



NM Bioscience Authority

*Presenting on behalf of the New
Mexico Bioscience Authority:*

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President, NM Bioscience Authority
Executive Vice Chancellor, UNM HSC
Vice Chancellor of Research, UNM HSC

August 4, 2021

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



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



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)

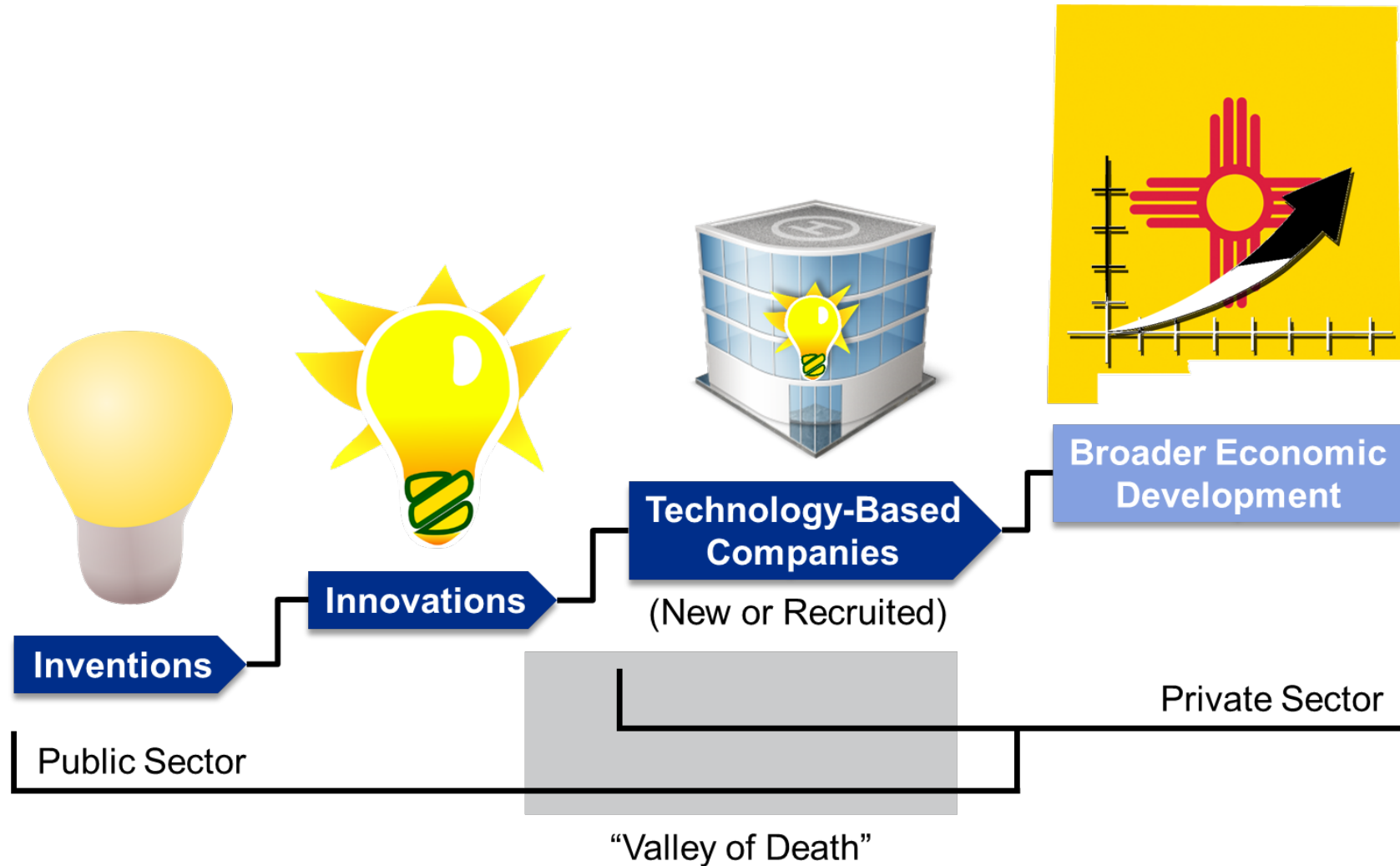
Bioscience Leads NM Patents, 2011 – 2015

- 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)

How New Companies Are Created



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 (workforce)

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)

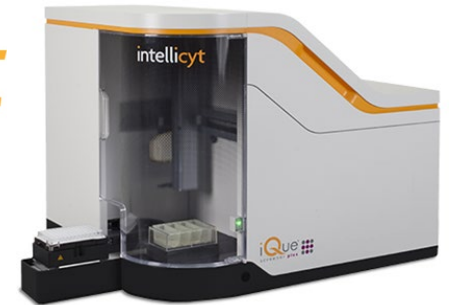
Raised approximately \$20 Million

- 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

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 sartorius

Commercialization of Bioscience

Since 2004, over 60 new bioscience start-up companies have spun out of the University of New Mexico, New Mexico State University and New Mexico Institute of Mining and Technology

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



History of the NM Bioscience Authority (NMBSA)*

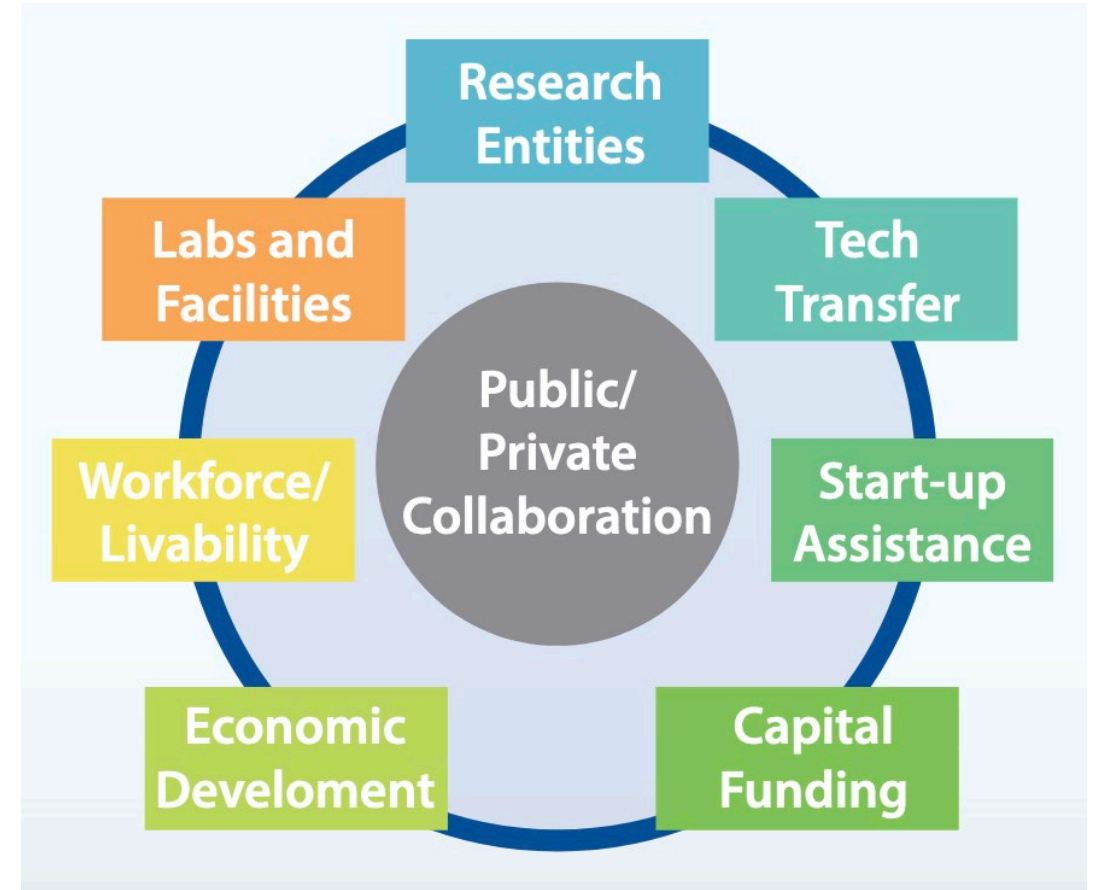
Public/Private working group with consultant identified in bioscience industry as being potential driver of economic growth in New Mexico.

Senate Bill 478, the Bioscience Development Act was passed to create the NM Bioscience Authority



Produced GrowBio Report that reviewed best practices and identified needs in New Mexico to grow bioscience.

Governor Lujan Grisham established four Centers of Excellence which includes the UNM/HSC with & NMBSA



*NMBSA Reports annually to STTC (fall), Governor's Office (November), HED (fall)

NMBSA

Mission & Vision

Mission

To increase awareness and support for New Mexico's bioscience sector by attracting capital investors, influencing policy and assisting in infrastructure and business development. The NMBSA connects all necessary elements of: Research & Development, Technology Transfer, Investment and Funding and Workforce.

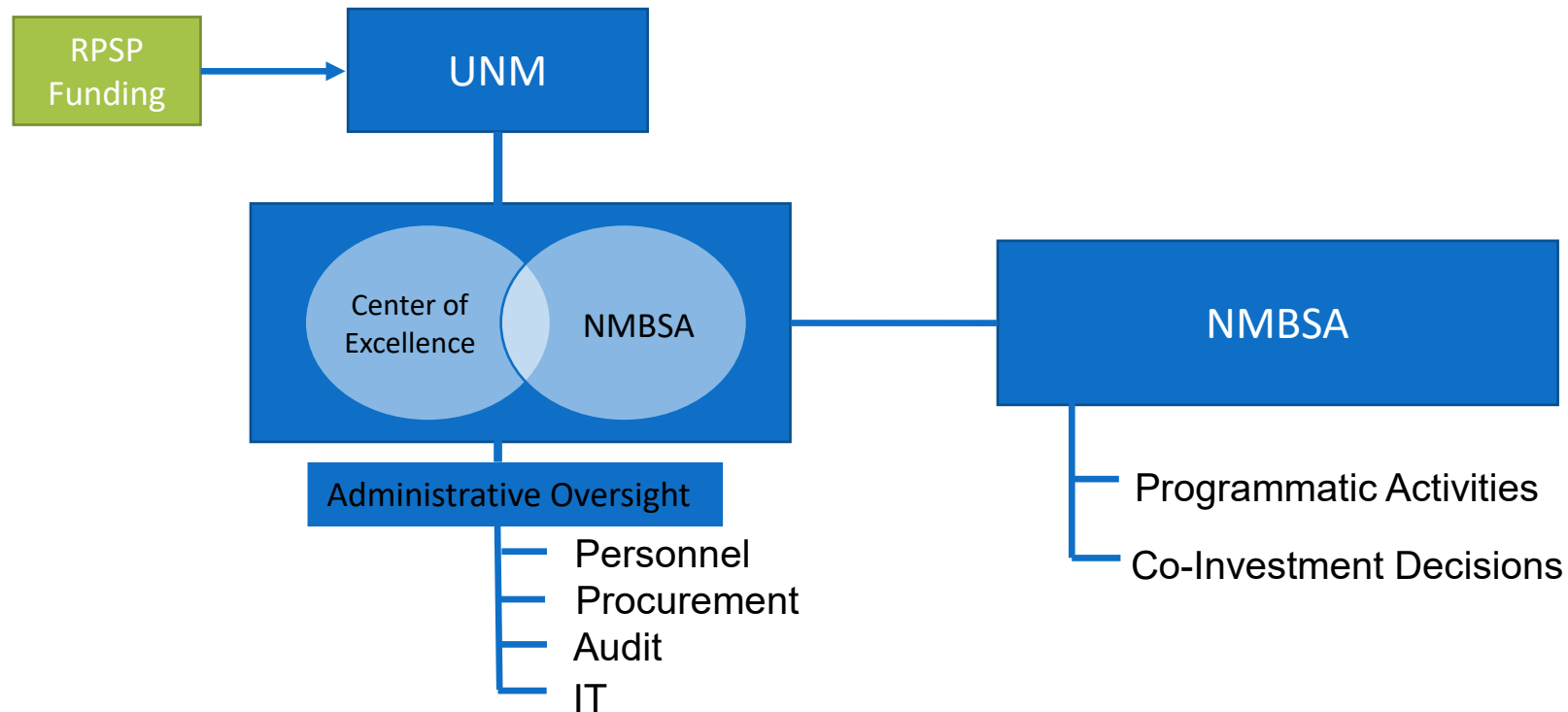
Vision

To grow a robust bioscience industry in New Mexico.



Organization of NM Bioscience Authority

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





Dale Dekker, AIA, AICP, Chair
Registered Architect and Founder of
Dekker/Perich/Sabatini Design Firm



Sheryl Arvizu, Vice Chair, Board
Director, Pharmaceutical Specialist



Richard S. Larson, MD, PhD,
President, Executive Vice Chancellor,
Vice Chancellor for Research UNM HSC



Christos Christodolou, PhD, Vice
President, Dean of the School of
Engineering at UNM



Suzanne Quillen, RN, MPA,
Secretary, Vice President of Healthcare
Innovation for Ernest Health



Greg Byrnes, Board Member,
Executive Director at the New Mexico
Biotechnology & Biomedical Association



Jennifer H. Gifford, PhD, Board
Member, Assoc. Professor in Animal
Range Sciences Dept. at NMSU



Tom Kieft, PhD, Board Member,
Microbiologist NM Tech Biology
Department



Scott McLaughlin, Board Member,
Executive Director at Spaceport America
of New Mexico



Myrriah Tomar, PhD, Board
Member, Director of the office of
Science and Technology for NM EDD



NM Bioscience Authority Board of Directors

- 2 members appointed by UNM President
- 2 member appointed by NMSU President
- 1 member appointed by NMT President
- Secretary of EDD or Designee
- Executive Director of SpacePort Authority or Designee
- 4 members appointed by Speaker of the House and Senate Pro-Tempore
- 2 members appointed by Governor

NM Bioscience Authority Staff



Stephanie Tofighi, MSPP
Executive Director



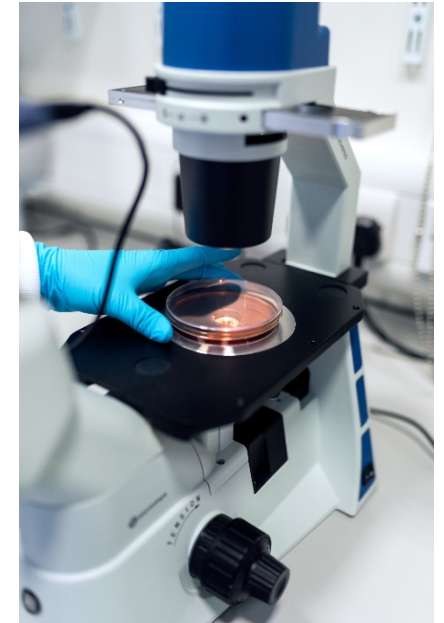
Ryan Cangiolosi, MBA, MACCT
Strategy & Policy Director



Sterling J. Nichols III, BS
Program Specialist

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
- **Co-Investment & Funding**
- Endowment for long-term investment
- **Actively recruit** bioscience businesses to New Mexico



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 #1: Community Readiness:

Currently Certified Sites



Albuquerque

- Mesa del Sol
- Innovate ABQ
- North I-25 / Balloon Park
- Sandia Science & Technology Park
- North UNM Campus
- UNM Science & Technology Park
- Volcano Heights
- Atrisco Business Park

Rio Rancho

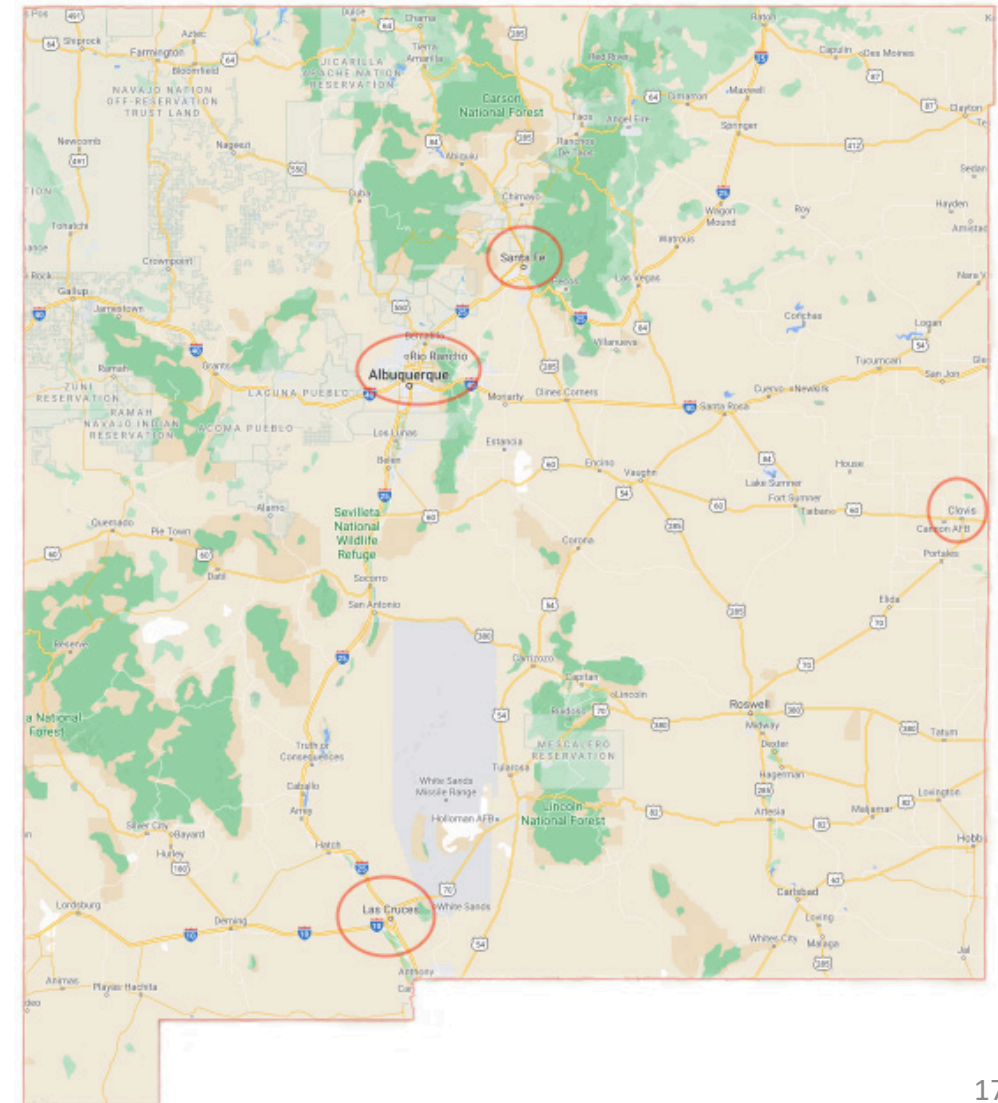
- City Center

Clovis, Santa Fe, Las Cruces

- Currently completing certification process

Initiative #1: Community Readiness: *Next Steps*

- We're in the process of identifying and working with other communities, both rural and urban, throughout the state who could benefit from the community readiness certification.
 - Los Alamos
 - Socorro
 - Taos
 - Gallup
- Preparing an informational session for stakeholders in Las Cruces that wasn't able to happen during COVID.
- Contact Stephanie Tofighi at stofighi@salud.unm.edu to begin the process in your community.

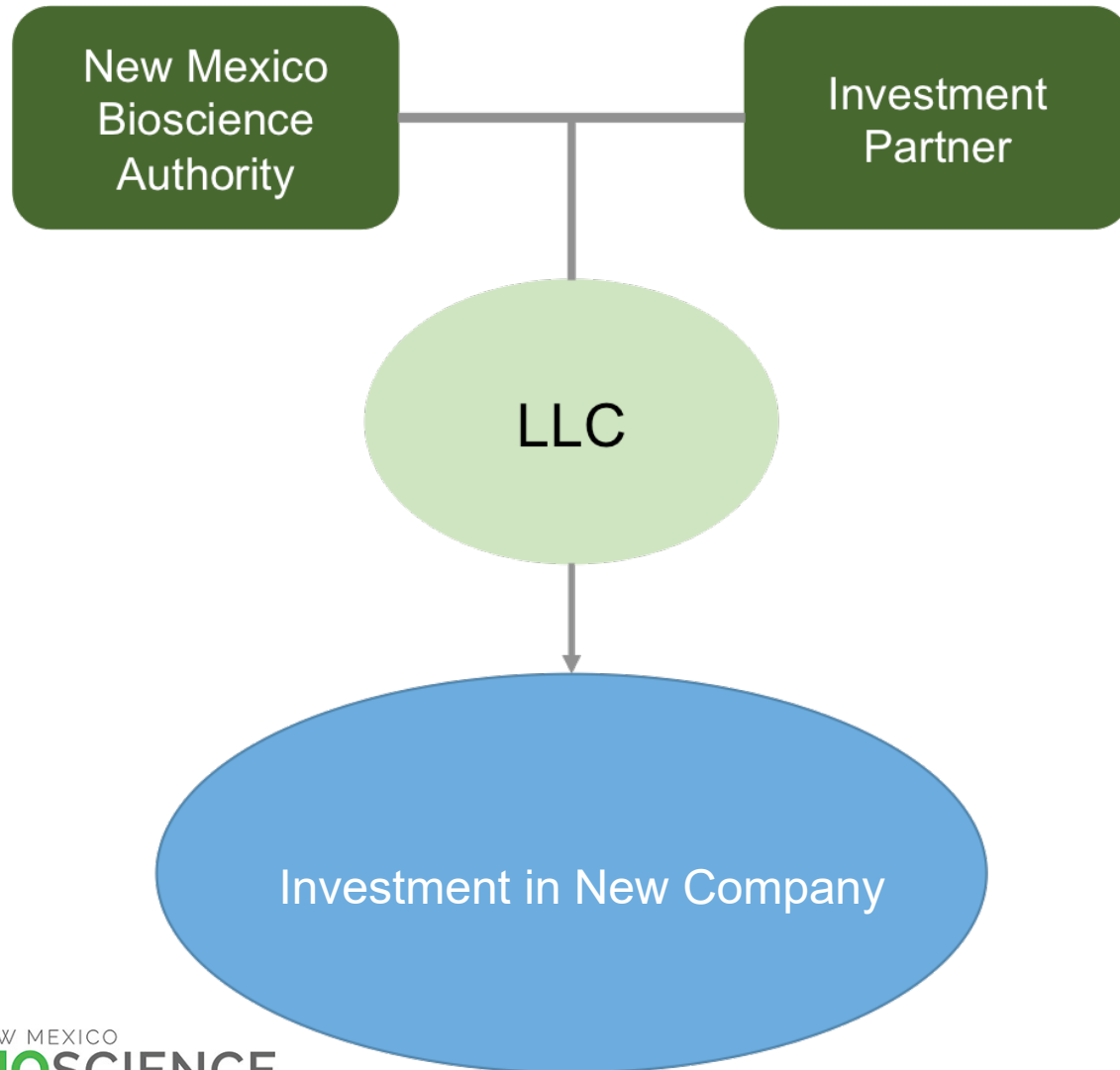


Expanding Community Readiness Certification Program to Rural NM

- NMBSA website will promote certified sites to potential businesses by highlighting their ratings, available resources, and location.
- Restarting certification process with Clovis, NM with plans to work with Clovis Industrial Development Corporation (CIDC) to include both Clovis and Curry Counties in site identification and certification
- Will work to expand this program to many communities.



Initiative #2: Co-Investment Program



Main Objective

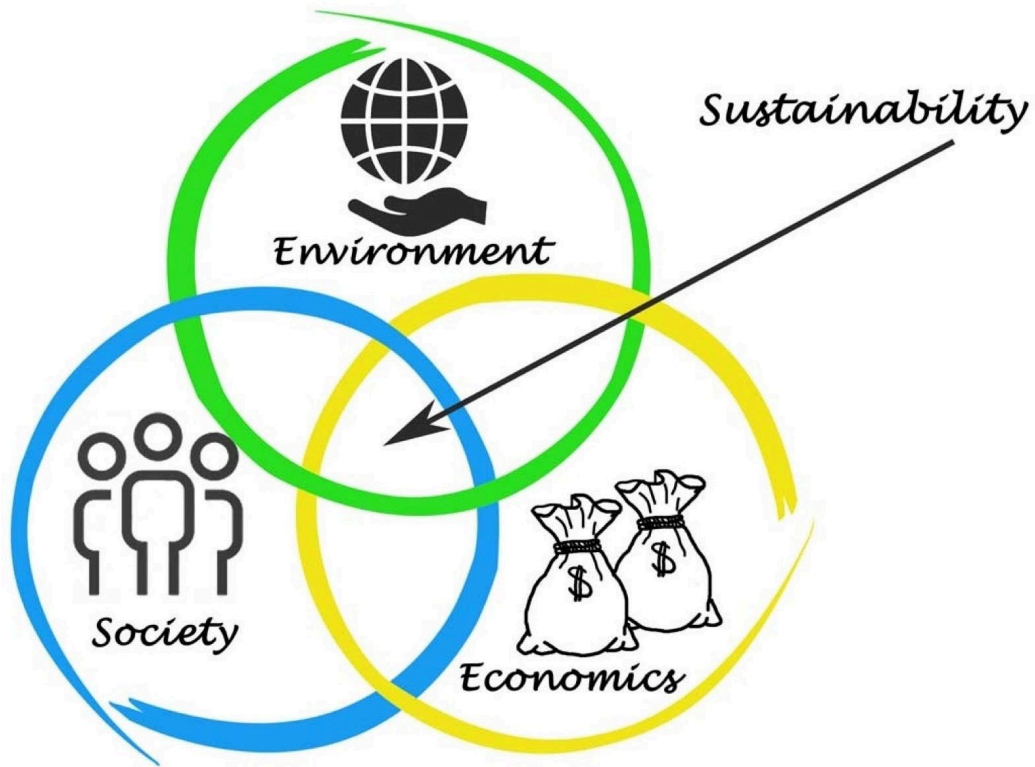
- Create NM Companies & Jobs
- Available to all investors in NM

Investment Partner Criteria

- Qualifies to be lead investor
- Will provide a 2:1 match of funds
- Has experience in sourcing, vetting and investing in companies
- Has investment experience in bio-related industry
- Has existing capital for co-investment and is currently investing in bioscience companies

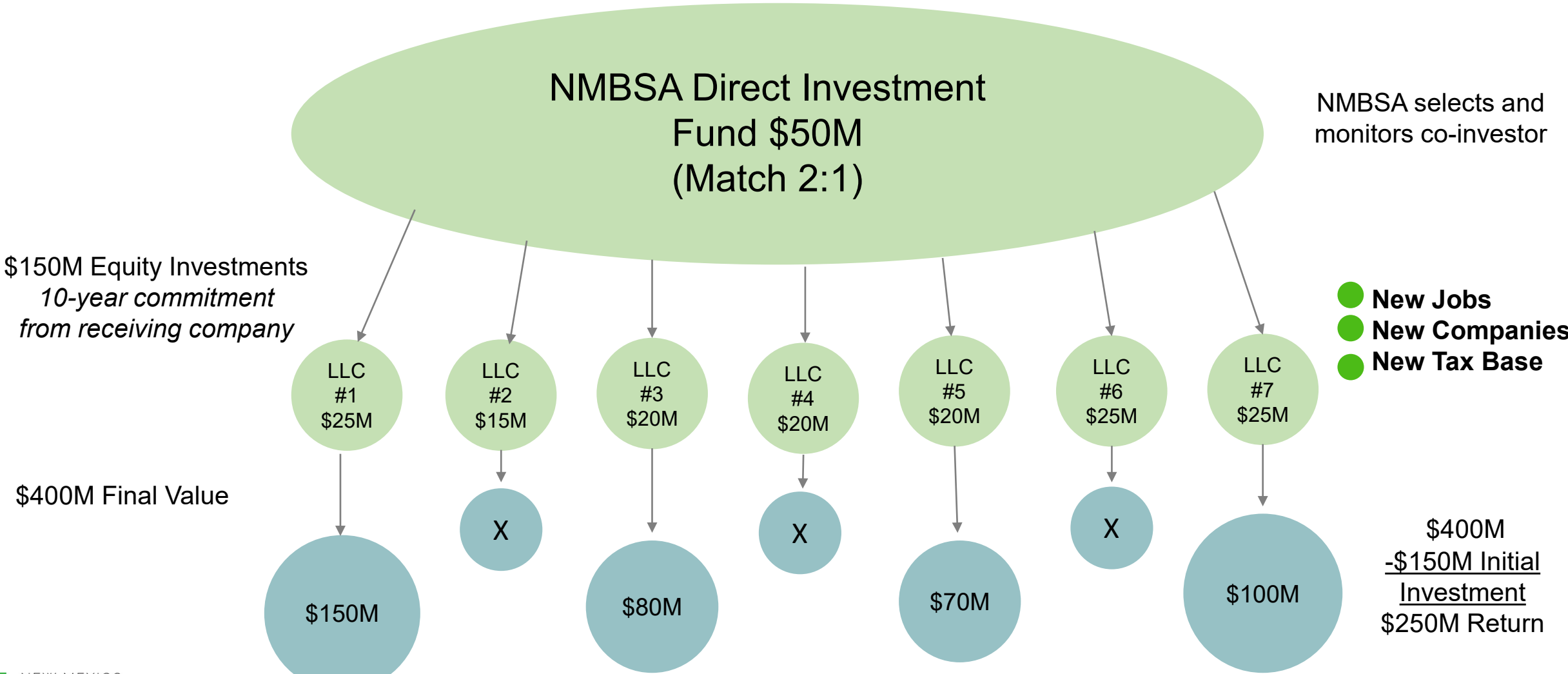
Co-Investment Model is Self-Sustaining

Next Steps to Consider



- All size municipalities can benefit.
- More capital is needed. The more capital there is, the more activity will occur.
- Need capital across spectrum of economic activity
- Include Main street businesses to higher tech companies.
- In bioscience space, this includes high tech companies making new drugs or devices, but also light manufacturing or distribution shops

Co-Investment Model is Self-Sustaining



\$25M Co-investment Program Request



Will invest over 5 years



Co-investment of state and private dollars to start new companies or recruit companies



Will Invest in all stages of business growth (pre-see, Series A, B,C; Main Street and high tech)



Will invest 100K to 1.5M per company



If successful, will return funds so program will be self-renewing



Will build economy throughout state



Selection of Pilot Program Co-Investment Partners Timeline

- July 2021 - Issue Request for Presentation (RFP) per state procurement rules to at least 25 venture capital companies already identified within New Mexico.
- September 2021 – Finalists will be asked to present to the BSA Board of Directors.
- October 2021 - Following approved evaluation criteria, the Bioscience Authority Board will select co-investors
- Formation of LLC or limited partnership agreement through contract with co-investment partner that takes equity or equivalent



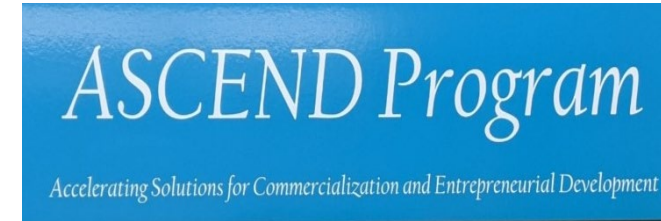
Initiative #3: Centralize State Resource Information

- NM BSA Website will serve as a conduit to investors, entrepreneurs, and inventors to gain awareness of and direction to state resources and economic development incentives.
- Individual support pages will direct these three types of users to resources across the state specific to their needs.



Initiative #4: ASCEND Program Partnership

- ASCEND is business accelerator at UNM that is currently federally funded. NMSU is already an ASCEND Hub partner.
- Statewide mission to train university faculty to work effectively with entrepreneurs to start bioscience businesses.
- Focuses on training to write federal grants (e.g. SBIR/STTR) and networking to form entrepreneur-university partnerships.
- The BSA will play the role of expanding ASCEND training, mentoring and workshops to new partners outside the current ASCEND Hub
- New partners may include SNL, LANL, UNM-branch campuses (Gallup); NM Tech; Community colleges (CNM) and others.



Initiative # 5: Enhance Communication with Stakeholders

- Design more robust webpage and track visitor traffic to adjust to their needs appropriately
- Establish stakeholder listserv to directly share information
- Develop NM BSA newsletter to begin bi-annually but transition to quarterly celebrating bioscience innovation and commercialism throughout NM
- Use social media to reach a more inclusive audience
- Seek out opportunities for public presentations



Next Steps of the NMBSA



1. Expand Community Readiness Certification Program to identify zones throughout NM that are suitable to host bioscience businesses
2. Release co-investment program
3. Redesign NMBSA website making it more user friendly for inventors, entrepreneurs, and investors
4. Facilitate small business grant training throughout the state
5. Enhance communication – newsletter & social media
6. Work with the Rural Economic Opportunities Task Force to compile list of local agencies involved in economic development or business start ups

Questions?

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Stephanie Tofighi, STofighi@salud.unm.edu

<https://www.nmbioscience.org/>