

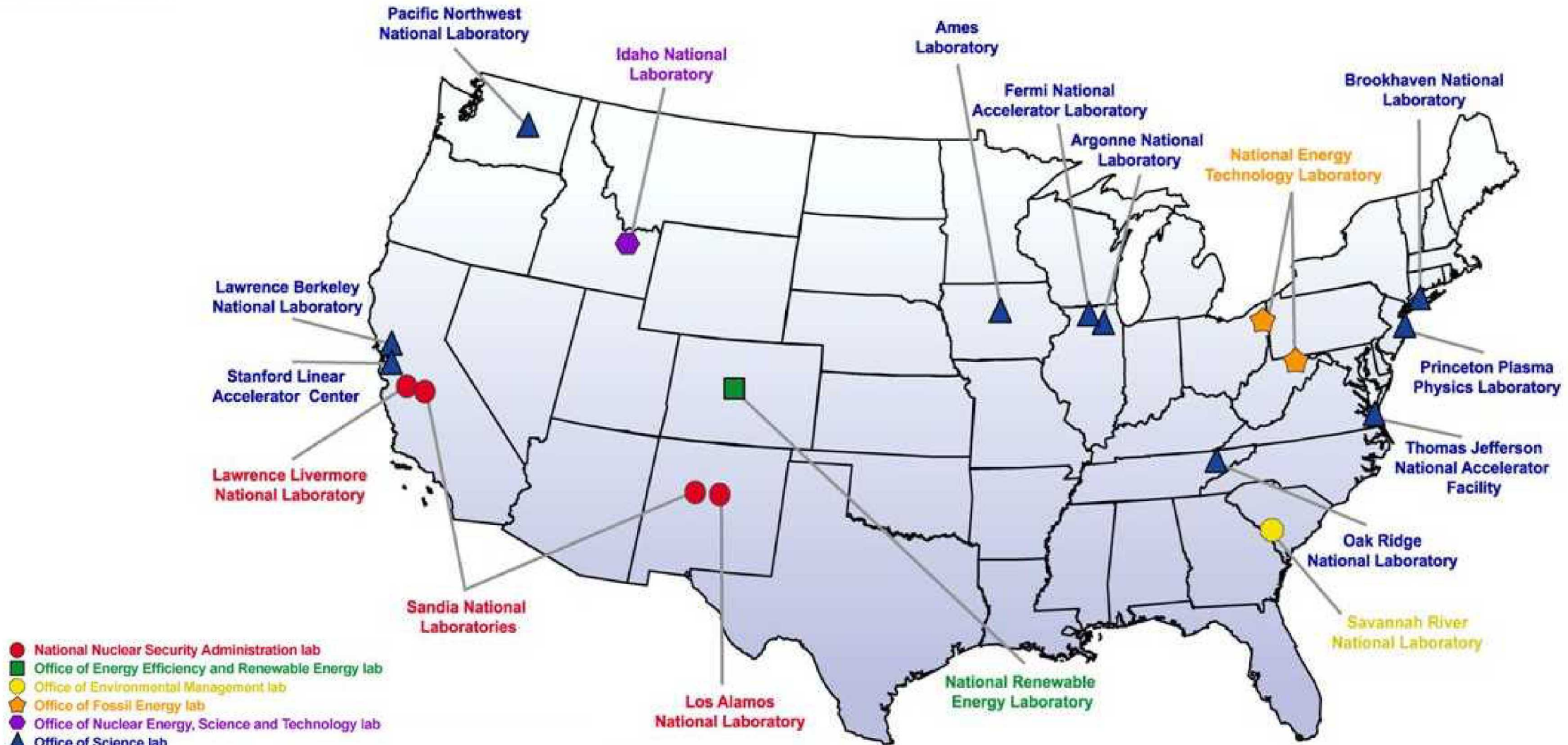
Why and How to Collaborate with Federal Laboratories to Advance Your Pursuits

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The Mission of the Office of Technology Transitions is to expand the commercial impact of the Department of Energy's research and development portfolio to advance the economic, energy, and national security interests of the Nation.

"Technology transfer" refers to the process by which knowledge, intellectual property, or capabilities developed at the Department of Energy's National Laboratories, single-purpose research facilities, plants, and other facilities ("Facilities") are transferred to other entities, including private industry, academia, and state or local governments. Such transfers may take many forms, including but not limited to Lab Partnering Agreements such as: Cooperative Research and Development Agreements (CRADAs) Cooperative Research and Development Agreement (CRADA), Work-For-Others Agreements (WFOs), User Facility Agreements (UFAs), and licensing of intellectual property.

- New Mexico Small Business Assistance
- Sandia Science & Technology Park
- Center for Collaboration and Commercialization





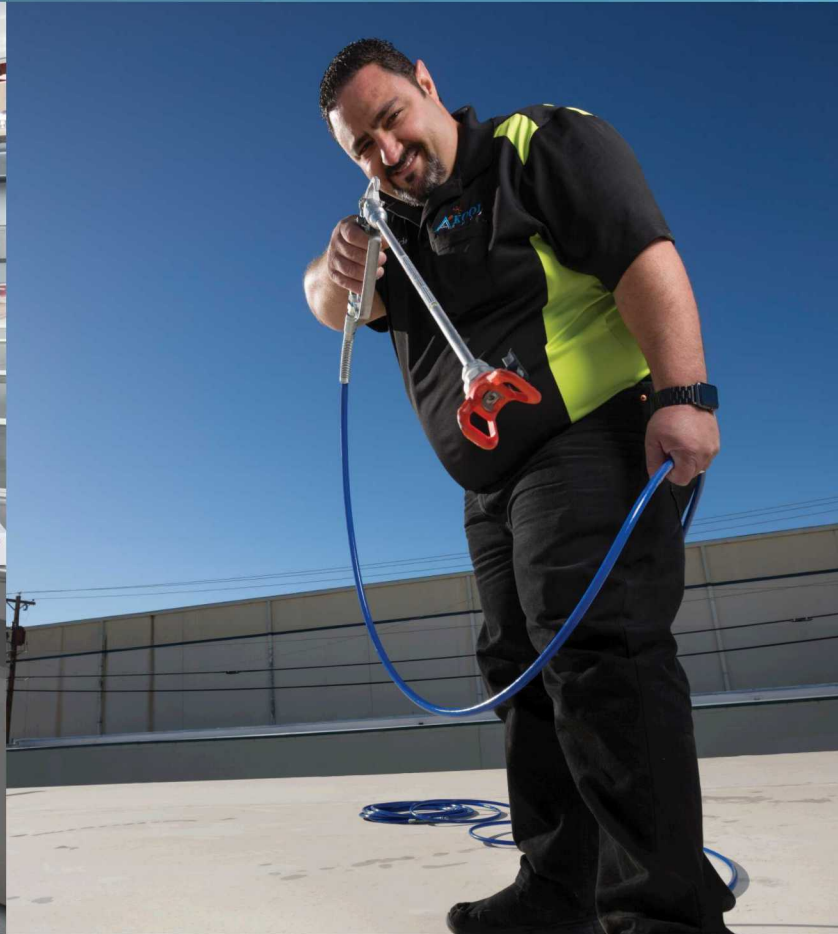
New Mexico Small Business Assistance (NMSBA)



- Governed by NM Statute: *Laboratory Partnership with Small Business Tax Credit Act*
- Public-Private Partnership between State of New Mexico, Sandia National Laboratories, Los Alamos National Laboratory, NM Small Businesses
- \$2.4 million per lab, per calendar year
- \$40K for rural companies, \$20K for urban companies, per calendar year
- Labs contract with UNM, NMSU, NM Tech, and NM MEP
- Serves all 33 counties in NM



Rhino Health



Kool Armor



McKenzie Land & Livestock Company

	SANDIA	
NMSBA Metrics	2000-2019	2019
Number of Small Businesses Served	2,347	192
Number of Counties Supported (out of 33)	33	21
Value of Assistance Provided	\$41M	\$2.4M

In 2019, **75 PIs** across **57 departments** at Sandia National Laboratories assisted NM small businesses.

NMSBA Joint Lab Economic Impact*	2000-2018
Small Business Jobs Created and Retained	8,778
Averaged Reported Salary (2018)	\$49,803
Increase in Revenue	\$396M
Decrease in Operating Costs	\$203M
Investment in NM Goods and Services	\$140M
New Funding/Financing Received	\$176M
*Surveys are performed six months to one year after project completion	



- Founded in 1998
- 340+ Acres
- Master-Planned Technology Community
- Affiliated with Sandia National Laboratories
- Adjacent to Kirtland Air Force Base
- Internationally Recognized



METRICS	
Number of Companies and Organizations*	48
Number of Employees*	2,221
Number of Buildings*	26
Public and Private Investment in the Park since 1998**	<div>Public</div> <div>Private</div> <div>Total</div> <div>\$89.0 Million</div> <div><u>\$300.6 Million</u></div> <div>\$389.6 Million</div>

*as of November 2019, **through CY18,

ECONOMIC IMPACT ***	
Cumulative Impact on taxable consumption (goods and services)	\$3.1 Billion
Cumulative impact on gross receipts tax revenue to the City of Albuquerque	\$22.5 Million
Cumulative impact on gross receipts tax revenue to the State of New Mexico	\$123.4 Million
Cumulative Increase in wage and salary disbursements attributable to Park activities	\$5.4 Billion
Average salary for each full-time job in the Park	\$98K
Average salary for each full-time Job in Albuquerque	\$46K

***through CY17



Center for Collaboration and Commercialization (C3)

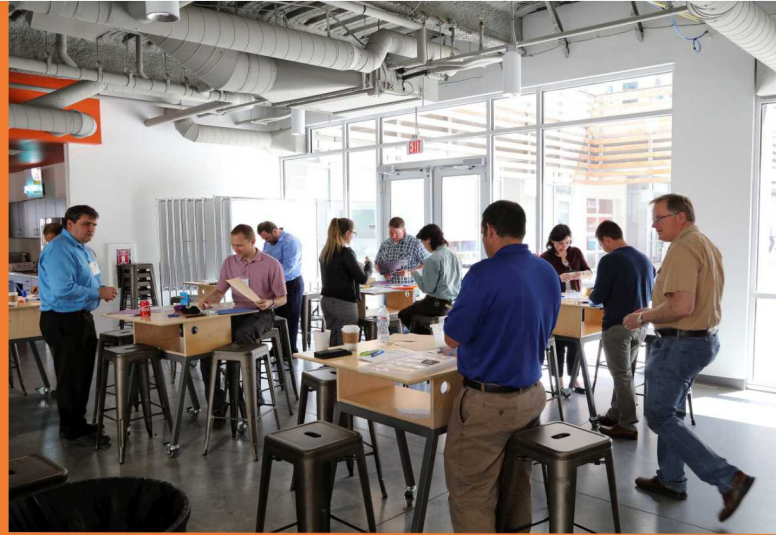
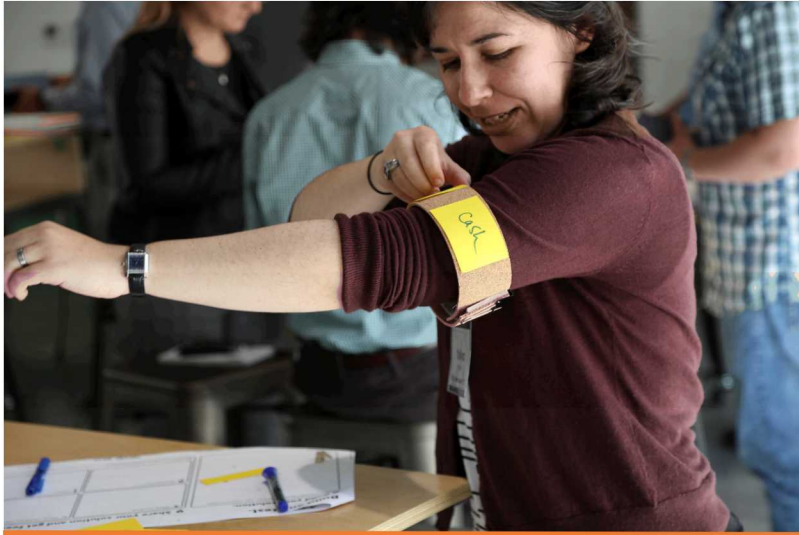
- Opened in 2017
- Front Door to Sandia National Laboratories in Downtown Albuquerque
- Dedicated to increasing partnership and tech transfer activities in support of our mission
- Designed to strengthen ties to the community
- Offers services to boost Sandia National Laboratories interactions with industry, academia, and government





Sandia National Laboratories Idea Sprint

Sandia-UNM Partnership





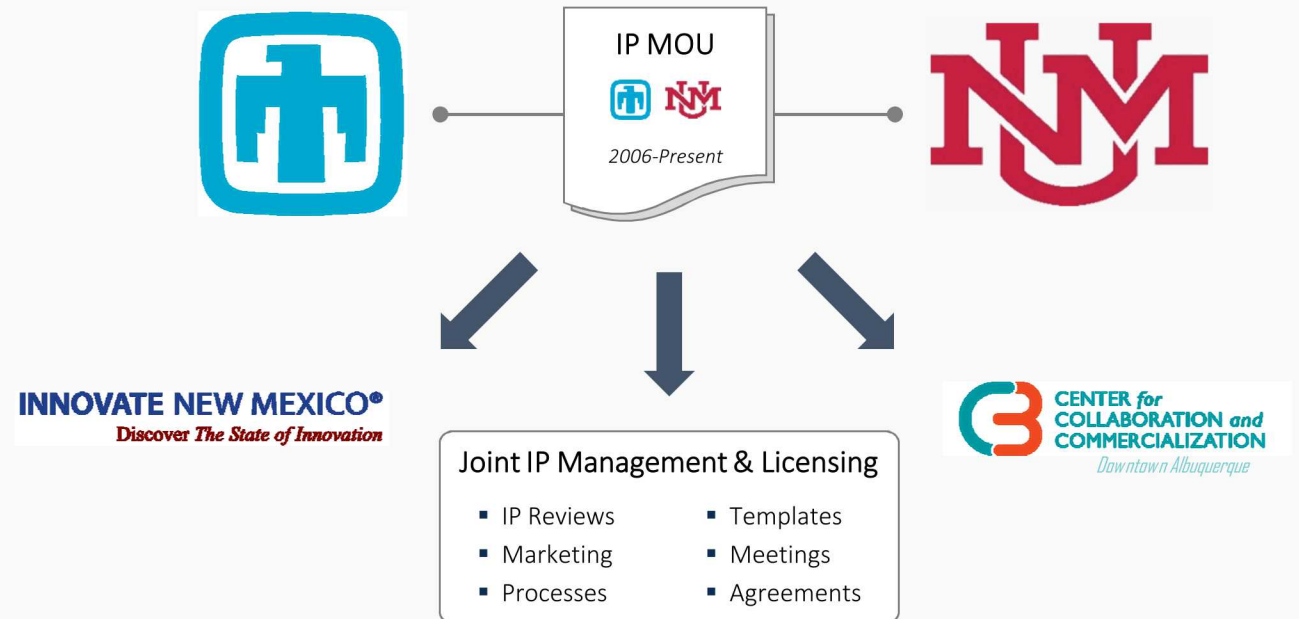
Universities have more flexibility in deployment of IP

The key differences in technology transfer policy between Sandia and US universities include:

- Conflict of Interest: National laboratories take a more conservative approach than universities
- Cost Model: Faculty are often funded to participate in tech transfer and commercialization activities
- Fairness of Opportunity: Universities interpret fairness of opportunity at a higher level
- Enforcement: Universities actively enforce IP rights and have resources to do so

Sandia's relationship with UNM allows us to more effectively develop and deploy technologies in New Mexico and across the country

This is a model for how we seek to partner with universities for greater impact



Joint Disclosures | Joint Patents | Revenues | UNM Leads on 80% of Commercialization Efforts

Benefits

- UNM handles the majority of the licensing and they have flexibility that we don't have
- Access to serial entrepreneurs and venture capital
- Standardized commercialization agreement and MOU for fair and transparent cost and revenue sharing
- Monthly meetings to review joint inventions and make timely decisions
- Technology showcases highlight licensing opportunities for joint-IP



Biotechnology Advancements

Joint efforts with UNM Health Science Center result in novel drug delivery approaches. Sandia and UNM received an FLC Award.



- Collaborative Research
 - Laboratory Directed Research and Development (LDRD)
 - Direct Program
 - External Proposals
- Faculty Sabbaticals
- Invited Tech Talks
- Graduate Student Advisory
- Internships/Student Hires
- Visiting Researcher Programs
 - Center for Integrated Nano Technology (CINT)
 - Combustion Research Facility (CRF)

THANK YOU!