

Bioscience: **Growing the Economy and Jobs in New Mexico**

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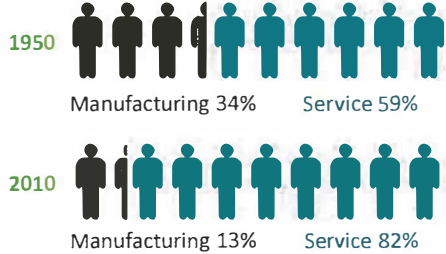
THE UNIVERSITY OF NEW MEXICO HEALTH SCIENCES

Economic Challenges

Currently facing the US economy

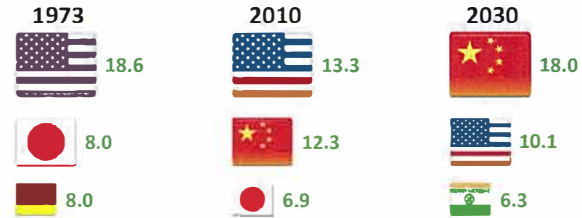
DECREASED MANUFACTURING

Percentage of Non-Farm Workers Employed by Industry



INCREASED GLOBAL COMPETITION

Top 3 Countries by Economic Dominance
(% share of world GDP)



INSECURITY OF JOB GROWTH

Months Required to Recover Job Growth
to Pre-Recession Rates



INSECURITY OF HEALTH CARE & SOCIAL SUPPORT SYSTEMS

Healthcare Costs increased nearly 1.5 times faster than wages between 1999 and 2011

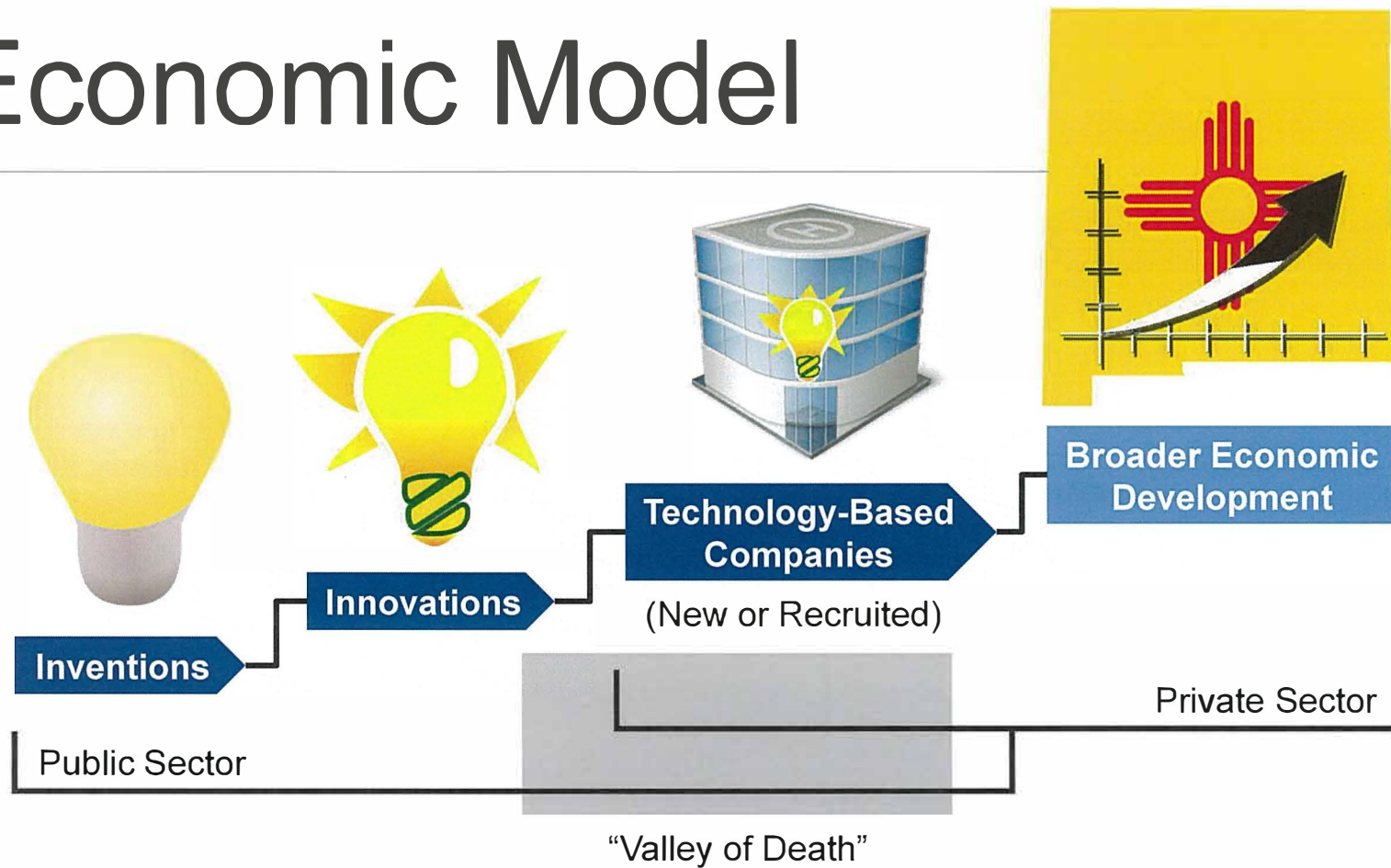
Almost 60% of personal bankruptcies are linked to medical bills



41% of American adults had trouble finding necessary care due to costs in 2011

Sources: healthcare.gov, Center for Studying Health System Change, CIA World Fact Book, US Department of Commerce

Economic Model



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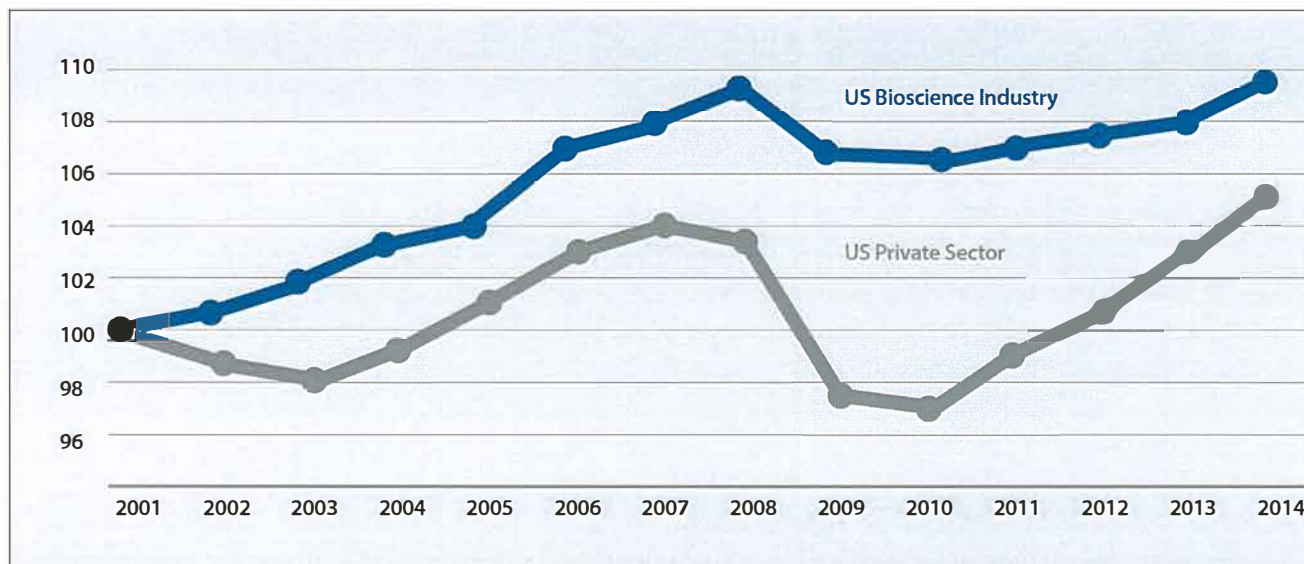
- Background



- Terry Dunlay, Founder, President, & CEO
 - 2006 - moving to New Mexico and was referred to STC
 - Licensed by STC/UNM
 - Inventors: Larry Sklar and Bruce Edwards (UNM HSC)
 - 2006 - Worked with STC through Cecchi Venture Lab (first tenant of CVL)
- Raised approximately \$20 Million
 - 2007-2010 - \$5 million in 3 rounds. \$1 million in 2007 from Verge & Village Ventures, \$1.5 Million in 2008 from Verge & Village Ventures and \$2.5 million from Prolog Ventures, Verge, and New Mexico Community Capital.
 - May 2013 – \$8 million from Arboretum Ventures who led the venture funding round with participation from current backers Prolog Ventures, Verge Fund and New Mexico Community Capital
 - July 2015 – \$5.4 million from Arboretum Ventures who led the venture funding round with participation from current backers Prolog Ventures, Verge Fund and New Mexico Community Capital
- Sold to Sartorius AG in June 2016 for \$90 million
 - Company currently has 55 employees
 - Company will continue to operate in New Mexico



Growth of Jobs in Bioscience vs Other Private Industries



Source: TEconomy Partners analysis of US Bureau of Labor Statistics, QCEW data, May 2017

i. Various: PWC, Deloitte, OECD, Datamonitor, and Others

NM Bioscience in Comparison to Other Industries

Industry	Total Employed	Annual Salary
Bioscience ¹	4,990	\$87,387
Computer ¹	14,760	\$74,050
Engineering ¹	21,150	\$85,629
Aerospace ²		\$71,512
Mining ²		\$78,695
Communication ²		\$84,150

Sources: 1. BLS (2015 Data)
2. Salary.com (2016 Data)

Effective Public-Private Partnership is Key

University/Public Sector

- Their view: Contributes scientists and experts
- Business perspective: Minimizes technical risk, market risk, and evolving nature of market
- Supports existing business (recruitment)

Private Sector

- Their view: Priority of economic growth and jobs
- Academic perspective: Societal impact

What is Bioscience?

Six industries make up the bioscience sector:

1. Agricultural feedstock and chemicals
2. Bioscience-related distribution
3. Drugs and pharmaceuticals
4. Medical devices and equipment
5. Research and bioinformatics
6. Testing and medical laboratories



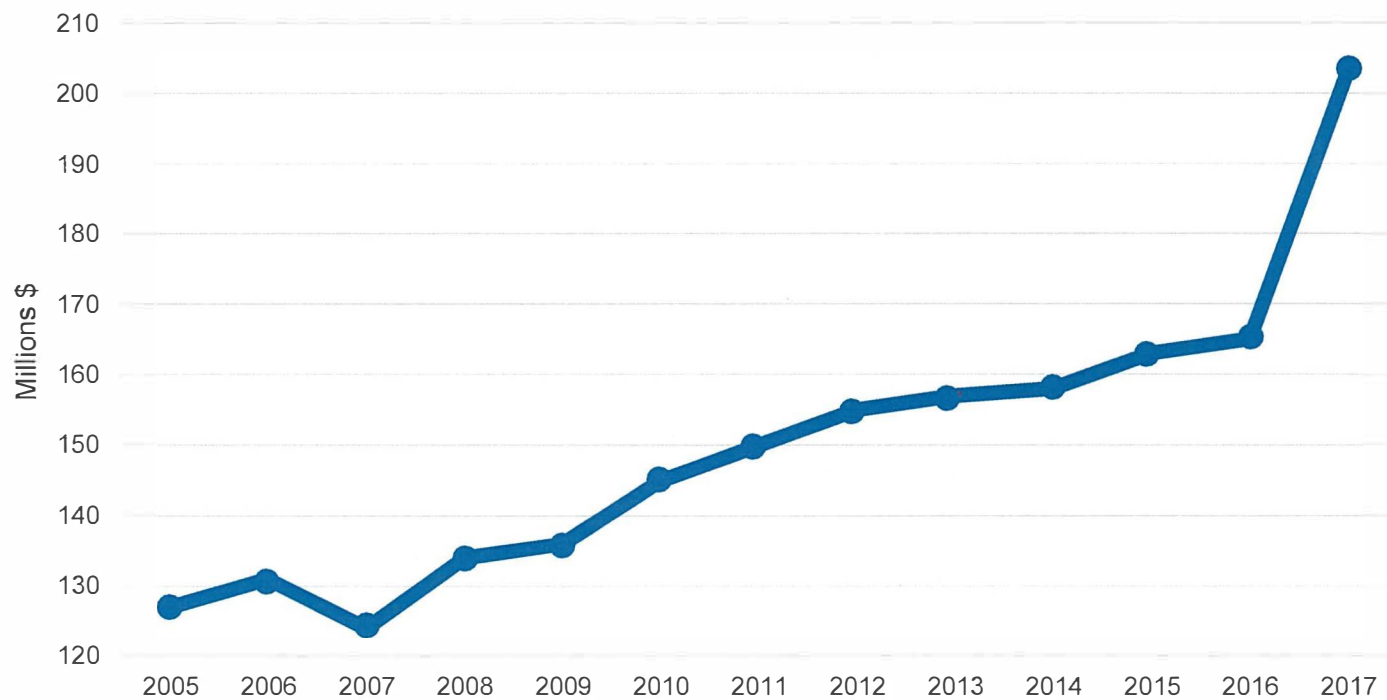
Why Bioscience in New Mexico?

Workforce

- Hundreds of potential bioscience scientists and engineers produced at universities each year
- High wages; “green” jobs
- Declining numbers of population < 30 years of age stay in New Mexico
- Employment growth

New Mexico Universities and National Labs Support Bioresearch

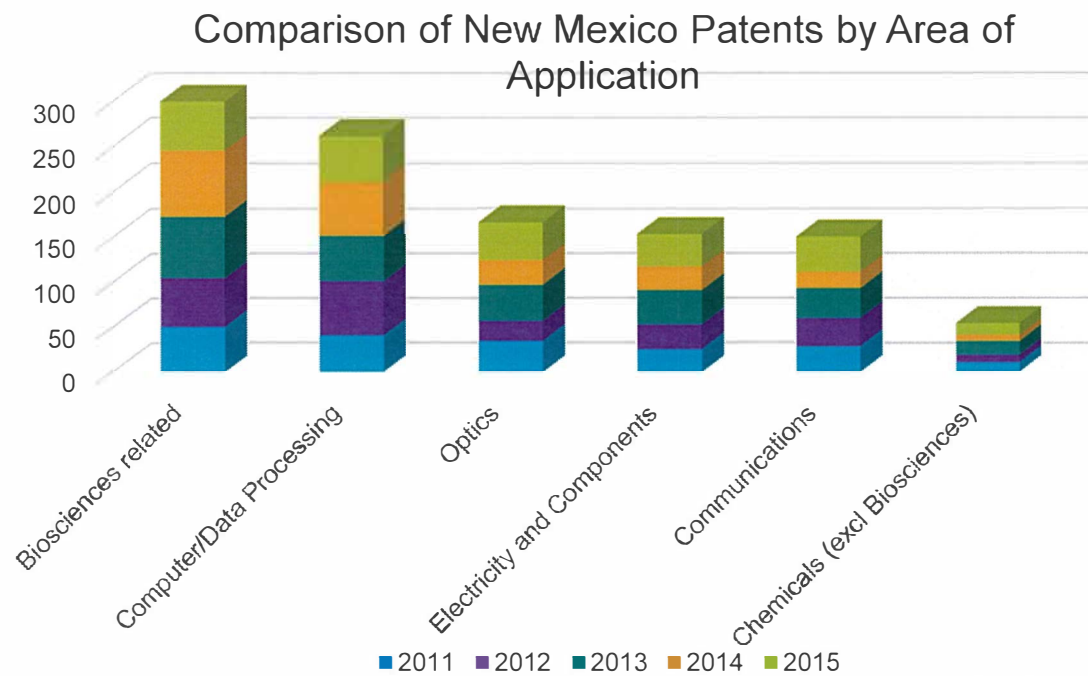
UNM HSC Growth in Bioscience Research



Source: UNM HSC PreAward

Why Bioscience in New Mexico?

Bioscience Patents Outnumber All Others



Data Source: US Patent Office Technical Classification System

Commercialization

- Since 2004, 25 new NM private companies were either spun off from the university or used university technology to start up.
- A total of 52 new private companies in the US and abroad (1)



Why Bioscience in New Mexico?

Private Capital Investment in New Mexico

\$301
Million

Private capital invested
in New Mexico over the
past 5 years

48%

Of this investment went
to bioscience

~\$80
Million

Available capital from
New Mexico-based VC
Funds



Recap: Why Bioscience Industry in New Mexico?

- Hundreds of potential bioscience scientists and engineers produced at universities each year
- High wages; “green” jobs
- Employment growth
- Have fundamental pieces to grow



What Is Needed to Grow Bioscience Industry?

- Foundation of industry
- Strong bioscience RND from university
- Access to capital
- Space and permitting
- Workforce
- Technology transfer
- “Authority” or public-private agency



Role of the Bioscience Authority

New Mexico foundation of a public-private partnership

- Not a traditional organization
- Not a solely public or solely government agency

Authority

- Advise state on methods, proposals, programs and initiatives that may stimulate investment
- Companies and funds may have funding from government, public entities, and private entities for investment or other programs
- Create programs to expand bioscience economic opportunities
- Create avenues of communication and promote legislation
- Identify science and technology trends
- Perform or cause to be performed environmental, transportation, communication, land use and other technical studies
- Actively recruit industries
- Execute contacts and other instruments



Legislative Priorities

- Prioritize operating funds for NMBSA at 250K year.
- Formation of an endowment under NMBSA of a one-time allocation of 25-50M.
- Rationale:
 - Strategic investment in our state's future
 - Represents patient capital
 - Will have 3rd party validation on this approach
- In addition we will support the expansion of the SBIR STTR matching funds as recommended by the EDD of the State.



Questions?

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