



*Economic Opportunities of
the Life Sciences Industry
in the Borderplex*

MVEDA Business in the Borderplex Forum
November 1, 2016
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Arrowhead Center



Economic Opportunity in the Life Sciences Industry

So....What is this Life Science / BioScience Industry?

Biotech / Biomed
Pharmaceuticals
Digital Health
EMR / EHR
AgBIO
Clinical Laboratories

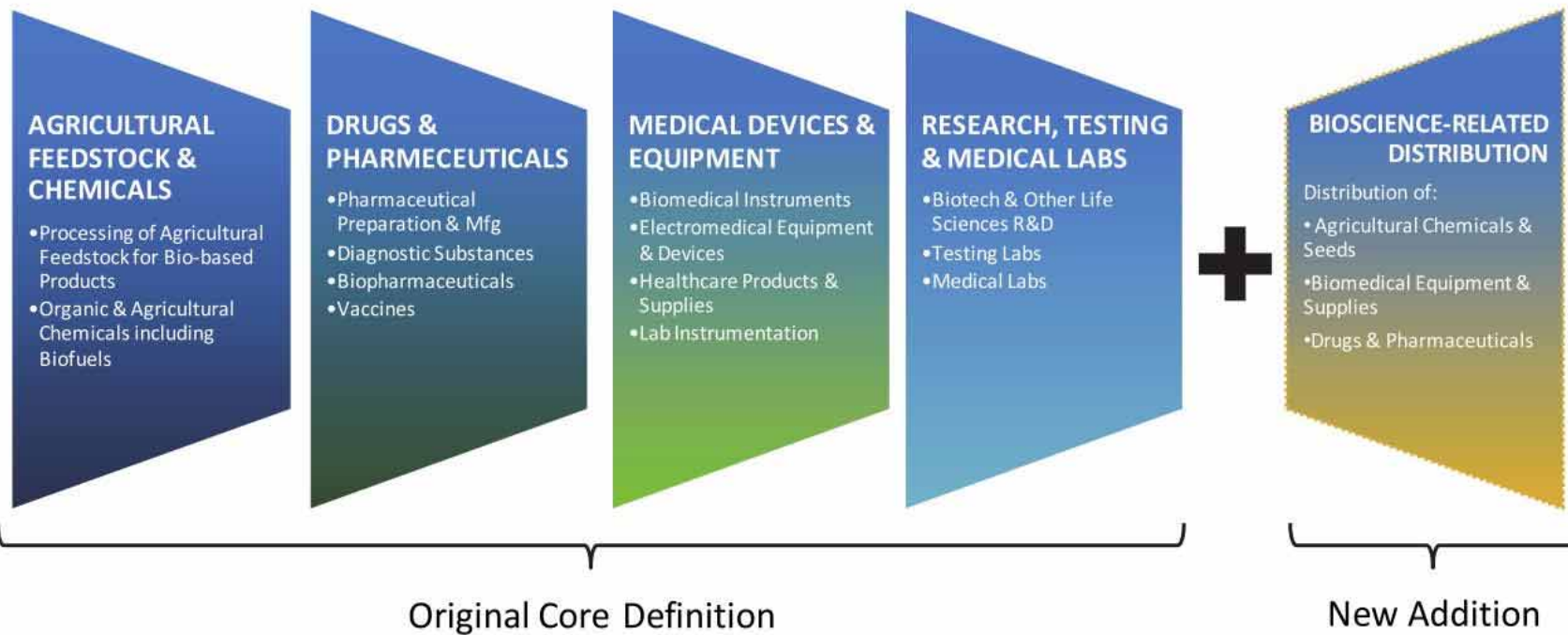


Research
Innovation
Manufacturing
Workforce Development
Distribution
Investment

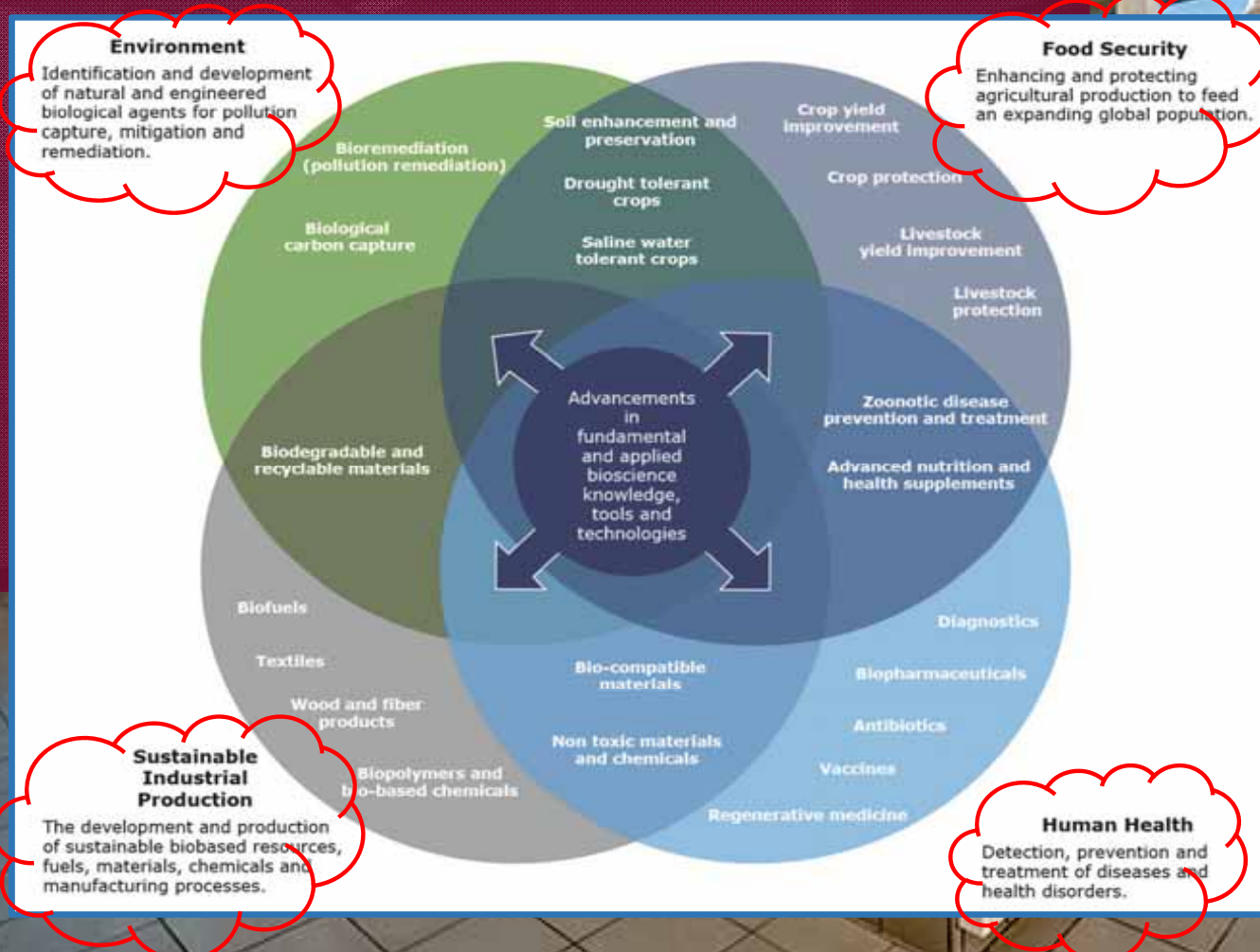
The Industry & The Innovation Supporting Quality Healthcare

Industry Breakdown by Field:

Figure 1. Revised Definition of the Bioscience Industry

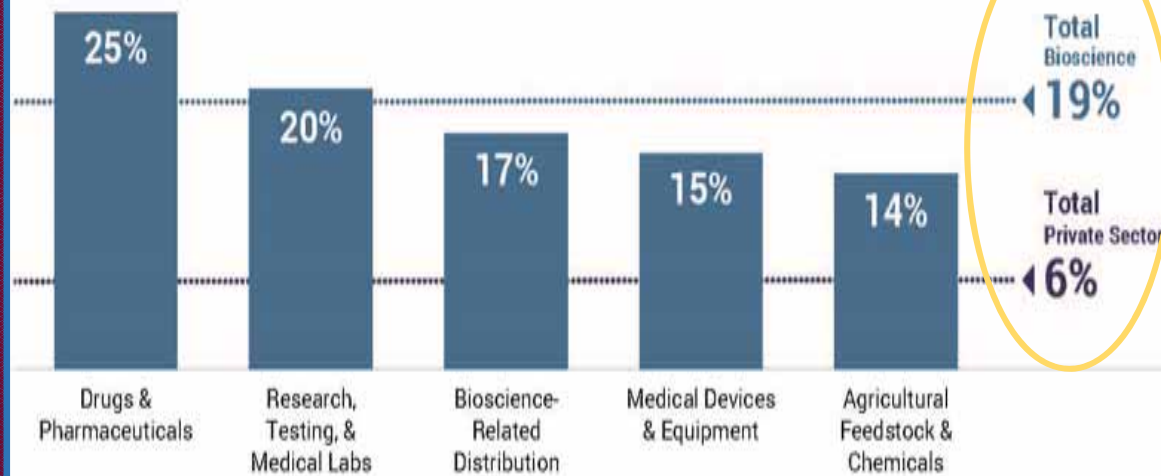


Industry Breakdown by Application:



BioScience Industry Data 2001-2014

Change in Real Average Annual Wages in the Biosciences
2001-2014



Source: TEconomy Partners analysis of U.S. Bureau of Labor Statistics, QCEW data; enhanced file from IMPLAN Group.

Average Annual Wages for Selected Industries
in the U.S.

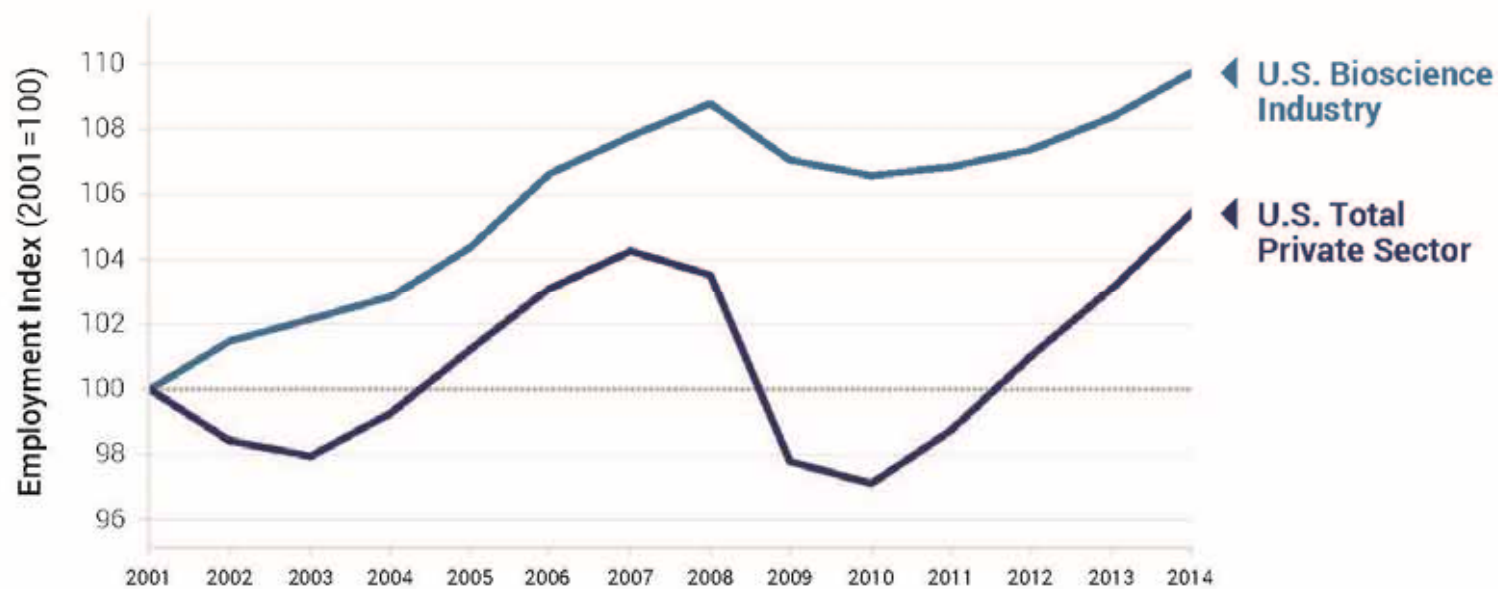
2014

Employment Sector	Average Annual Wage
Drugs & Pharmaceuticals	\$117,524
Research, Testing, & Medical Labs	\$97,485
Finance & Insurance	\$97,373
Total Biosciences	\$94,543
Information	\$90,804
Bioscience-Related Distribution	\$90,458
Professional & Technical Services	\$86,391
Agricultural Feedstock & Chemicals	\$80,640
Medical Devices & Equipment	\$79,537
Manufacturing	\$62,977
Construction	\$55,040
Real Estate & Rental & Leasing	\$51,808
Total Private Sector	\$51,148
Transportation & Warehousing	\$48,720
Health Care & Social Assistance	\$45,859
Retail Trade	\$28,743

Source: TEconomy Partners analysis of U.S. Bureau of Labor Statistics, QCEW data; enhanced file from IMPLAN Group.

BioScience Industry Resilience

Employment Trends
2001-2014



Source: TEconomy Partners analysis of U.S. Bureau of Labor Statistics, QCEW data; enhanced file from IMPLAN Group.

How Does NM Stack Up Nationally?



Economic Opportunity:

Growing Industry and Demand for Qualified Employees

Higher Wages - Higher Average Growth Rates - More Resilient

Life Sciences at Arrowhead Park

A Present and Growing Foundation.....

- *NMSU / DACC have over 40 Life Science-related programs*
 - *> \$40 M Research*
- *Burrell College of Osteopathic Medicine Open August 2016*
- *Arrowhead Park HS Medical Academy Opened July 2014*
- *170 Life Science-Related Jobs, 6 Employers (> 60%)*
- *Average Park Life Sciences wage estimated at \$69,000*
- *13 Startups Currently Incubating at Arrowhead Center*

Next Steps

Intensify Efforts to Grow Life Science Sector

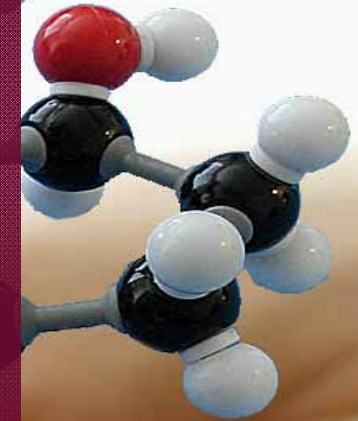
- *Local, Regional Strategic Action Plans*
- *Encourage and Facilitate Research Collaborations*
- *Regional Promotion and Attraction Targeting Life Sciences Sector*

Develop Around Our Uniqueness

- *Rural and Border Needs – Healthcare Data, Diagnostics, Education*
- *Cross-Border Research, Clinical Trials, Design & Manufacturing*
- *Innovate Around Cutting Edge Technologies*
 - *Virtual / Augmented Reality, Bioinformatics, Imaging, 3D-Printing*

Grow Funding Sources to Support Technology Commercialization

- *Attracting and Incentivizing New Entrepreneurs*



For More Information:

Arrowhead Center – waynes@nmsu.edu

NMBIO Meeting – November 16, 2016

NMSU Fulton Center, 4-6pm

2016 NM GrowBio Report (release November)

Borderplex Alliance Strategic Plan

<http://www.borderplexalliance.org/resources/>

Cluster Startups / Technologies

A Partial Current Listing.....

- *VR-based Pain Management*
- *Oxygen Delivery Hydro-Filter*
- *Telemedicine for Rural NM Medicine/Mexico*
- *DNA Lab Management Software...International Sales*
- *Non-Invasive Concussion Detection Device*
- *Non-Invasive Glucose Detection*
- *Decision Support Software for Medicare/Medicaid Enrollment*
- *Implantable Electric Bone Growth Stimulator*
- *Mosquito Repellent Band (24 hr)*