



New Mexico Bioscience Authority
2020 Annual Report

NM Bioscience Authority
Annual Report of Activities
October 1, 2019 – September 30, 2020

Background:

The New Mexico Bioscience Authority (NMBSA) was created in 2017 by the legislature as an official state agency and the state's first public-private partnership. The NMBSA is administratively attached and an affiliated organization to the University of New Mexico Health Sciences Center, and is tasked with building a robust bioscience industry in New Mexico.

The mission of the NMBSA is to increase awareness and support for New Mexico's bioscience sector by attracting entrepreneurs, capital investment and businesses; influencing policy; and assisting in infrastructure and business development. Created under the Bioscience Development Act in 2017 and later recognized as a Center of Excellence, the organization seeks to build a stronger bioscience economy in New Mexico by fostering public-private collaboration and promoting coordination between universities, research entities and the private sector. Through strategic funding, community outreach and policy recommendations, the Authority aims to create cohesive strategies to bring biotechnology to market, generate high-paying jobs, and strengthen New Mexico's economy.

The NMBSA has a dual role of being the state's bioscience oversight authority, as well as one of Governor Michelle Lujan Grisham's Center of Excellence.

State Funding:

In FY20, we received \$63,000 of recurring funding and \$250,000 as a Center of Excellence. In FY21 we received \$59,200 of recurring funding and \$235,000 as a Center of Excellence.

Primary NMBSA Activity:

1. **Completion of a Strategic Plan for NMBSA and start of its implementation:** In August of 2019, the NMBSA engaged a third-party, Econsult Solutions, Inc. (ESI) to assist in developing a strategic plan. We worked through an eight-step process in the development of the strategic plan, with the goal of providing the NMBSA with a three to five year roadmap, which can be used to build the organization and set it on a trajectory

of success in building New Mexico's bioscience economy. The chair sought input from every board member and conducted an exhaustive process of capturing elements that each board member believed to be imperative components of the strategic goals of the NMBSA. In April the final step was presented to the board for final affirmation of the plan at the Board of Director's meeting and there was unanimous consensus of all board members present that this be the final version to work from, and amended as needed. The plan provides a clear sense of where the organizational mission, organizational assets, key partnerships, programmatic momentum, funding interest, legislative initiatives and market needs intersect. The three goals of the plan are:

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- Establish NMBSA as a Model for Bioscience Development and Organizational Management
- Take leadership Role within the NM Bioscience Ecosystem
- Provide Funding for NM Bioscience Growth and Innovation

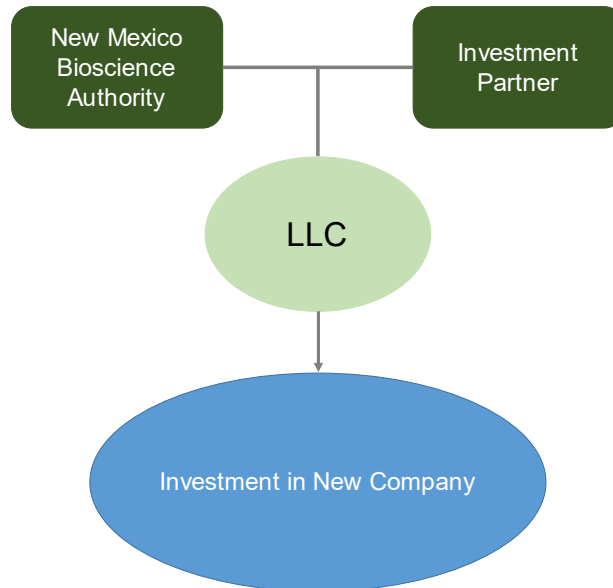
The final version of the Strategic Plan will be shared with Secretary Alicia Keyes, with the goal of assisting the NM Economic Development Department with their overall strategic plan for the state.

2. **Bioscience Accelerator Development:** One of the most challenging, but gratifying accomplishments was the establishment of a relationship with the Bioscience Accelerator, ASCEND grant (for Accelerating Solutions for Commercialization and Entrepreneurial Development) with the NMBSA. The University of New Mexico Health Sciences Center and the University of Montana were chosen to be co-academic leads for the project and received a \$3.5 million Small Business Technology Transfer grant from the National Institute of General Medical Sciences. The NMBSA is partnering with ASCEND on educating faculty within various institutions on how to commercialize their research, as well as assisting with finding start-up funding, talent recruitment and training and private partner development. The goal is to accelerate technology transfer

of scientific discoveries from participating universities, including the University of New Mexico and New Mexico State University.

3. **Community Readiness Program:** The NMBSA recognizes that business location is one of the most critical aspects of business success and future growth. In partnership with the City of Albuquerque, the NMBSA launched its Community Readiness Program. The City of Albuquerque and the NMBSA identified eight “Zones” that were certified with regards to infrastructure and zoning, as well as incentives, which are critical for early stage and start-up business success. These Zones, as well as Bio-ready scoring is now located on our newly developed website where local economic development entities and site selectors can use as a tool for recruitment of bioscience companies. Other municipalities, such as Rio Rancho, Santa Fe and Clovis have now began identifying and will start scoring Zones within their cities. Due to Covid-19 implications, our February 2020 event in Las Cruces has been delayed. Dr. Richard Larson and other NMBSA staff will be putting on an information session regarding the Community Readiness Program in Las Cruces in cooperation with New Mexico State University at a future date. The data received by each municipality will be continually posted and updated on our website, as well as shared with the NM Economic Development Department, the NM Partnership, other economic entities and economic development departments in cities and counties throughout the state.
4. **Direct Investment Fund:** As we have communicated frequently, one of the most needed aspects of successful business creation and growth is dependent upon available financing. The NMBSA was created to assist startups and existing companies with obtaining adequate financing. With the endorsement of the Science, Technology and Telecommunications Committee, a recommendation from Econsult Solutions, Inc. (ESI), who assessed New Mexico and optimally determined and recommended that to establish a vibrant bioscience industry, a \$25 - \$50 million Direct Investment Fund and a \$100 million endowment was needed, and with legal work from Modrall Sperling Law

Firm, who provided advice on a legal structure for a Direct Investment Fund, Senator Munoz sponsored legislation - Senate Bill 61 - during the 2020 session.



The above diagram displays the relationship of the NMBSA with its investment partner(s) and how an LLC would be created for investment in a new company. Below is the criteria to be an investment partner:

- Qualifies to be lead investor
- Will provide a 2:1 match of funds
- Funds New Mexico bioscience start-ups, early stage or existing bioscience companies or companies relocating to New Mexico
- Has greater than five years' experience in sourcing, vetting and investing in companies
- Has existing capital for co- investment and is currently investing in bioscience companies

As a pilot program for co-investing, the NMBSA issued an RFP for co-investment opportunities and has selected two New Mexico based investment organizations for potential co-investment. Both organizations have received a Memorandum of

Agreement (MOA) from the NMBSA and once signed, will present sourced opportunities for investment in New Mexico based bioscience businesses.

5. Marketing Tools:

- a. In 2020, the NMBSA built a new, up-to-date, cutting edge website that is more user friendly and contains elements for recruitment, like the data and maps in the Community Readiness Program section. The website was designed to be a tool that economic development entities and site selectors can use as a tool to educate bioscience businesses looking to startup or relocate in New Mexico.
- b. The NMBSA also participated with other economic development entities, such as the City of Albuquerque Economic Development, the New Mexico Partnership, Albuquerque Economic Development, NM Bio and Arrowhead Center in a New Mexico Report for Site Selection Magazine.

The digital version of the report may be found here:

<https://siteselection.com/digitalEdition/2020/jul/#page=135>

- c. The NMBSA also has produced a one page info sheet and a Community Readiness Trifold to help elected officials, community leaders and businesses understand the mission of the NMBSA.

- 6. Organizational Evolution:** Being a de novo entity, the NMBSA continues - with input from staff and the board - going through organizational evolution. The chair has put together a task force to examine and evaluate the current Bylaws. This evaluation will result in a more robust organization that better accomplishes the strategic goals which were outlined in the enabling legislation.

Anticipated Requests for FY22:

1. Continue to receive \$235,000 appropriated as recurring in FY20 as one of Governor Lujan Grisham's Center of Excellence.

2. Continue to receive \$59,200 in a recurring appropriation from the legislature for operations.
3. Request \$25 - \$50 million from the legislature for a direct investment fund. This would allow for direct infusions of capital (between \$1.5 and \$2 million per year) in the New Mexico bioscience startup community, as well as assist fledgling companies seeking additional capital. The fund will also be used as a tool for recruiting biosciences companies looking to relocate to another state.
4. Continue dialog of a \$100 million endowment with key stakeholders, state government, private industry and public universities, which will ultimately distribute over \$5 million per year for workforce development, research grants and entrepreneurial support.

Additional Partnership Activities

1. Albuquerque Hispanic Chamber of Commerce (AHCC) – The NMBSA is committed to developing and implementing programs to reach out to various areas and diverse communities of the State of New Mexico, including those that are focused on improving the health status of New Mexicans. Through execution of a **Collaboration Agreement**, the NMBSA and the Albuquerque Hispanic Chamber of Commerce (AHCC) have agreed to work together to promote Hispanic-led technology businesses in Albuquerque and New Mexico. The NMBSA and the AHCC will meet on a mutually convenient basis to coordinate ongoing activities between them; review performance on common projects and explore ways to further enhance their collaborative efforts. The NMBSA and AHCC have committed to developing cooperative projects and have agreed to develop a pipeline that is a reciprocal model that perpetually and continually improves the local Hispanic tech business community. The NMBSA is pleased to communicate that it is currently working with the AHCC in bringing a Hispanic lead pharmaceutical company to the Albuquerque area.
2. University of New Mexico Health Sciences Center - The UNM Clinical & Translational Science Center planned on hosting its 3rd annual **UNM HSC BioVenture Partnership Event**. The BioVenture Partnership Event is a unique opportunity that will bring together UNM faculty, inventors, biotech innovators, and investors to promote bioscience in our community. The event promoted networking among New Mexico companies (both start-up and established) in the “bio” arena, investors/angels, and UNM faculty/inventors. This first-of-its kind event allowed local bioscience inventors a rare opportunity to “pitch” their ideas to experts in commercialization and economic and business development in a “Shark Tank” style pitch event. Due to Covid-19, this event has been postponed for a future date.
3. NMBio’s Third Annual Knowledge Fair & Expo Educational Program on NM’s Bioscience Sector – On October 10, 2019 Ryan Cangioli, Director of Strategy and Policy spoke at an

event that was held in Albuquerque. He provided an update on the NMBSA and its focus on bio industry trends and bioscience bills that were introduced in NM's 2020 legislative session, as well as in Congress. Speakers from other states discussed catalysts that stimulates rapid growth of the bioscience sector. Invited guests includes elected officials, as well as, the governor elect, board members from NMBio and the Bioscience Authority, the Mayor of ABQ and leading economic development professionals.

Administrative Activities

1. Amended the Bylaws to result in a more robust organization that better accomplishes the strategic goals which were outlined in the enabling legislation
2. Filed a Form 990-series tax return (990EZ) in November of 2019.
3. Hired Econsult Solutions (ESI) to develop a strategic plan for the NMBSA. The plan has been completed and accepted by the board. It is currently being implemented.
4. The NMBSA leased permanent space at the Verge Building located at 317 Commercial NE.

Board of Directors

New Mexico Bioscience Authority						
Board of Directors 2019-2020						
	Representative Organization	Appointed By	Name	Term	Term Start Date	Term End Date
1	University of New Mexico Health Sciences Center	University President	Richard S. Larson	4 years	5/25/2017	5/24/2021
2	University of New Mexico Health Sciences Center	University President	Christos Christodoulou	4 years	5/25/2019	5/24/2023
3	New Mexico State University	University President	Jennifer Gifford	4 years	6/22/2019	6/21/2023

4	New Mexico State University	University President	Immo A. Hansen	4 years	6/22/2017	6/21/2021
5	New Mexico Institute of Mining and Technology	Institute President	Thomas L. Kieft	4 years	6/13/2017	6/12/2021
6	NM Secretary of Economic Development or Designee	Designated by NM Sec'y of Economic Development	Myrriah Tomar	Ex Officio	N/A	N/A
7	Spaceport Executive Director	NA	David Bushman Designee	Ex Officio	N/A	N/A
8	Member of the Public	Governor	Dale Dekker	4 years	8/1/2017	12/31/2021
9	Member of the Public	Governor	Sheryl Arvizu	4 years (partial term)	9/20/2019	9/1/2023
10	Member of the Public	NM Legislative Council (Egolf)	Kenneth Prokuski	3 years (partial term)	3/6/2019	6/18/2022
11	Member of the Public	NM Legislative Council (Egolf)	Greg Byrnes	3 years	8/30/2017	6/18/2020
12	Member of the Public	NM Legislative Council (Papen)	Suzanne Quillen	4 years	8/30/2017	6/18/2021
13	Member of the Public	NM Legislative Council (Papen)	Stuart Rose	4 years	6/24/2019	6/18/2023



NM Bioscience Authority Update and Request

Richard S. Larson, MD, PhD
President and Chair

September 2, 2020

Why Bioscience Industry in New Mexico?

Bioscience innovation is a catalyst for improving our state's health, productivity and economic development.

- High paying, green jobs
- University research and patents
- Workforce Generation
- Existing companies & entrepreneurs
- Some Financing
- Bioscience Authority



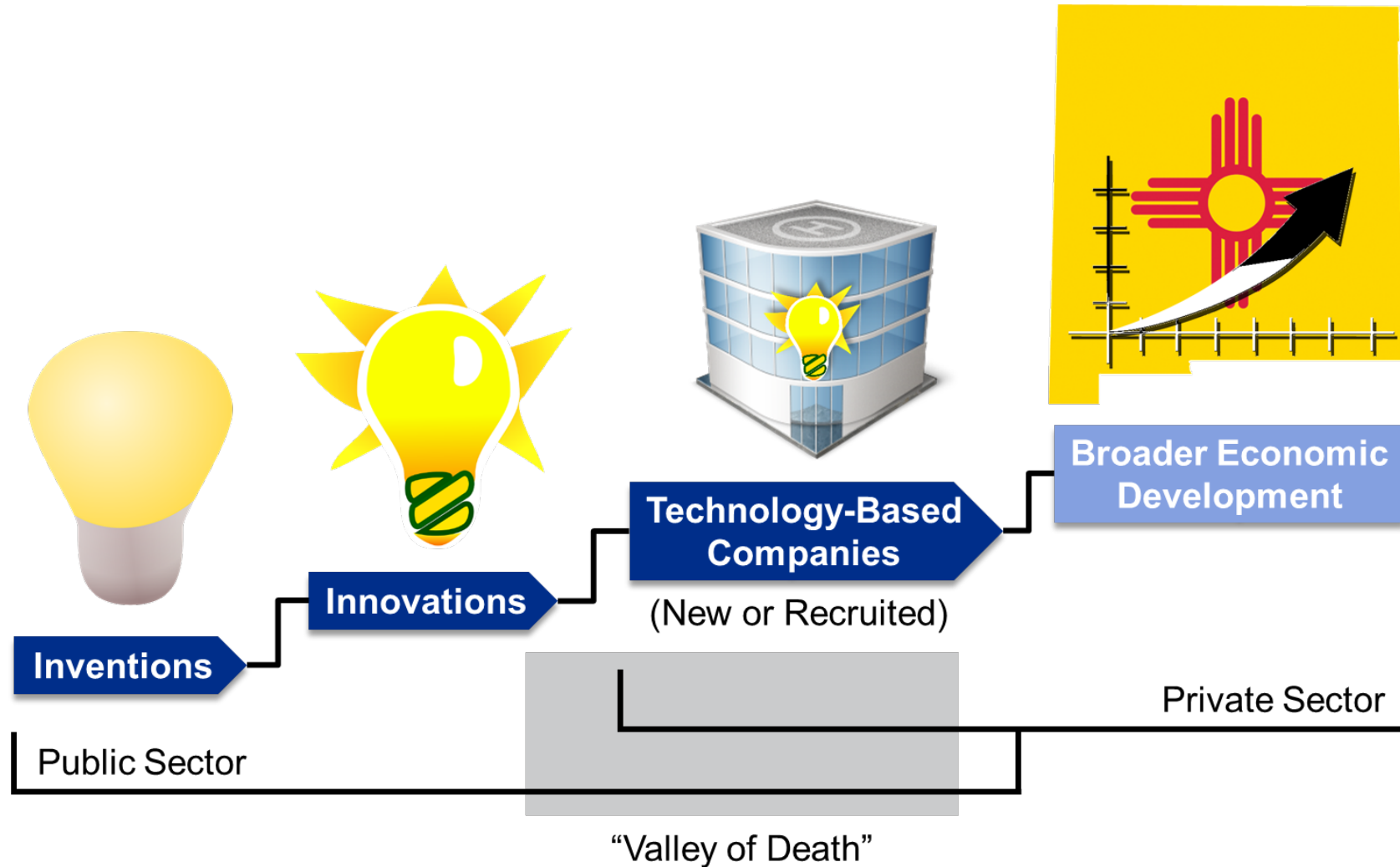
What is Bioscience?

Six Industries Make Up 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



How New Companies Are Created



Effective Public-Private Partnership in 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

Example of Success

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

intellicyt



 sartorius

Commercialization

Since 2002, 61 new private companies were either spun off from the University of New Mexico Health Sciences Center or used technology from the university to start up.

Companies focused on drug development, cancer therapies, molecular imaging, medical diagnostics, software development, genetics, and more.



Key Metrics

Growth in Bioscience Research Funding, UNM HSC

- 2020 (\$206M)
- 1993 (\$25M)

Availability of Workforce (NM Graduates in Bioscience- Related Fields, 2009 – 2013)

- Natural Sciences (4,271)
- Health Professions, excl. BSN (4,379)
- Engineering/Tech/CS (6,718)
- Business (10,941)

Employment Index Increase, 2001 – 2016

- Bioscience (19% increase)
- Total Private Sector (10% increase)

Bioscience Leads NM Patents, 2011 – 2015

- Biosciences-related (~ 275)
- Computer/Data science (~ 250)
- Optics (~ 150)
- Electricity (~125)
- Communications (~120)
- Chemicals (~25)

Bioscience Leads in Salaries

- Bioscience (\$87.4K)
- Engineering (\$85.6K)
- Communication (\$84.1K)
- Mining (\$78.7K)
- Computing (\$74.1K)
- Aerospace (\$71.5K)

Background of the New Mexico Bioscience Authority

- The New Mexico Bioscience Authority was created in 2017 to support and cultivate the bioscience industry by attracting investment, influencing policy and assisting in the development of the critical business infrastructure needed for start-ups, business recruitment, R&D, and entrepreneurship.
- New Mexico Bioscience Authority is the states only public-private partnership.
- In 2019, Governor Lujan Grisham established four Centers of Excellence, and re-establish funding through UNM. The NM Bioscience Authority/UNM Health Sciences is one of the four.

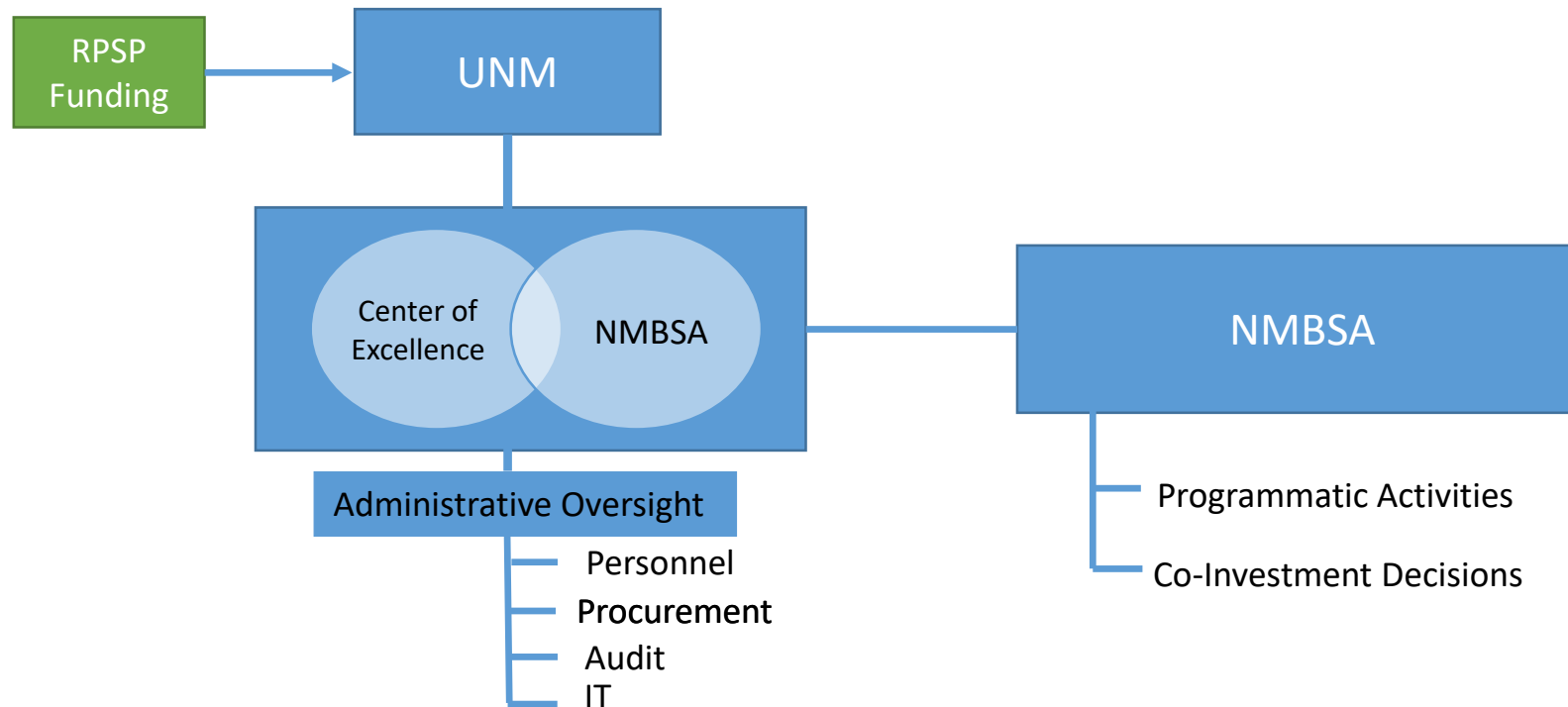
Activities of New Mexico Bioscience Authority

- Advise state leadership on initiatives that may stimulate investment and provide jobs
- Create programs to expand bioscience economic opportunities
 - Community Readiness Program
- Connect New Mexico and representatives of bioscience industries
- Promote legislation to grow the bioscience industry
- Produce promotional literature related to explanation and fulfillment of the NMBSA's goals
- Identify science and technology trends and be a clearinghouse for bioscience enterprise issues
- **Direct Investment & Funding**
- Endowment for long-term investment
- Actively recruit bioscience businesses to New Mexico



New Mexico Bioscience Authority

- 12 person board (appointed by Governor, Speaker of the House, Senate Pro-Tempore, Mary Kay Papen, and University Presidents).
- UNM affiliated to assure conformity with state procurement rules, statutes and guidelines.



Initiative #1: Community Readiness:

The Path to Make New Mexico Bioscience Ready

What Community Readiness means for New Mexico?

- Attract Bioscience companies and startups
- Foster Bioscience industry growth
- Help municipalities create innovation zones
- Facilitate Bioscience site selection
- Current sites include Albuquerque, Rio Rancho, Las Cruces, Santa Fe and Clovis

Community Readiness Rating:



BRONZE
Local governments have identified sites that are served by utilities and have a process in place to assist bioscience businesses.



GOLD
Local governments have identified sites within Opportunity and/or tax advantage location, have expedited development processes, have available suitable buildings, have invested in enhanced transportation and logistics infrastructure and are partnering with universities and colleges to train workforce.

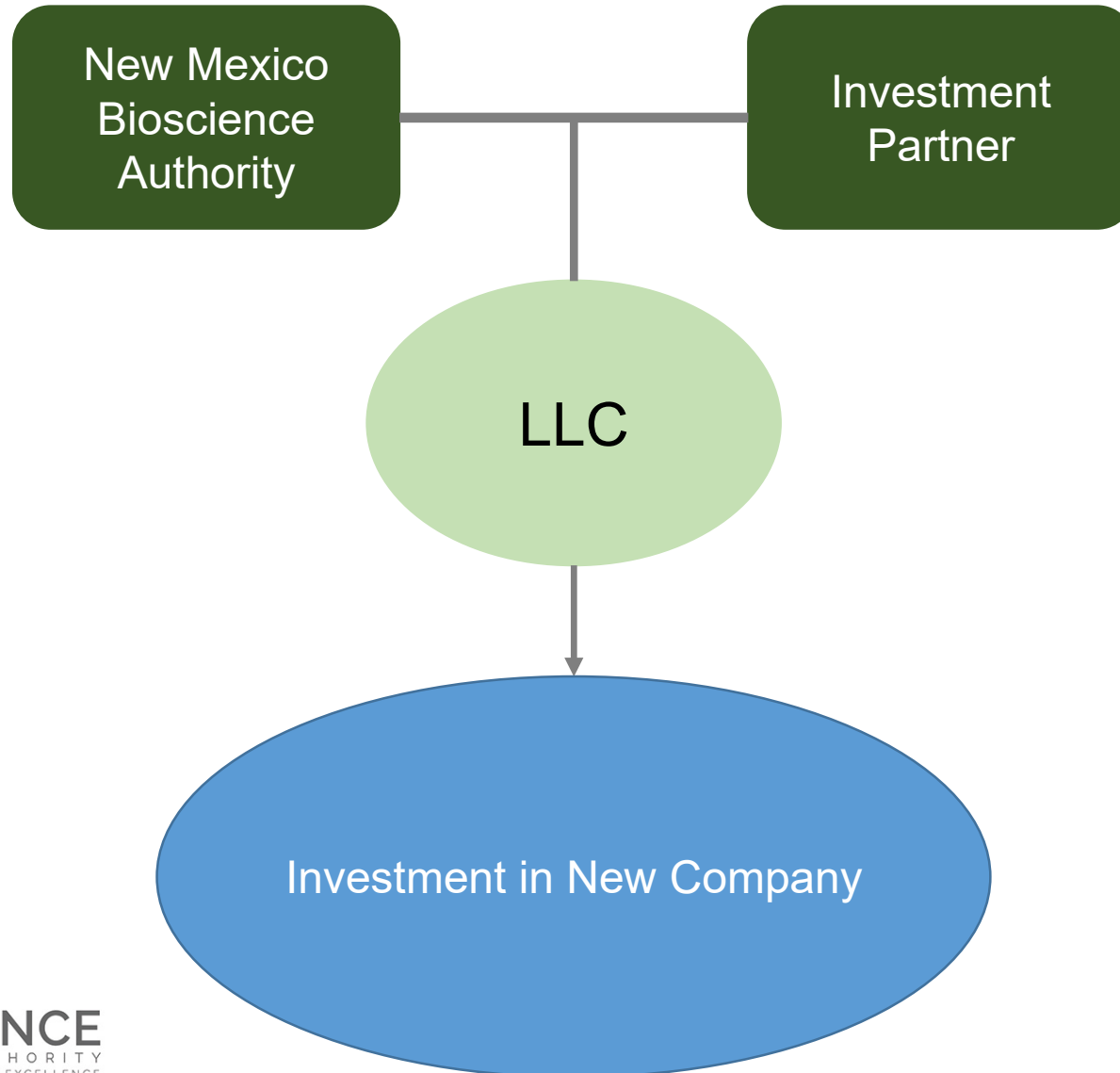


SILVER
Local governments have 'shovel ready' sites, have development incentives and have identified point person to assist bioscience businesses through the process.



PLATINUM
Local governments have an inventory of suitable buildings and sites, sites are pre-permitted for bioscience uses, sites have completed NEPA review, and local governments assist bioscience businesses with identifying funding sources.

Initiative # 2: Creating NM Companies & Jobs Through Co-Investment



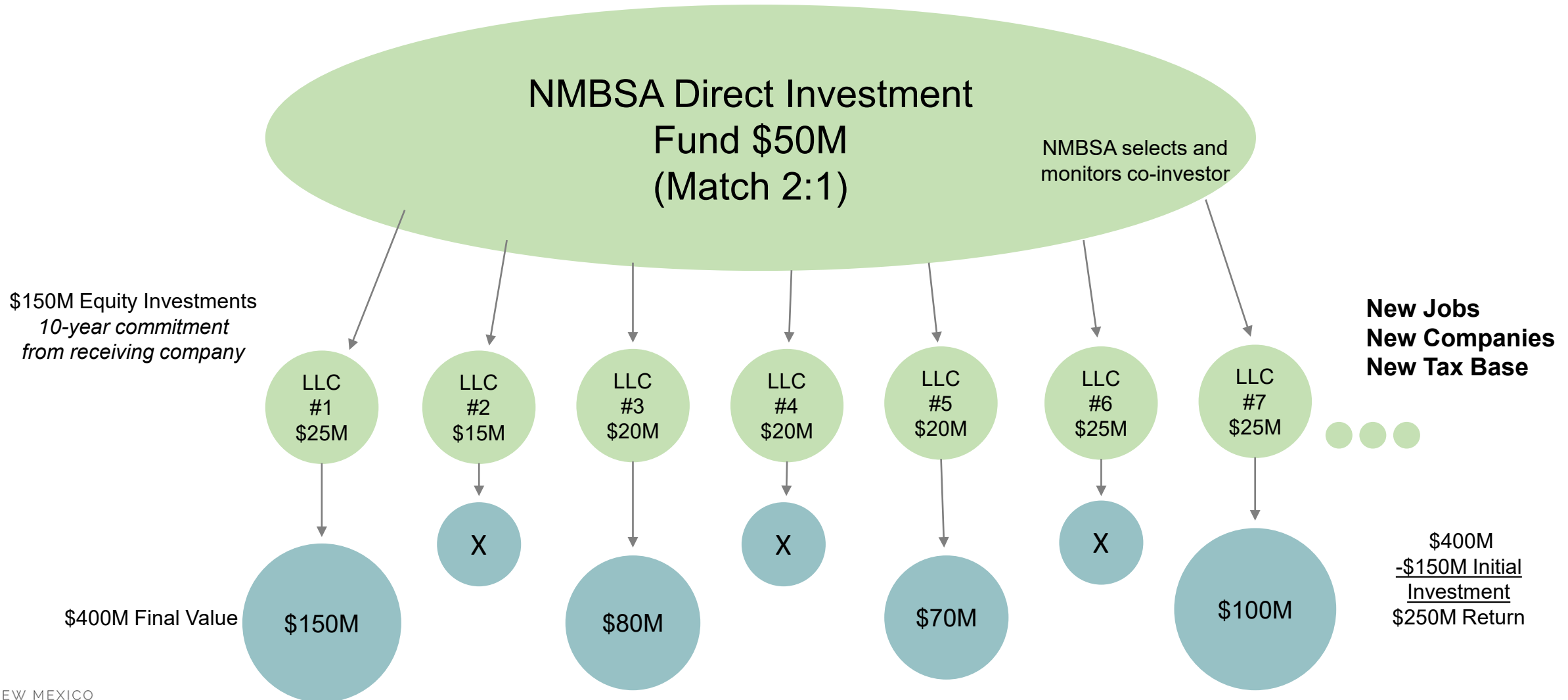
Investment Partner Criteria

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Selection of Co-Investment Partners

- Issue RFP per state procurement rules
- BSA Board selects co-investor
- Formation of LLC through contract with co-investment partner that takes equity or equivalent.
- New Mexico and investment partner benefit financially with company success or purchased (“exit”) by another company.

How Co-Investment Grows the Economy



Questions?

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