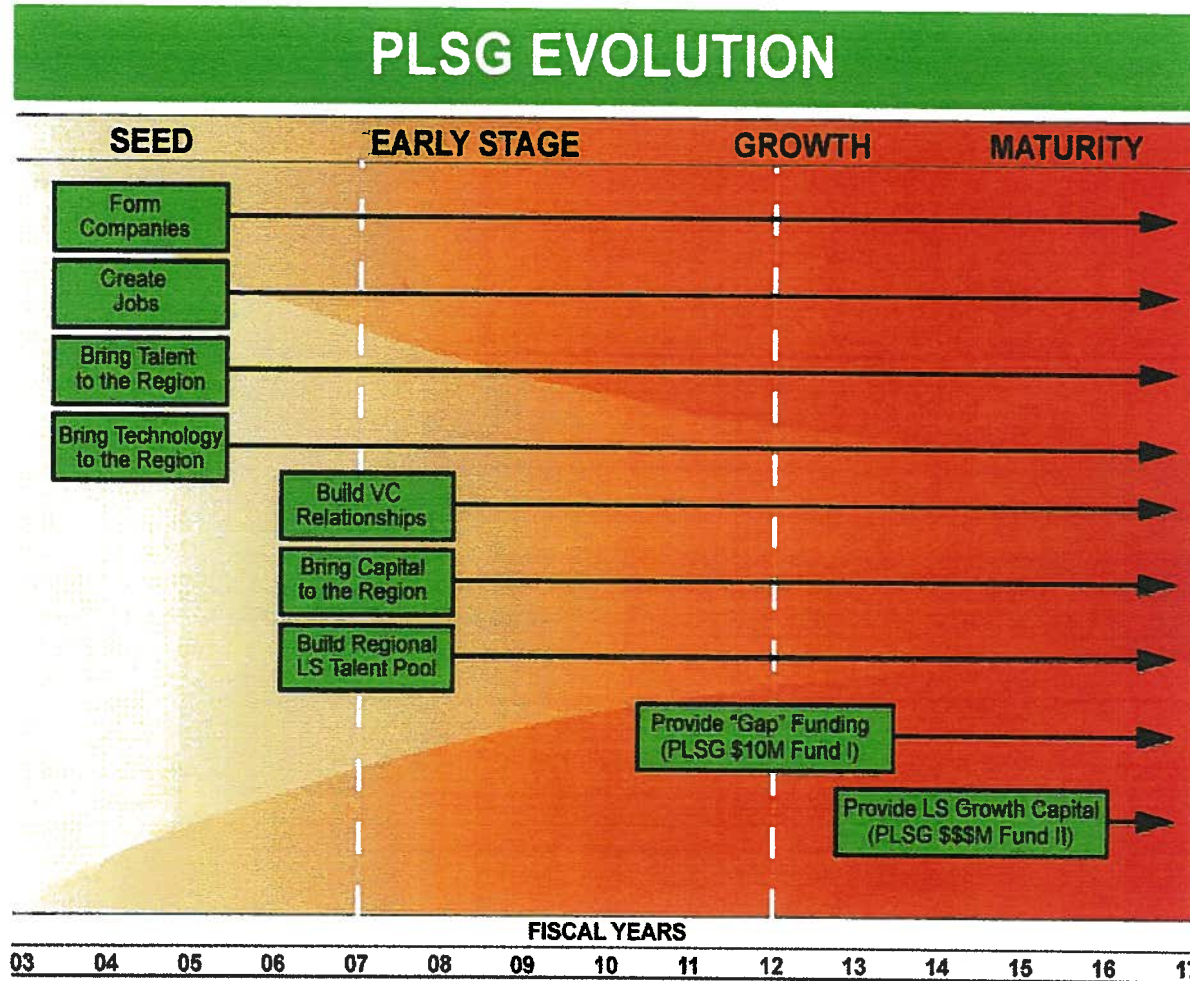


PLSG Portfolio Companies Address Diseases and Create Healthcare Solutions

- Cancer – early detection and treatment
- Cardiovascular Disease – heart attack, stroke
- Respiratory Disease - COPD
- Autoimmune/Inflammatory Diseases – Arthritis, diabetes, lupus, bladder
- Neurodegenerative Diseases - ALS, Parkinson's, AD, MS
- Biosurgical/Surgical Applications - biomaterial, therapeutic and sophisticated device technologies
- Disease Monitoring and Training – outbreak surveillance, real-time training, crisis management, reduced surgical errors

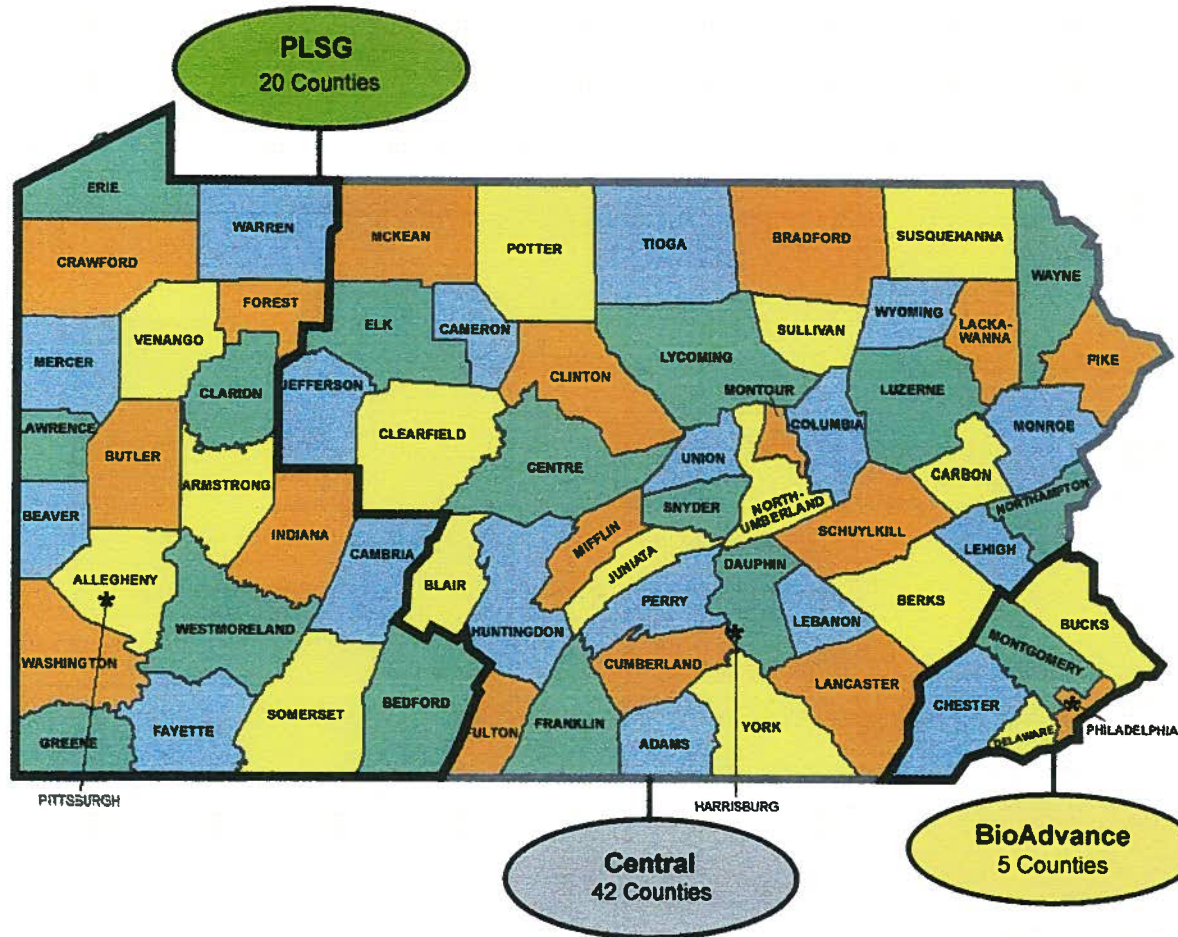


PLSG Progress





PA Counties by LSG





LSGs Impact

\$66.8 million - Federal Funding Attracted to LSG projects or as Follow-on

\$1.897 billion - Additional Funding Received by Companies after Investment (including exits)

\$117 million - Funds Raised by LSG Outside of PA/State



LSGs Impact

Jobs Created – 1187

- Greenhouse Investment Program – 589
- Other Programs (including LSG staff) – 598

Jobs Retained – 1144

Number of indirect jobs (Milken Multiplier) – 13,009

- LSG Investment Program – 4405
- Other Programs – 8604



LSGs Impact

1150 – Applications Received for Funding

\$445 million – Total Dollar Amount of all LSG applications

\$52.2 million – LSG Investment commitments to date
Funds disbursed - \$47.5 million

224 – Total Projects Funded

Company (university-based).....	193
University/Institutions.....	.21



LSGs Impact

- Leverage is very high
- Demand is strong
- Job growth is good
- 36:1
- 1150 applications requesting over \$445M
- 1187 created

**John W. Manzetti,
President and CEO
Pittsburgh Life Sciences Greenhouse**

John joined the PLSG in 2006. After serving as an Executive-in-Residence and then as the Chief Operating Officer assisting start-up companies move their ideas and products through the PLSG "*concept to commercialization*" pipeline, John was named President and Chief Executive Officer in December 2006. Prior to joining the PLSG, Mr. Manzetti held the position of President and Chief Executive Officer at NOMOS Corporation, a leader in the field of radiation therapy treatment solutions for cancer patients.

He joined NOMOS in May 1999 as Executive Vice President and Chief Financial Officer and was named President and Chief Operating Officer in December 2000. As CFO, and later as COO, he focused and streamlined NOMOS' operations, laying the foundation for the company's profitable growth. He was named Chief Executive Officer in October 2001 and spearheaded its merger with North American Scientific in 2004. After the merger, Mr. Manzetti assumed the role of President of the NOMOS Division, a wholly owned subsidiary of the Company, and he also served on Board of Directors of this publicly traded company (NASI on NASDAQ).

Prior to NOMOS, Mr. Manzetti served as Executive Vice President and Chief Financial Officer, Secretary and Treasurer at Carnegie Group, Inc., a publicly traded information technology company that was acquired in November 1998 by Logica PLC, a UK-based firm. During his 10 years at Carnegie Group, he helped the company become a recognized leader in delivering intelligent software solutions to commercial and government markets. He structured the company's initial public offering in 1995 and served as Corporate Secretary and a member of the Board of Directors.

He also served as business unit manager for each of Carnegie Group's manufacturing, healthcare, financial services and government businesses. Before Carnegie Group, Mr. Manzetti served in various management positions of increasing responsibility at Babcock & Wilcox Company, a leader in the design and delivery of power generation systems and industrial equipment to industry.

Mr. Manzetti holds a Bachelor of Science in Business Administration from Geneva College and an MBA from the University of Akron. He was the winner of the 2008 Carnegie Science Center Catalyst Award for the Life Sciences, and he also was a recipient of the 2008 Ernst & Young Entrepreneur of the Year Award. He is also a Director of the Pittsburgh Venture Capital Association.