



2017 Federal Facility Workshop

*Advancing America's Economy:
Building Infrastructure Partnerships at National Security Laboratories*



Sandia National Laboratories

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Technology-Based Economic Development

“Creating and expanding high-growth companies and jobs in NM”

- Sandia Science & Technology Park
 - **42** companies & organizations, employing **2,008** people
 - **\$380.4M** of investment
 - **\$83K** average annual salary, **\$4.4B** wages and salaries generated
- New Mexico Small Business Assistance
 - **\$53.3M** technical assistance provided to **2,648** NM small businesses
 - **5,734** jobs created and retained
 - All **33** NM counties supported
- Small Business Vouchers
 - Sandia received **17** vouchers totaling **\$3.5M**
- Entrepreneurial Separation to Transfer Technology
 - **157** Sandia entrepreneurs have left the Labs
 - **108** companies started up or expanded
- Center for Collaboration and Commercialization
 - Downtown Node opened in **October 2017**
 - Entrepreneur Exploration has hosted **40** events with **1,937** participants



Local Innovation Ecosystem

“Partnering for economic development”



COMMUNITY PARTNERS

- Air Force Research Laboratory ● ●
- Albuquerque Public Schools ●
- New Mexico Manufacturing Extension Partnership ● ● ●
- Mid-Region Council of Governments ●
- National Museum of Nuclear Science & History ● ● ●
- New Mexico Angels ● ● ●
- New Mexico Chambers of Commerce ●
- New Mexico Technology Council ●
- Public Service Company of New Mexico ●
- Sandia Science & Technology Park Development Corporation ● ●
- New Mexico Small Business Development Center Network ●
- Union Development Corporation ●

ACADEMIC PARTNERS

- Central New Mexico Community College ● ●
- New Mexico State University ● ●
- New Mexico Tech ● ●
- University of New Mexico ● ● ●
- Sandia Academic Alliance ● ●

GOVERNMENT PARTNERS

- Bernalillo County ●
- City of Albuquerque ● ●
- New Mexico Counties ●
- Federal Delegation ●
- State Land Office ●
- State of New Mexico ● ●
- U.S. Department of Commerce/EDA ●
- U.S. Department of Energy/NNSA ● ● ●

ACCELERATORS/INCUBATORS

- ABQid ● ●
- Arrowhead Technology Incubator ●
- BioScience Center ● ● ●
- FatPipeABQ ●
- Santa Fe Business Incubator ● ●
- TEAM Technologies ● ●

INDUSTRY PARTNERS

- Clean Energy Small Businesses ● ● ● ● ●
- New Mexico Small Businesses ● ● ● ● ●
- SS&TP Companies ● ● ●

ASSOCIATIONS

- Air Force Research Laboratory Advisory Council
- Arrowhead Center at NMSU Advisory Board
- Association of University Research Parks
- Economic Forum of Albuquerque
- Federal Laboratory Consortium
- NAIOP, The Commercial Real Estate Development Association
- NM Bio
- New Mexico Technology Council
- Santa Fe Business Incubator Board
- UNM Economic Development Forum

SANDIA ECONOMIC DEVELOPMENT PROGRAMS

- Entrepreneur Exploration (EE)
- Entrepreneurial Separation to Transfer Technology (ESTT)
- New Mexico Small Business Assistance (NMSBA)
- Sandia Science & Technology Park (SS&TP)
- Small Business Vouchers (SBV)



Entrepreneur Exploration



May 31, 201/

Sandia Science & Technology Park (SS&TP)

“Leveraging physical proximity to Sandia”



- Founded in 1998
 - One of the first research parks at a national lab
 - Benchmarked by other labs & universities
- Master-Planned Technology Community
 - 300+ acres; 220 acres are governed by master development plan
- Partnership Tool for Sandia
 - Joint research & development
 - Technology commercialization
 - Business development
 - Subcontracting & supplier relations
 - Local economic development
- Strategic space option for Sandia; Sandia populates 6 buildings in Park

SS&TP Public-Private Partnership

“Catalyzing a technology community”



ORIGINAL PARTNERS

- Created vision
- Provides executive-level champion
- Provides executive director and program staff
- Manages marketing and business development



**Sandia
National
Laboratories**



- Shared vision
- Funds infrastructure



**SANDIA SCIENCE & TECHNOLOGY PARK
DEVELOPMENT CORPORATION**

- The nonprofit entity which oversees development of the Park
- Manages grants and infrastructure

**Park MOU
Signatories**



LAND OWNERS

**New Mexico State
Land Office**

- Sell and lease land
- May build and own buildings

OTHER KEY PARTNERS



**Provided
planning
funds**



**Provides
telecommunications
infrastructure**



**Provides
infrastructure**



**Provides
economic impact
analyses**



**Provides
leadership and
support**

SS&TP Metrics & Economic Impact

“Generating results”



METRICS *	
Number of Companies and Organizations	42
Number of Employees	2,008
Number of Buildings	25
Public and Private Investment in the Park since 1998	
	Public
	Private
	Total
	\$89.0 Million
	<u>\$291.4 Million</u>
	\$380.4 Million

* Through CY16

Cumulative Impact on taxable consumption (goods and services)	\$2.6 Billion
Cumulative impact on gross receipts tax revenue to the City of Albuquerque	\$15.2 Million
Cumulative impact on gross receipts tax revenue to the State of New Mexico	\$103.1 Million
Cumulative Increase in wage and salary disbursements attributable to Park activities	\$4.4 Billion
Average salary for each full-time job in the Park	\$83K
Average salary for each full-time Job in Albuquerque	\$44K

** Through CY15

New Mexico Small Business Assistance (NMSBA)

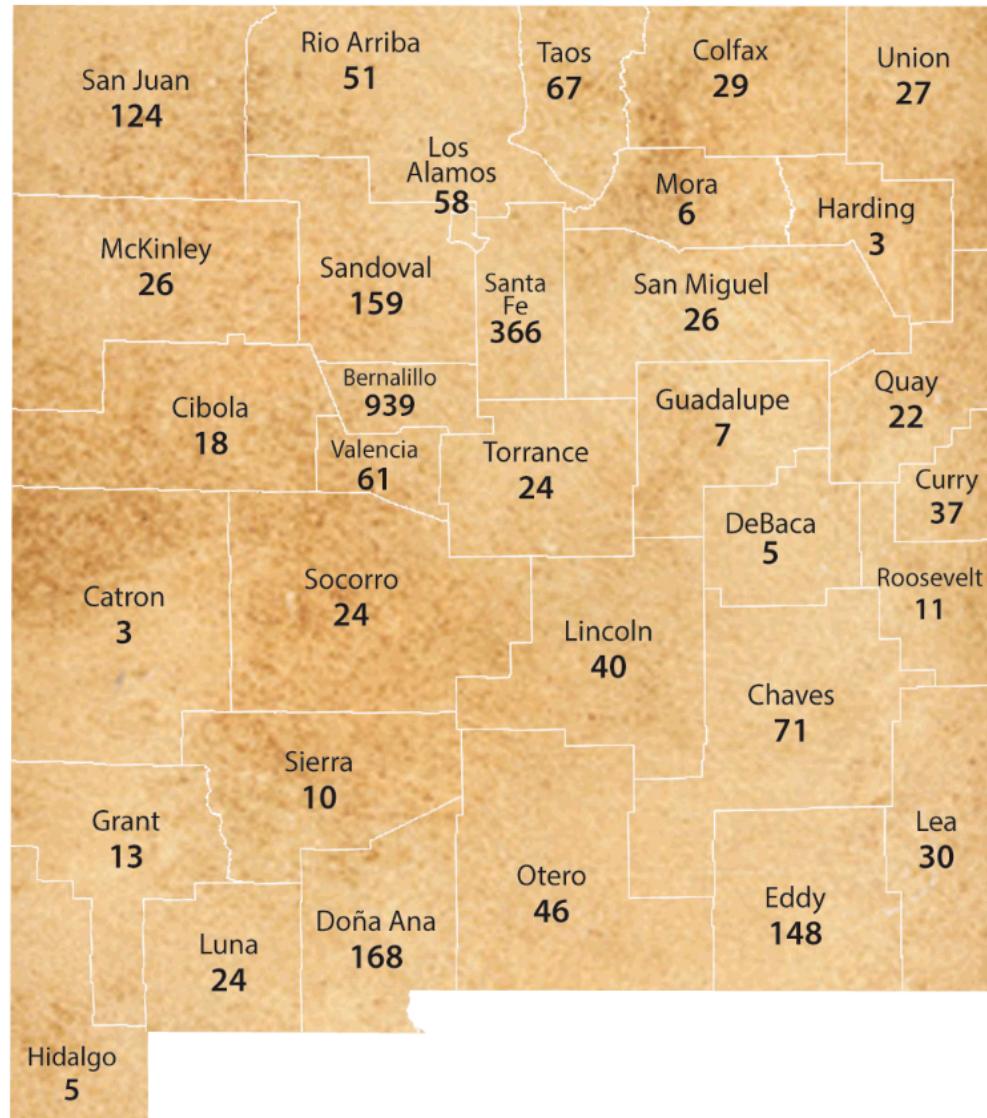


“Assisting New Mexico’s small businesses”



- Governed by NM Statute: *Laboratory Partnership with Small Business Tax Credit Act*
- \$20K for rural companies, \$10K for urban companies per calendar year
- Public-Private Partnership between State of New Mexico, Sandia National Laboratories, Los Alamos National Laboratory, NM Small Businesses
- Labs contract with UNM, NMSU, NM Tech, and NM MEP
- Serves all 33 counties in NM

“Reaching rural New Mexico”



NMSBA Metrics & Economic Impact

“Generating results”

NMSBA Metrics	JOINT PROGRAM		SANDIA	
	2000-2016	2016	2000-2016	2016
Number of Small Businesses Served	2,648	365	2,096	198
Number of Counties Supported (out of 33)	33	29	33	19
Value of Assistance Provided	\$53.3M	\$4.8M	\$34.0M	\$2.4M

In 2016, **75 PIs** across **59 departments** at Sandia assisted NM small businesses.

NMSBA Economic Impact*	2000-2015
Small Business Jobs Created and Retained	5,734
Mean Salary	\$38,975
Increase in Revenue	\$272.3M
Decrease in Operating Costs	\$142.4M
Investment in NM Goods and Services	\$108.9M
New Funding/Financing Received	\$110.7M

**Surveys are performed six months to one year after project completion*

Small Business Vouchers

“Helping clean energy companies”



Vladimir Matias, iBeam Materials
Santa Fe, NM

- DOE/EERE Program providing technical assistance to small, for-profit businesses in the clean energy sector
- Modeled after NMSBA program
- Sandia is one of 5 co-leads for program, DOE provides funding
- \$22M in funding provided by DOE in technical vouchers to the national labs for 3 rounds
- Sandia has received 17 vouchers valued at \$3.5M

Entrepreneurial Separation to Transfer Technology

“Launching and expanding start ups”



Todd Christenson, 2003

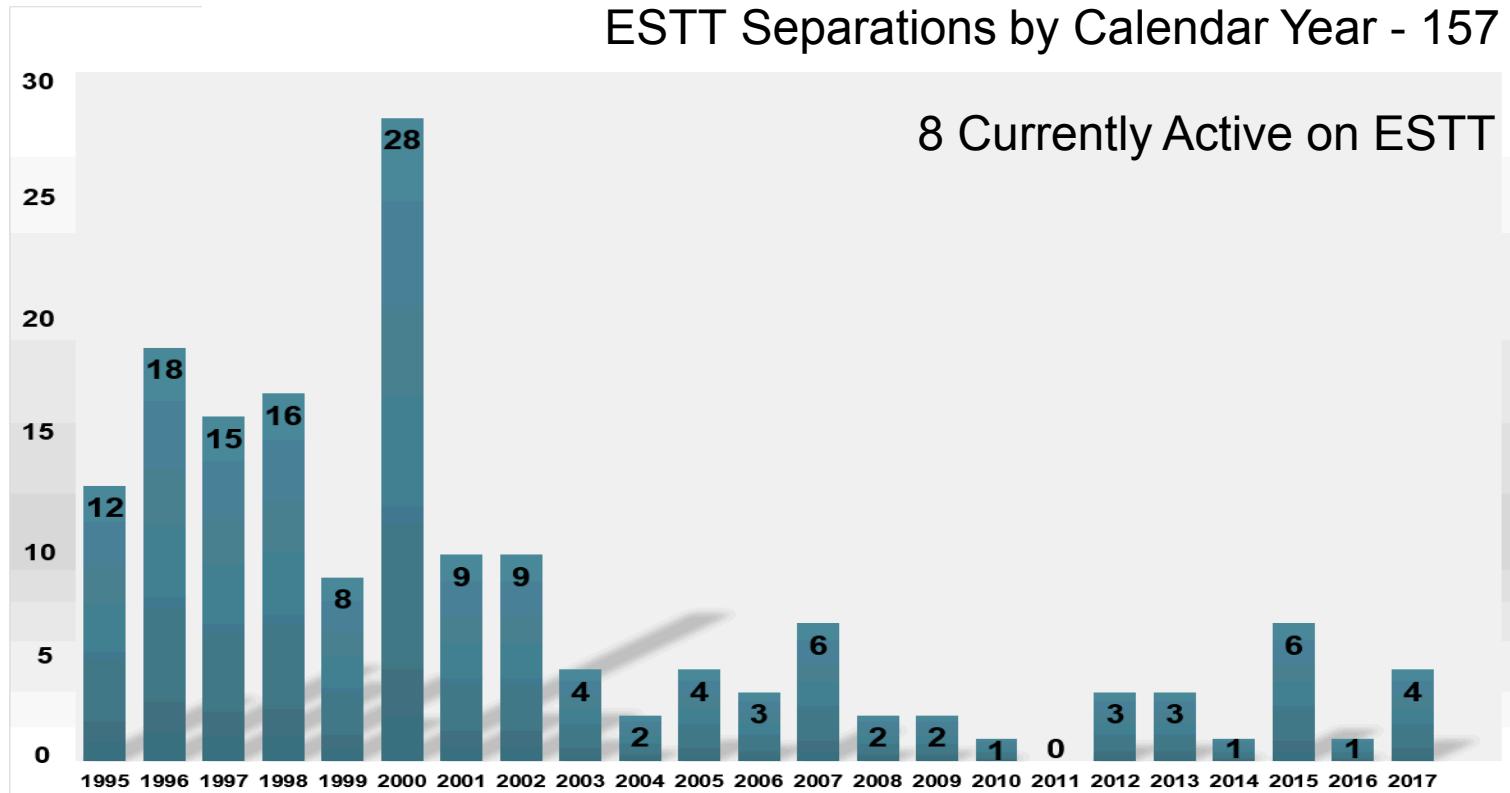
18,000 sf manufacturing facility employing 12 people

- Governed by Corporate Procedure:
HR100.6.5 Request an Entrepreneurial Separation to Transfer Technology
- Founded in 1994
 - Largest of national labs
 - Benchmarked by AFRL, Army, Navy, and other DOE labs
- Participants may **start up** or help **expand** small tech businesses
- Participants terminate their Sandia employment, but are guaranteed their job back for up to two years

ESTT Metrics

“Generating results”

ESTT Separations by Calendar Year - 157



Sandians who left on ESTT	157
• To start up companies	70 (45%)
• To expand companies	87 (55%)
Companies impacted by ESTT	108
• Start-ups	54
• Expansions	54
Licenses for Sandia IP with ESTT	44

Center for Collaboration and Commercialization (C3)



“Increasing Sandia’s collaboration & commercialization activities”

Objectives

- Create a **place** that serves as a “public face” for Sandia, provides access to Sandia, and builds linkages with the external community
- Provide **programs and services** to maximize interaction with partners – industrial, academic, and government – and facilitate successful technology commercialization

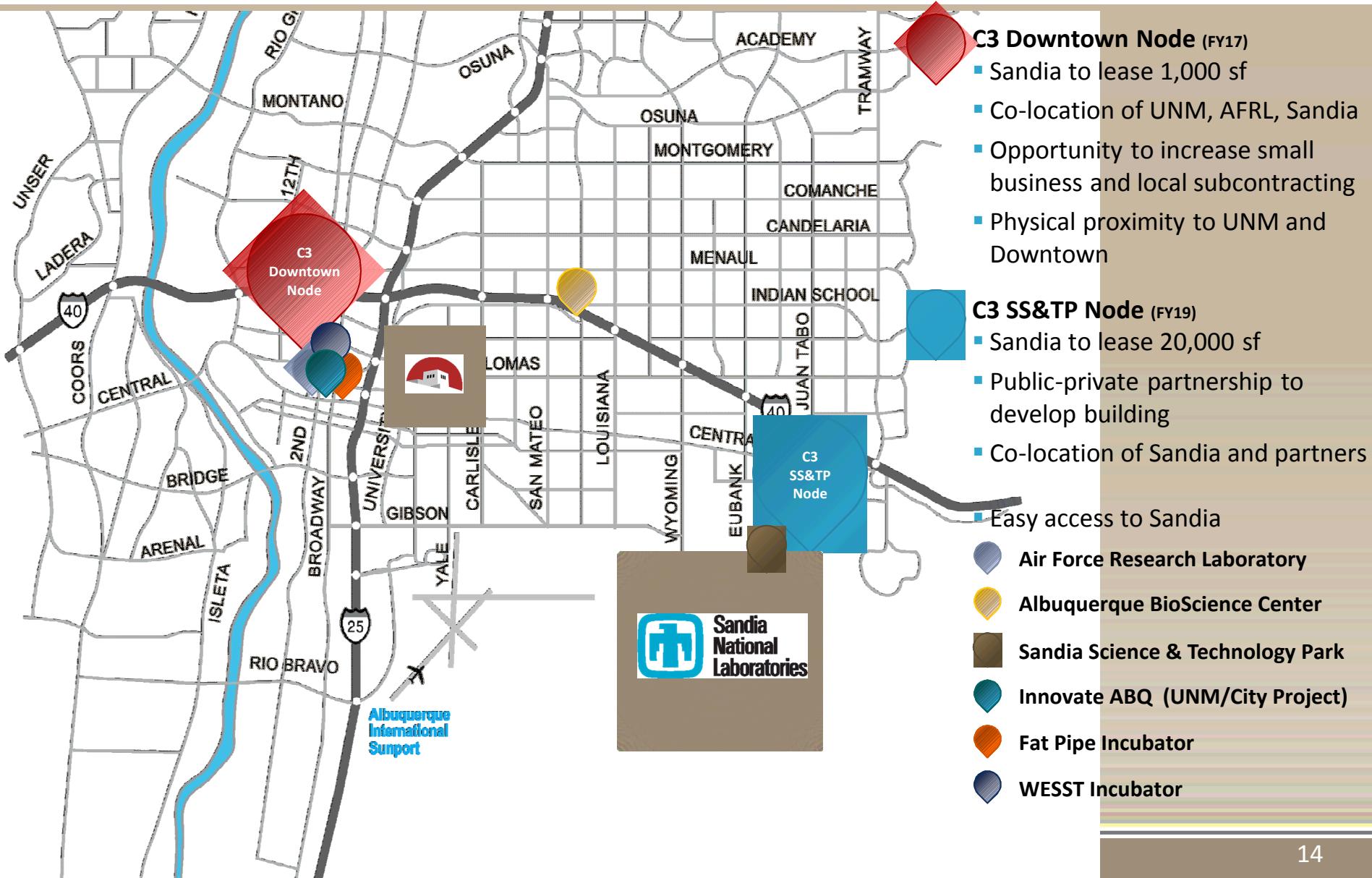
Implementation

- Place
 - Multi-Node Approach
 - C3 Downtown Node (FY17)
 - C3 SS&TP Node (FY19)
- Programs and Services
 - Launched new Entrepreneur Exploration Program (FY15)



C3 Nodes Along Albuquerque's Innovation Corridor

"Expanding our reach"



C3 Downtown Office Hours

“Diving into downtown”



SANDIA LABS OFFICE HOURS

Meet the Sandians behind the gate!
Stop by C3 Downtown or make an appointment:
partnerships@sandia.gov

PROCUREMENT

Are you interested in selling goods and services to Sandia Labs? Stop in to learn more about becoming a Sandia Labs vendor.



HOURS: Monday, 1pm - 5pm

LICENSING

Are you interested in licensing a Sandia Technology? Learn more about our current portfolio and opportunities in tech transfer.



HOURS: Tuesdays, 1pm - 5pm

STRATEGIC PARTNERSHIPS PROJECTS

Are you interested in developing collaborative projects with Sandia Labs? Come speak with our contracting team to learn more about how you can benefit from over 70 years of technical expertise.



HOURS: Wednesdays, 1pm - 5pm

NMSBA PROGRAM
(New Mexico Small Business Assistance)

Are you interested in receiving FREE technical assistance from Sandia Labs? If you are a for-profit small business located in NM, visit us to learn more.



HOURS: Thursdays, 1pm - 5pm

MEET OUR PRINCIPAL INVESTIGATORS

Are you interested in partnering with Sandia Labs? We will feature members of the technical staff from different divisions within Sandia. Learn about specialized research in microsystems, renewable energy, cyber security, and more.



HOURS: Fridays, 1pm - 5pm

MEET OUR EXECUTIVES

To be announced monthly.



- PROCUREMENT
- LICENSING
- CRADAS/STRATEGIC PARTNERSHIP PROJECTS
- NEW MEXICO SMALL BUSINESS ASSISTANCE
- MEET THE PRINCIPAL INVESTIGATORS
- MEET THE EXECUTIVES

Entrepreneur Exploration

“Encouraging entrepreneurs and intrapreneurs”

Objectives

- Invigorate Sandia's entrepreneurial culture
- Inspire Sandia entrepreneurs
- Increase number of Sandia entrepreneurs leaving the Labs to form/join companies

Events

- National Labs Entrepreneurship Academy
- Workshops
- Roundtables
- Office Hours
- Socials

Results

- FY15: 9 events, 317 participants
- FY16: 17 events, 820 participants
- FY17: 20 events, 926 participants



Entrepreneur Exploration

FY 17 CALENDAR



OCTOBER 2016

10/6
Rise of the Rest Luncheon with Steve Case
12:30 PM – 2:00 PM
Bow and Arrow Brewing Company

NOVEMBER 2016

11/15
Lab Launch 2017 with Wasabi Ventures and Air Force Research Laboratory (AFRL)
3:00 PM – 5:00 PM
National Museum of Nuclear Science and History

DECEMBER 2016

12/6
Leading the Way in Cybersecurity and Building a 7-figure Cybersecurity Company in New Mexico
4:00 PM – 5:00 PM
Tractor Brewing

12/6
Entrepreneur Exploration (EEx) Holiday Social
5:00 PM – 6:00 PM
Tractor Brewing

JANUARY 2017

1/26
Sandia Technology Showcase with the New Mexico Angels
11:30 AM – 1:30 PM
Yanni's Mediterranean Grill

FEBRUARY 2017

2/21
How to be a Great Founder
3:00 PM – 5:00 PM
National Museum of Nuclear Science and History

MARCH 2017

3/9 – 3/11
National Labs Entrepreneurship Academy with University of California, Davis
Santa Fe Business Incubator

APRIL 2017

4/7 – 4/8
2nd Annual Inventors and Entrepreneurs Workshop
Fidel Conference Center, NM TECH

4/18
Innovate New Mexico Technology Showcase
Sandia Golf Club

JUNE 2017

6/6
Academic Alliance Alum Technology Transfer/Entrepreneur Seminar
9:00 AM – 10:30 PM

6/21
Sandia Licensing, Legal and Ethics Roundtable 3:30 PM – 5:00 PM

JULY 2017

7/18
Sandia Pitch Competition Workshop #1
In Partnership with ABQid
3:00 PM – 6:00 PM
IPOC Supplier Lobby

7/27
TEDxABQ Workshop
3:00 PM – 5:00 PM
899/1811

AUGUST 2017

8/3
University of Illinois Academic Alliance Tech Transfer Workshop
7:30 AM – 1:30 PM
CGSC/1149

8/15
Sandia Pitch Competition Workshop #2
In Partnership with ABQid
3:00 PM – 5:00 PM
IPOC Supplier Lobby

8/17
Workshop participants will practice their pitch in front of other Pls, as well as ABQid staff and individual mentors.

8/17
Sandia ESTT Roundtable
3:30 PM – 5:00 PM
National Museum of Nuclear Science & History

8/17
Sandians who are currently out on ESTT will share their first hand experiences taking the leap from Sandia to small business.

AUGUST 2017

8/18
Economic Development Charettes "Step-Change Conversations"
8:00 AM – 10:00 AM
FatPipe ABQ

Join us as we partner with the NM Tech Council on a community feedback event focused on Advanced Manufacturing.

8/21
Purdue University Academic Alliance Tech Transfer Workshop
8:00 AM – 2:30 PM
CGSC/1149

Learn best practices for entrepreneur programs from Sandia's Academic Alliance partner, Purdue University.

8/31
Economic Development Charettes "Step-Change Conversations"
8:00 AM – 10:00 AM
FatPipe ABQ

Join us as we partner with the NM Tech Council on a community feedback event focused on Technology Solutions for Creative and Culture Enterprise.

SEPTEMBER 2017

9/8
Economic Development Charettes "Step-Change Conversations"
8:00 AM – 10:00 AM
FatPipe ABQ

Join us as we partner with the NM Tech Council on a community feedback event focused on Cybersecurity.

9/14
DOE Lab Pitch Competition
6:00 PM – 8:00 PM
GravitateABQ

Scientists and engineers from Sandia Labs will pitch their best and brightest innovations to a panel of esteemed judges and members of the entrepreneurial community for a chance to advance to DOE Pitch National Competition.



Questions



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