

How to Interact with Sandia Technology Transfer at Sandia

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Licensing Executive
Industry Partnerships and Business Development

What is Tech Transfer?

The process of transferring our knowledge for the purpose of further development and commercialization...

...for the public good.

Sandia's Objective for IP

Enable the results of Sandia's publicly funded research and development to be deployed for the US public good

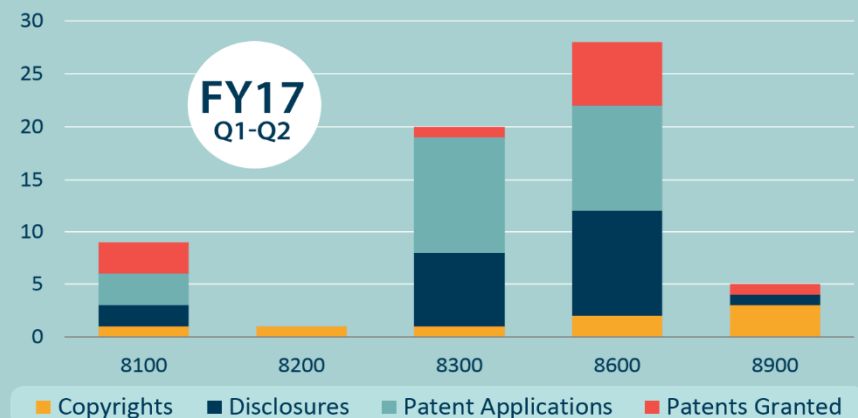
- Enhance national and local economic development
- Further the national security mission(s) of Laboratories by
 - attracting strategic partners
 - commercializing technologies to enhance national security

Fulfill Sandia's technology transfer mission by

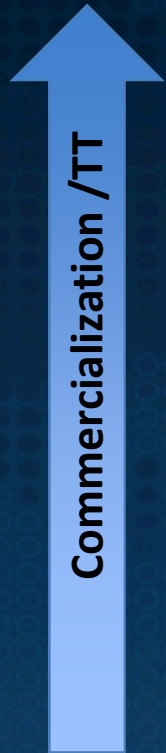
- enhancing U.S. industrial competitiveness
- commercializing technologies
- providing special consideration to small business

- 8300 and 8600 continue to drive IP generation. As opposed to FY16, 8300 leads patent applications while 8600 leads patents granted thus far in FY17.
- Lab-wide IP trends remain fairly consistent with FY16 numbers.
- Division 8000 IP generation is likely to remain consistent with FY16 numbers, with the exception of copyrights which are likely to exceed FY16 numbers.

IP GENERATION BY CENTER



Interacting with the Lab takes many forms



- Intellectual Property Licensing
- CRADAs – Cooperative Research and Development Agreements
- Strategic Partnership Agreements (Work For Others)
- Open Source Software/Published Literature

- Entrepreneurial Leave (ESTT)
- LabCorps
- NM Small Business Assistance
- Sandia Science & Tech Park
- Livermore Valley Open Campus (LVOC)

Intellectual Property Licensing

- Commercial Patent License
- Commercial Copyright License (software or design plans)
- Commercial Hybrid License (copyright and patent)
- Test and Evaluation License
- License Option

Intellectual Property Licensing

- License term
 - Commercial license term - length of the patent or copyright
 - T&E/License Options terms - limited in time
- Financial consideration
 - upfront license fee, annual license fee, milestone fee, running royalty, or company equity, as appropriate
- Performance requirements
 - Make sure the licensee is diligent in their commercialization plan
- License Limitations imposed by Sandia
 - field of use, region, or period of restraint
 - Non-exclusive licenses are preferred
 - exclusive licenses are considered when the business case is justified
- U.S. Manufacturing
 - Commercial licensees must substantially manufacture their product in the U.S., given the Department of Energy's intent to provide benefit to the U.S. economy.
- Government Use
 - The U.S. government retains a right to use the technology for government purposes.

Cooperative Research and Development Agreement (CRADA)

Definition	Protection of generated information	IP Rights	Industry resource commitment	Lab resource commitment	DOE approval required
Agreement enables non-federal entities to collaborate with the Lab for the purpose of joint R&D	Commercially valuable info generated under a CRADA may be protected for up to 5 years	Negotiable, however, the US Gov. retains a nonexclusive license and march-in rights	Cost shared through contributions of personnel, equipment, services, facilities, and funds	The Lab cost shares (program \$) otherwise Sponsor is responsible for full cost recovery	Yes

Strategic Partnership Agreement (SPA) formerly non-fed work-for-others

Definition	Protection of generated information	IP Rights	Industry resource commitment	Lab resource commitment	DOE approval required
Agreement that enables non-federal entities to ask the Lab to perform a defined scope of work or list of tasks that draw upon the Labs capabilities	Negotiable	Rights to Lab inventions generated under the SPA may be available to a Sponsor under DOE's Class Waiver	Sponsor covers the cost of all Lab work to be completed under the SOW	Personnel, equipment and facilities that are used	Yes

Our Vision For The Future

Transform
Research & Technology Showcase
into a year-round function

- More “hot” technologies
- Easy and fast licensing
- Access to research and inventors
- Place to meet and collaborate
- More licensing and collaboration with small businesses
- Medtech and LabCorps as a model

INVITATION

You Are Cordially Invited to Attend the
2nd ANNUAL Sandia Research & Technology Showcase



Learn about some of the cutting-edge research and technology development taking place at Sandia National Laboratories.



The event will also provide information on doing business with Sandia National Laboratories through licensing, partnerships, procurement, and economic development programs.



Date and Time
Tuesday, September 10, 2013
8:30 am - 4:00 pm
(Registration and check-in begins at 8:00 am)

Location
Embassy Suites
1000 Woodward Place NE
Albuquerque, New Mexico 87102



Event is free and open to the public, but online registration is required.

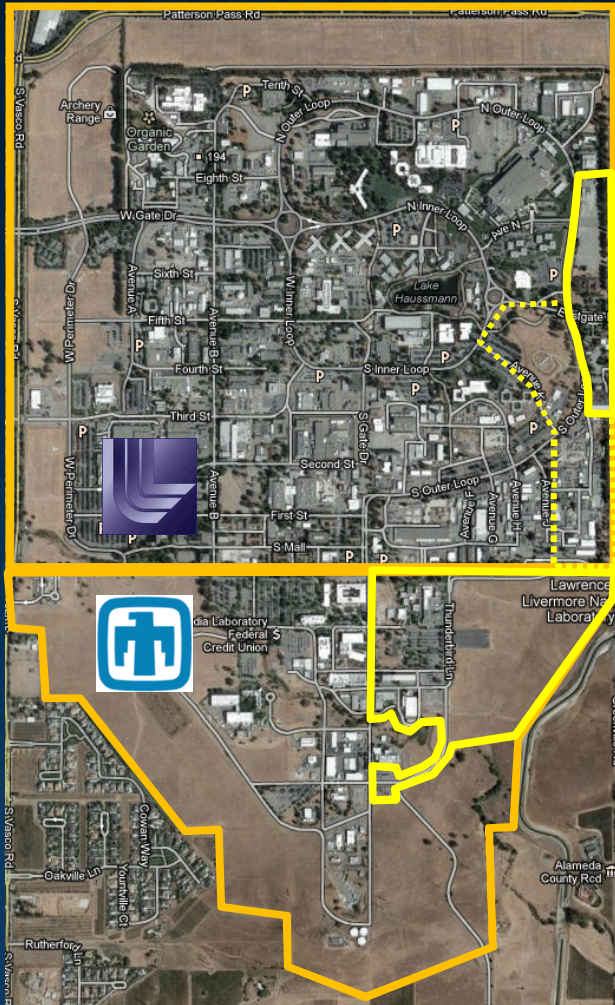
For more information and registration, visit www.sstp.org/showcase.

Sponsors:



Livermore Valley Open Campus (LVOC)

“Front Door” to Engage Industry and Academia



Open Campus Attributes

- Campus-like environment with collaborative space
- Ready access for all partners, including foreign nationals
- Expansion of academic programs
- Access to world-renown facilities and resources

Medtech "Shark tank"



Discoveries: MEDICAL BREAKTHROUGHS

Wednesday, February 25, 2015 • Innovate Pleasanton • 4464 Willow Rd., Suite 103, Pleasanton, CA

Agenda:

Arrival And Networking

Welcome, Tristan Mahyera

Sandia Bioscience Program Overview, Victoria Vandernoot

Medical Diagnostics

- 1) **BaDx**: Credit card sized pathogen detector – Melissa Finley
- 2) **RapiDx**: Rapid automated Point-of-Care system – Victoria Vandernoot
- 3) **SpinDx**: Rapid, sensitive, multiplexed centrifugal biodetection lab-on-a-chip – Chung Koh

Lunch And Networking

Biosurveillance

- 1) **Automated Molecular Biology Hub**: Microliter-based digital microfluidic (DMF) platform – Ken Patel
- 2) **Blood RNA prep** – Steve Branda
- 3) **PDID**: Miniature pulsed-discharge ionization detector for breath analysis – Matt Moorman

Break And Networking

Therapeutics And Drug Delivery

- 1) **Microneedles**: Wearable, noninvasive and pain-free diagnostic and delivery device with real-time readout – Ronen Polsky
- 2) **Protocells**: Novel drug-carrying nanoparticles – Carlee Ashley

Wine Reception and Networking

10:30 - 11:00

11:00 - 11:05

11:05 - 11:15

11:15 - 12:00

12:00 - 1:00

1:00 - 1:45

1:45 - 2:15

2:15 - 2:40

2:40 - 3:00



bio.sandia.gov

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About The Speakers

Melissa Finley:

Education: Ph.D. in Molecular Physiology from Kansas State University and Doctor of Veterinary Medicine from Colorado State University

Research Interest: Safe, secure and efficient infectious disease detection for veterinary labs in less-developed countries as part of Sandia's international biological threat reduction program

Steve Branda:

Education: Ph.D. from Yale University School of Medicine and completed post-docs at Yale University and Harvard Medical School

Research Interest: Host-pathogen interaction, and the development of microbial cells to understand the implications for human disease as part of Sandia's Biotechnology and Bioengineering program

Kamlesh ("Ken") Patel:

Education: Ph.D. in Analytical Chemistry from the University of North Carolina at Chapel Hill

Research Interest: Microfluidics and subsystem development for biodefense programs. Manages the Advanced System Engineering and Deployment team with expertise in mechanical, chemical and electrical engineering

Victoria ("Tori") Vandernoot:

Education: Ph.D. in Analytical Chemistry from Carleton University. Completed a post-doc with the University of Colorado Health Sciences Center in conjunction with Monsanto

Research Interest: Point-of-care medical diagnostic devices. Manages the Biotechnology and Bioengineering team with expertise spanning fundamental research in understanding biological phenomena to applied R&D medical diagnostic devices

Chung-Yan Koh:

Education: Ph.D. in Chemistry from Northwestern University

Research Interest: Microfluidic detection systems for diagnostics in low resource settings as part of Sandia's Biotechnology and Bioengineering team

Ronen Polsky:

Education: Ph.D. from New Mexico State; post-doc at Hebrew University

Research Interest: Biosensors and bioelectronics, surface chemistry, advanced fabrication, and novel nanomaterials as part of Sandia's Biosensor and Nanomaterials team

Carlee Ashley:

Education: Ph.D. in Chemical Engineering from the University of New Mexico. Received Sandia's Harry S. Truman Fellowship in 2010. Member of the University of New Mexico Cancer Center

Research Interests: Medical and biodefense applications of nanomaterials including VLPs and protocols for targeted drug delivery

Matthew Moorman:

Education: M.S. in Mechanical Engineering from Georgia Institute of Technology

Research Interests: Modeling, design, and fabrication of micro-chemical analysis systems including developing microsensors for the detection of combustible gases and volatile organic compounds



LabCorps Goals

- DOE program based on NSF's i-Corp program. Pilot program was last year with 5 national labs, this year all 17 DOE labs are participating.
- Increase the number of national laboratory-developed technologies that are transferred into commercial development or industry agreements
- Train national laboratory researchers to better understand the commercialization process and private sector needs, even how to start a company
- Transform national laboratory culture to value commercialization and entrepreneurial activities.

DOE LabCorps

Award \$75k DOE teams for LabCorps training



LabCorps
Kickoff

LabCorps Team
Selection

Startup Info Sessions

Prepping Teams

LabCorps Training Team 1

LabCorps Training Team 2

Phase 1: Basic startup and commercialization concepts

Phase 2: Prepare selected clean energy teams for national program

Phase 3: “Crucible”-style training program focused on customer engagement and Lean Startup Practices applied to lab technologies.

Classes at i-Gate
and
UC Davis

Sandia Cooler

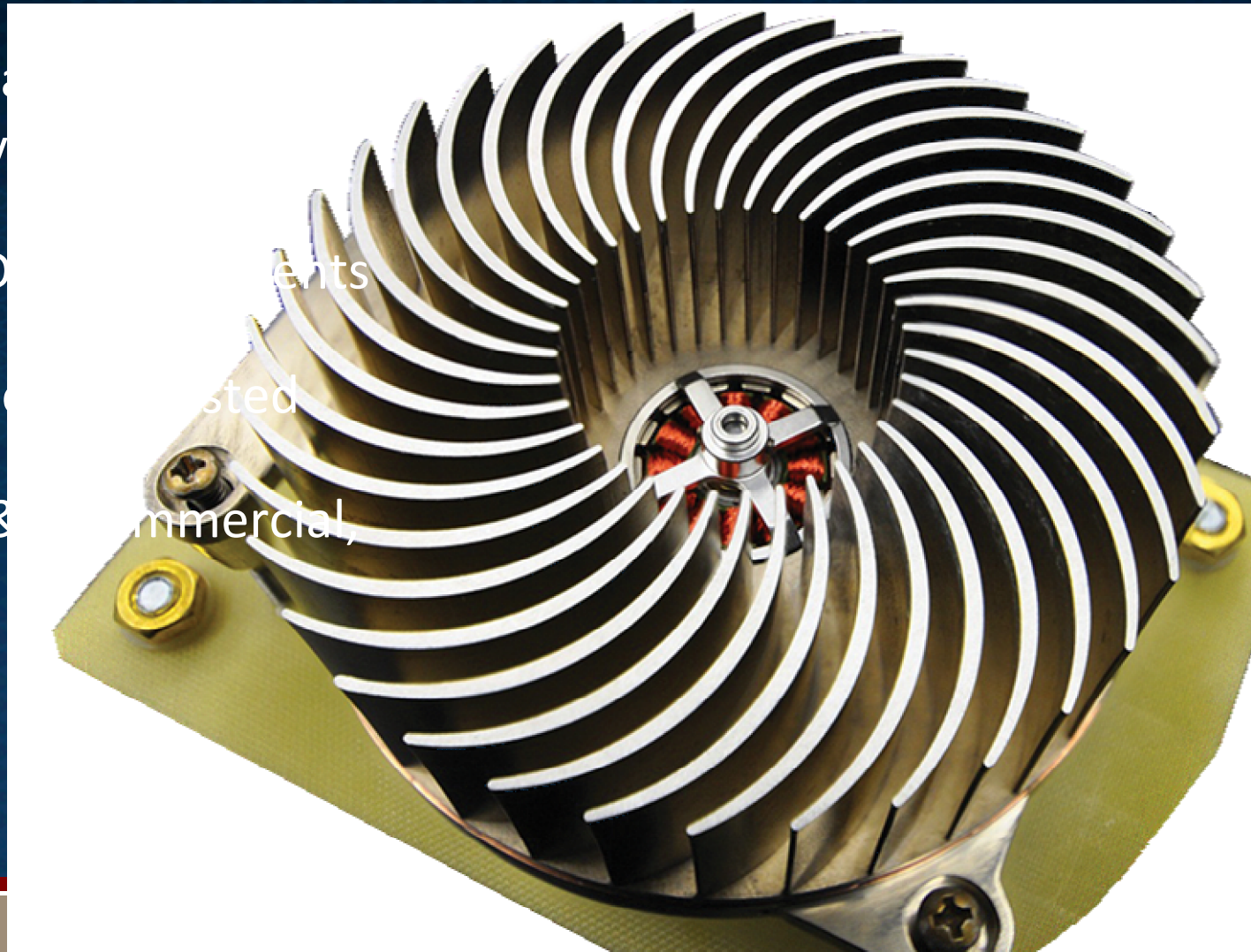
Air Bearing Heat Exchanger – Electronics, HVAC

Prototype evaluation
(DOE and royalties)

CRADA and DRI agreements

50+ companies interested

4 licenses (T&E, commercial,
option)



Startup Companies/Small Biz SpinDx

Rapid, low-cost and compact
diagnostic system



“Hot” Technology – Decontamination Foam

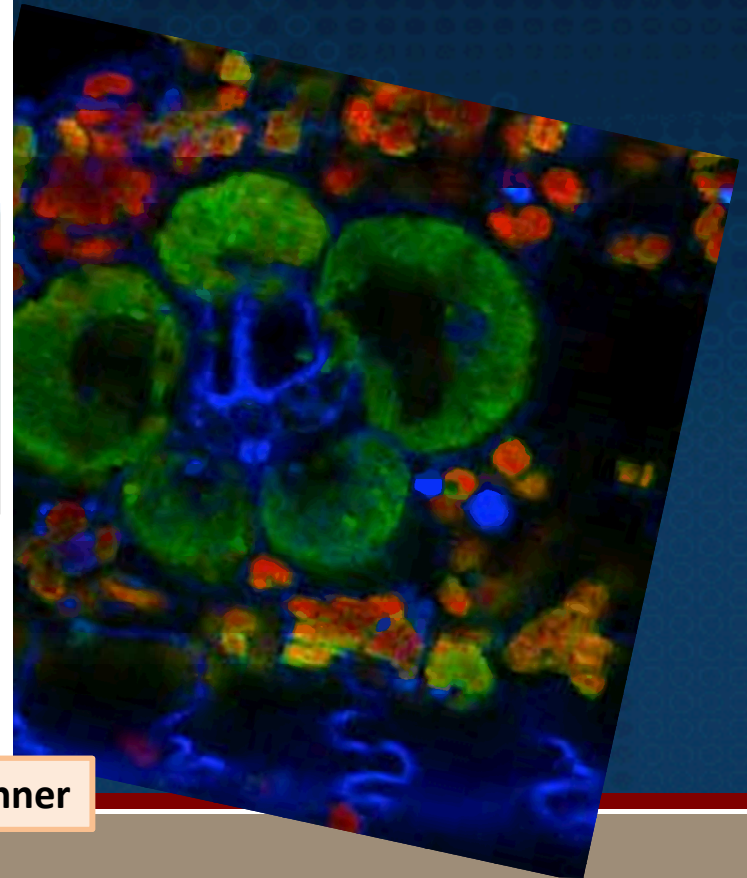
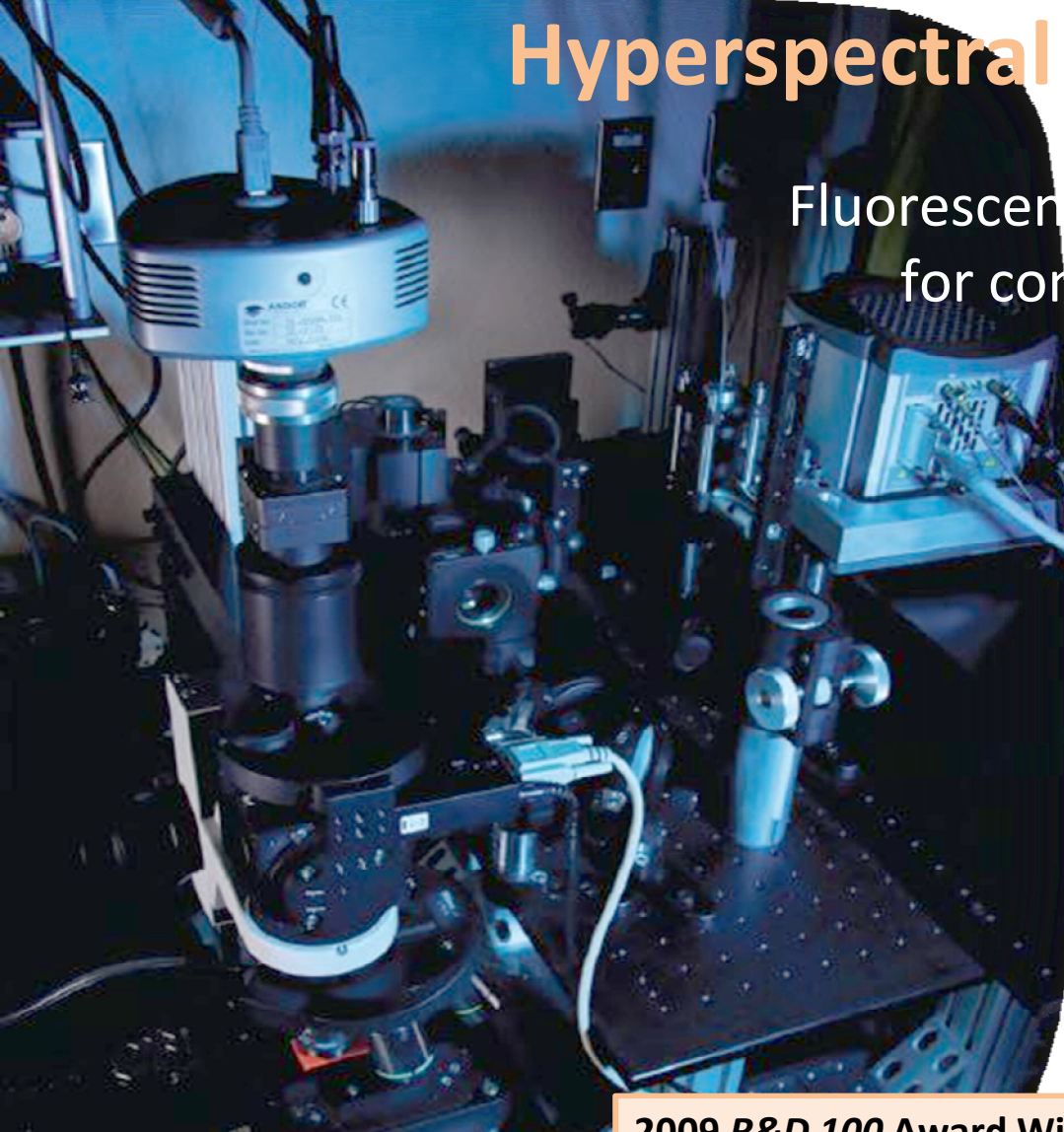


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“Hot” Technology – Hyperspectral Imaging

Fluorescence microscope and software
for complete image extraction



2009 R&D 100 Award Winner

“Hot” Technology – Protocell and NanoCRISPR

University of New Mexico Partnership

A novel nanoparticle combined with
CRISPR technology



STC.UNM
THE INNOVATION DOOR TO
THE UNIVERSITY OF NEW MEXICO

Lots of options to work with Sandia



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ABOUT PROGRAMS RESEARCH WORKING WITH SANDIA NEWS CAREERS

Agreements Procurement Licensing/Technology Transfer Technology Partnerships Economic Impact

Working with Sandia

Small Business Utilization
Sandia's commitment to supplier diversity is key to our mission success

PROCUREMENT TECHNOLOGY PARTNERSHIPS SMALL BUSINESS

Sandia values its interactions with federal, state, and local agencies, the private sector, academic institutions, and the local community. Whether purchasing goods and services, working with our partners, or licensing technology, Sandia is committed to cultivating the highest quality relationships. We offer many business opportunities to suppliers, and are dedicated to strengthening our national, state, and local economies. We spend a large portion of our funding in the states where we are located and are committed to acquiring products and services from [small and disadvantaged businesses](#). As businesses succeed, local economies thrive and economic benefits accrue to the taxpayer.

Sandia also seeks a wide array of mutually beneficial [partnership opportunities](#). Our customers and collaborators include federal, state, and local agencies, private companies, and academic institutions.

We have [transferred technology](#) to the commercial sector for more than three decades, and make it possible for partners to access our world-class science, people, and infrastructure.

News

[Twistact and Optimization of Building Efficiency projects chosen for DOE's LabCorps](#)
April 1, 2015

[Sandia showcases biology breakthroughs available for licensing](#)
March 19, 2015

[Sandia Labs anthrax detector takes home national technology transfer award](#)