

ANNUAL REPORT 2015

P E R S P E C T I V E S



Solving New Mexico's Small Business Challenges

\$48.5M

Technical Assistance Provided by Labs

2,495

Businesses Assisted

4,863

Jobs Created and Retained

33

New Mexico Counties Supported

Cumulative numbers since the inception of NMSBA in 2000.



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This vital program is critical in converting the technical expertise from our national laboratories into successful businesses. Thanks to the New Mexico Small Business Assistance Program, New Mexico businesses are creating jobs and growing ideas that are at the forefront of development and innovation.

Demesia Padilla
Cabinet Secretary
Taxation and Revenue Department
State of New Mexico



The Economic Development Department congratulates the New Mexico Small Business Assistance Program on another successful year supporting New Mexico entrepreneurs by leveraging technical expertise from the national laboratories located in our state. This is a remarkable Program and New Mexico's small businesses are fortunate to have the NMSBA here and ready to help them innovate and lead.

Jon Barela
Cabinet Secretary
Economic Development Department
State of New Mexico

Dear Governor Martinez and New Mexico State Legislators,

We are pleased to share the 2015 Annual Report for the New Mexico Small Business Assistance (NMSBA) Program. This report highlights just a few of the hundreds of successful projects from 2015 and quantifies the overall performance of NMSBA, both for the past year and since its inception in 2000.

During 2015, a total of 366 small New Mexico businesses participated in NMSBA. Thanks to the *Laboratory Partnership with Small Business Tax Credit Act*, the state of New Mexico, along with Los Alamos National Laboratory and Sandia National Laboratories, invested nearly \$4.77 million of national laboratory expertise and resources to help small businesses in 24 counties overcome technical challenges and grow.

Highlights from 2015 demonstrate the impact of NMSBA on small businesses from various industries around the state.

- ▶ A Las Cruces company received assistance in field testing their environmentally friendly pesticide for use on turf grass, leading to a grant award supporting further research of this potential market.
- ▶ A Santa Fe brewery developing kombucha beer sought help in understanding how yeast and bacteria contribute to the flavor and nutrition of their new product, which has already been preordered by Whole Foods.
- ▶ A group of ranchers in Santa Rosa acquired assistance with an innovative site assessment to estimate their land's wind development potential, helping them secure a contract.
- ▶ An inventory software product was improved through technical assistance, giving the Corrales company additional revenue based on increased sales of the updated software.

Two projects received the "Honorable Speaker Ben Luján Award for Small Business Excellence" for demonstrating the most economic impact. Smart Battery Manager, a group of five small businesses working in the unmanned vehicles industry, received help developing a technology to monitor the vehicles' battery packs. The Bernalillo and Otero County companies have received \$2 million in new investments and hired nine new employees. Tibbar Plasma Technologies received assistance evaluating their plasma-based AC-DC electrical transformers which helped them win a \$3.5 million contract, hire ten new employees, and remodel a building in Los Alamos for manufacturing.

NMSBA has helped New Mexico's small businesses create jobs, increase revenues, decrease operating costs, and attract new funding opportunities. Since 2000, 762 technical lab experts from the two national laboratories have provided \$48.5 million in technical assistance to 2,495 businesses, enabling 4,863 jobs to be created and retained across the state's 33 counties.

We thank you for your continued support of NMSBA, which promotes collaboration between our national laboratories and small business community, leading to economic development throughout our great state.

Sincerely,



Micheline Devaurs
Los Alamos National Laboratory



Jackie Kerby Moore
Sandia National Laboratories

PROGRAM INFORMATION

OVERVIEW

In 2000, the New Mexico State Legislature created the Laboratory Partnership with Small Business Tax Credit Act for the purpose of “bringing the technology and expertise of the national laboratories to small businesses in New Mexico to promote economic development in the state, with an emphasis on rural areas.” As a result, Sandia National Laboratories established the New Mexico Small Business Assistance (NMSBA) Program to provide technical support to small businesses throughout the state. Los Alamos National Laboratory began participating in NMSBA in 2007. Jointly, the labs are committed to solving small businesses’ critical challenges with national laboratory expertise and resources; influencing New Mexico business development by building capacity, capabilities, and competencies; and acting as an advocate for small businesses through an entrepreneurial culture.

During 2015, NMSBA helped 366 small businesses across the state reach business goals, develop their products for commercial use, and increase profitability.

NMSBA makes a statewide impact by:

- ▶ Enabling New Mexico small businesses to access cutting-edge technology
- ▶ Increasing New Mexico small businesses’ technical sophistication and capabilities
- ▶ Sharing knowledge and resources between laboratory personnel and small businesses to address issues and develop real-world applications

While each company utilizes NMSBA in a different way, all use it as a means to maintain or grow their businesses. NMSBA services are provided at no cost to the participating small businesses in the form of lab staff hours valued at up to \$20,000 per calendar year for businesses located in rural counties and \$10,000 for businesses located in urban counties (currently just Bernalillo County). The total amount of assistance is capped at \$2.4 million annually for each laboratory. NMSBA may not provide assistance that is available in the private sector, and no equipment or cash can be given to a participating company.

BEN LUJÁN AWARD

NMSBA recognized Smart Battery Manager Leveraged Project and Tibbar Plasma Technologies with the “Honorable Speaker Ben Luján Award for Small Business Excellence” for demonstrating the most economic impact.



Smart Battery Manager Leveraged Project

Genaro Montoya, Sandia NMSBA Program Leader; Von Trullinger, Sandia Principal Investigator; William Neeley, Silent Falcon UAS Technologies Electronics Engineer; Duncan McBranch, Los Alamos National Laboratory CTO; John Brown, Silent Falcon CEO; Cliff Hudson, Emerging Technology Ventures, Inc. CEO; and Jane Powdrell-Culbert, New Mexico State Representative.



Tibbar Plasma Technologies

Patrick Duran, Office of U.S. Congressman Ben Ray Luján Field Representative and Economic Development Liaison; Genaro Montoya, Sandia NMSBA Program Leader; Duncan McBranch, Los Alamos National Laboratory CTO; John Finn, Tibbar Plasma Technologies Scientist; Jane Powdrell-Culbert, New Mexico State Representative; and Richaer Nebel, Tibbar Plasma Technologies President.

TYPES OF SMALL BUSINESS ASSISTANCE

Individual Projects

Individual NMSBA projects involve a single New Mexico for-profit small business. Projects address business-specific challenges that can be solved with national laboratory expertise and resources. Technical assistance challenges are wide ranging; however, the majority include testing, design consultation, and access to special equipment or facilities. Requests for individual projects are accepted year-round until funding is exhausted.

Leveraged Projects

Leveraged NMSBA projects allow a group of small businesses that share technical challenges to collectively request assistance. Leveraged projects address issues that are too large or complex to solve through an individual project. Proposals for projects are reviewed semi-annually by the NMSBA Advisory Council.

Contract Projects

Legislation allows NMSBA to contract with entities that have the capability to provide small business assistance services not available in the private sector. For the benefit of New Mexico's small businesses, NMSBA has contracts for specific services with the New Mexico Manufacturing Extension Partnership and the state's three research universities.

The New Mexico Manufacturing Extension Partnership (New Mexico MEP) provides training and assessments in the areas of quality and lean manufacturing principles.

The University of New Mexico Management of Technology program at the Anderson School of Management evaluates the commercial potential of small business technologies and identifies commercialization challenges.

The University of New Mexico School of Engineering addresses technical challenges faced by small businesses in computer science and chemical, biological, electrical, computer, civil, nuclear, and mechanical engineering.

The Arrowhead Center at New Mexico State University evaluates small business capabilities and technologies using subject matter experts throughout the university.

The New Mexico Tech Department of Management interfaces with a variety of disciplines taught at the university to help accurately assess the current competitive position of small business technologies.

FUTURE DIRECTION

As NMSBA moves into the future, it will continue to support the growth and diversification of the New Mexico economy. Ongoing goals for NMSBA include broadening the types of businesses receiving assistance, increasing the range of technical expertise offered by the national laboratories, and expanding NMSBA's coverage in underserved rural counties. In addition, NMSBA continues to look for new opportunities and avenues to partner with New Mexico universities and leverage the capabilities of other business support programs to mature technologies. NMSBA believes developing technology to a stage where a prototype or demonstration of a real-world application is possible helps move new and improved products and services to market.



bioLime

▲ Brian Coia
Founder and President
bioLime

BIOLIME

NMSBA has been a key component during the transition of relocating my company to New Mexico. The access to the expertise provided has been nothing short of outstanding.

Brian Coia
 Founder and President
 bioLime®, Inc.



A lifetime spent in the construction industry enabled Brian Coia to sample various building materials, including one of the oldest: lime. After studying how ancient Egyptians, Greeks, and Romans used lime in building materials, Coia developed a modern version of lime-based structural coatings or “breathable skin” that would make modern buildings more energy efficient, healthier, and longer lasting.

Originally based in Florida, bioLime imported the bulk of its materials from Europe. However, as economic crises deepened in countries including Italy and Greece, Coia realized that he needed to source materials in the United States. Through the Nano Network of NM, Coia made contact with NMSBA advocate Scott Bryant, who advised him on ways that New Mexico’s location could be advantageous. Four months later, Coia moved his company. He reached out to Bryant again, who by this time had joined the New Mexico Manufacturing Extension Partnership (New Mexico MEP).

New Mexico MEP helped address strategic concerns underlying bioLime’s market expansion. Bryant and his team provided bioLime with help in identifying raw materials and techniques to manage its domestic partners and regional supply chain. One critical component of this assistance involved shifting from importing to domestic manufacturing.

Matching bioLime with materials suppliers in the Southwest saved the company approximately \$25 million in avoided investment costs associated with site, equipment, and professional fees. More importantly, bioLime is now in a position to offer a distinctly New Mexico-made product that will attract new customers not just in the United States, but also around the world.

Meet the
PRINCIPAL INVESTIGATOR
Scott Bryant
New Mexico Manufacturing Extension Partnership



▲ Luke Smith
Founder
EcoSeal

ECOSEAL

My connection with NMSBA has set me on the path toward commercializing a really cool technology.

Luke Smith
 Founder
 EcoSeal, LLC



Meet the
PRINCIPAL INVESTIGATOR

Griselda Martínez
 Arrowhead Center at New Mexico State University

Today's entrepreneurs have so many tools at their disposal that it is possible to start a company while still in college. Luke Smith was an undergraduate student at New Mexico State University (NMSU) when he founded EcoSeal, and he has since used modern techniques, such as crowdfunding and business model competitions, to raise capital.

Smith was working on his accounting degree when his father, an NMSU researcher, told him about an interesting pesticide under development. Called NMX, this pesticide is based on environmentally friendly essential oils, known as "nature's pesticides."

Jazzed about this safe alternative to conventional pesticides, Smith founded EcoSeal to bring NMX to the marketplace. Getting a pesticide through the stringent regulatory process is difficult, and Smith soon realized more extensive testing needed to be performed to validate the product in the field. Griselda Martínez of NMSU's Arrowhead Center introduced Smith to Dr. Ryan Goss of NMSU. Together, Martínez and Goss evaluated the use of NMX on turf grass as one possible market.

As a result of this successful partnership, EcoSeal received an I-Corps grant for \$50,000 to conduct market research to commercialize NMX. Smith in 2016 applied for an additional \$50,000 from the New Mexico Economic Development Department and has launched a crowdfunding campaign to obtain \$30,000 to further expand his startup company.



▲ Ayla Bystrom-Williams, CEO
HoneyMoon Brewery
Rena Glasscock, Consultant

HONEYMOON BREWERY

Thanks to NMSBA, we have developed the first kombucha beer with the assistance of a top-level U.S. research facility.

Ayla Bystrom-Williams
CEO
HoneyMoon Brewery



Meet the
PRINCIPAL INVESTIGATOR

David Fox
Los Alamos National Laboratory

Santa Fe's HoneyMoon Brewery has recently developed a novel alcoholic hybrid that not only tastes amazing but is also low in calories, rich in probiotics, and retains essential vitamins and other nutrients. The method adopted by Founders Ayla Bystrom-Williams and James Hill is an age-old tradition in tea brewing known as the kombucha process. Kombucha is a symbiotic colony of bacteria and yeast (SCOBY) that converts sugar and tea extract into a unique blend of organic acids and polyphenols.

To successfully brew what some call "healthy beer," HoneyMoon Brewery sought technical assistance from NMSBA, whose project managers connected the startup with David Fox of Los Alamos National Laboratory. Using a zymurgy-based philosophy, Fox helped Bystrom-Williams and Hill gain a deeper chemical understanding of how both the yeast and bacteria contribute to the flavor profile while brewing alcoholic kombucha. Bystrom-Williams believes that nothing short of strict scientific scrutiny will enable her company to deliver the health promises related to the product.

As a result of the work performed in collaboration with Fox, HoneyMoon Brewery is rolling out its "Gypsy Brewing Plan," complete with the first kombucha-brewed product. The company has also received a preorder from the regional manager of Whole Foods Market. For Bystrom-Williams, the cost savings of this R&D work is incalculable. R&D is the backbone of her company and she believes the high-quality R&D performed by Los Alamos has been invaluable to her growing company.



▲ **Raghu Kopalle**
President and CEO
Innbright Technologies

INNOBRIGHT TECHNOLOGIES

With the assistance of NMSBA, I am realizing my vision of shifting the paradigm of “computing” in computer-generated imagery and visual effects rendering.

Raghu Kopalle
President and CEO
Innobright Technologies, Inc.

Although commonly used today in many blockbuster movies, computer-generated imagery (CGI) rendering has various drawbacks, including the time and money it takes to render complex scenes or animation sequences. At low render sampling or short/fast render times, current rendering technology results in output that is often snowy (noisy) or blurry.

Innobright Technologies, located in Albuquerque, has developed a new “denoiser” software that may change the cost, time, and results of CGI. Product named Altus, this software attaches as a denoising plugin for existing ray tracers that are deploying Monte Carlo rendering methods. Monte Carlo rendering consists of algorithms or methods that are time consuming and computationally intensive to obtain high quality results. Altus allows conventional rendering programs to render less and provides high-quality results up to 12 times faster by applying its patent-protected noise removal techniques.

Computer graphics imagery (CGI) has a diverse set of applications and this meant that majority owner Raghu Kopalle needed help identifying which markets would pose the greatest initial success for Altus. So Kopalle joined forces with Professor Steve Walsh of the University of New Mexico’s Management of Technology program through NMSBA. Walsh and his team of students authenticated a product roadmap from a market perspective. Graduate students involved with this project, Alex Greenberg and Namrata Nepal, gained valuable experience in technology commercialization and market research specific to New Mexico economic development.

Having a clearer vision of possible markets and an effective product roadmap, Raghu Kopalle has since raised \$330,000 in funding and has secured paying customers from all over the world. He has also hired two full-time and four part-time employees to help with his growing company.



Meet the
PRINCIPAL INVESTIGATORS

Alex Greenberg, Namrata Nepal, and Steve Walsh
University of New Mexico



▲ *William J. Kurtz*
President and COO
IR Dynamics

IR DYNAMICS

As a result of research initially funded through NMSBA, I saw a substantial business opportunity and formed IR Dynamics.

William J. Kurtz
President and COO
IR Dynamics, LLC



Entrepreneur and energy conservationist William Kurtz of Aerolenz, LLC, forged an alliance through NMSBA with Sandia National Laboratories to conduct experiments related to spectrally controllable materials. When the technology showed promise, Kurtz formed a new company, IR Dynamics, with the goal of manufacturing and marketing these new materials.

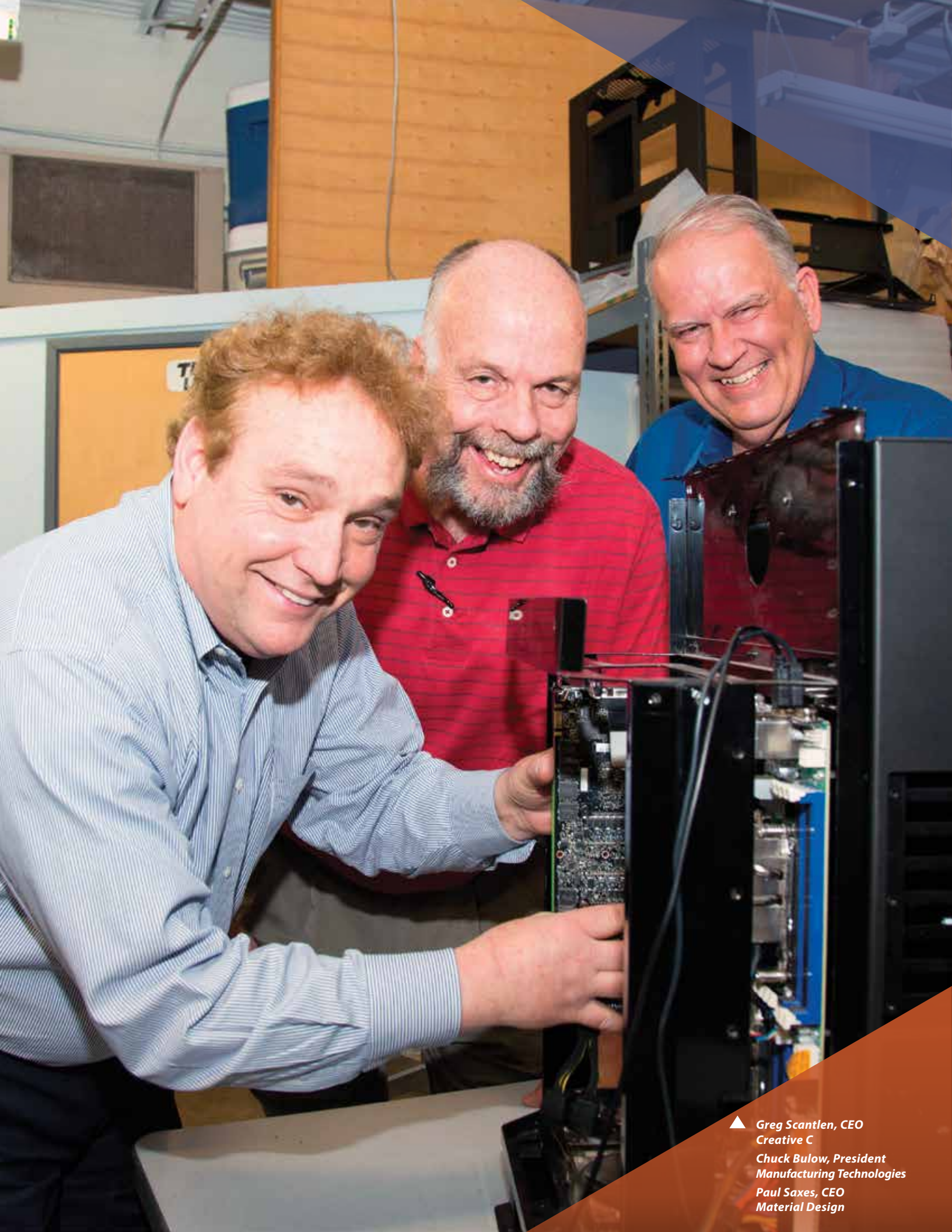
The thermally dynamic materials are in the form of nanoparticles. One of the principal applications of these nanoparticles is as a coating or film for windows in residential and commercial buildings. Once applied, on cold days the windows transmit the sun's heat into the structure. On hot days, the nanoparticles automatically shift so that the windows reject the sun's heat, keeping the inside of the structure cool. The coating is passive by nature, requiring no electronics or power source to shift back and forth from transmitting to repelling heat.

To ascertain the feasibility of manufacturing such innovative coatings, research scientists Raegan Johnson, Nelson Bell, and Paul Clem of Sandia provided structural and optical characterization data, materials analyses, and scientific consulting. IR Dynamics has since established a Cooperative Research and Development Agreement (CRADA) with Sandia for further development.

The company has raised \$600,000 in private equity funding, secured \$100,000 in grants, and received a \$1.95 million grant from the Department of Energy. The plan is to build a lab and hire two to four employees. The worldwide market for the window coatings alone will be worth an estimated \$5 billion by 2020. Other applications for the nanoparticles range from apparel to aerospace.

Meet the
PRINCIPAL INVESTIGATOR

Nelson Bell
Sandia National Laboratories



▲ *Greg Scantlen, CEO
Creative C
Chuck Bulow, President
Manufacturing Technologies
Paul Saxen, CEO
Material Design*

LAMMPS INSTRUMENT LEVERAGED PROJECT

*Thanks to NMSBA,
we have successfully
demonstrated that the
LAMPPS instrument can
perform materials design
at the atomic level.*

Greg Scantlen
CEO
CreativeC, LLC



Meet the
PRINCIPAL INVESTIGATOR

Saryu Fensin
Los Alamos National Laboratory

Originally developed under a Cooperative Research and Development Agreement (CRADA) with Sandia National Laboratories, and Lawrence Livermore National Laboratory, and industry partners Cray, Bristol Myers Squibb, and DuPont, the Large-scale Atomic/Molecular Massively Parallel Simulator (LAMMPS) is a classical molecular dynamics code. Key applications for LAMMPS, which is distributed as open-source code by Sandia, include solid-state materials and soft matter.

To take advantage of advances in computational architecture, three companies joined forces to develop and commercialize a LAMMPS instrument: CreativeC, Materials Design, Inc., and Manufacturing Technologies, Inc. The LAMMPS instrument is a hybrid graphics processing unit (GPU)/central processing unit (CPU) computer system that is tailored to run materials science problems. It is similar to having a supercomputer in your office. These companies then collaborated with scientist Saryu Fensin of Los Alamos National Laboratory through NMSBA.

Fensin performed various types of simulations including annealing and shock on copper-lead and copper using up to 50 million atoms. Through her simulations she determined that the breakeven point where GPUs outperformed conventional CPUs was 250,000-400,000 atoms, and showed significant speedups for larger calculations.

With this knowledge, CreativeC is now leading an Small Business Innovation Research (SBIR) Phase 1 project to commercialize the LAMMPS instrument. Materials Design is starting to sell a version of the LAMMPS instrument, including its proprietary graphic user interface (GUI) for LAMMPS, and believes that as sales grow it will be able hire new employees to support the effort. Manufacturing Technologies will manufacture prototypes for testing and will subsequently manufacture the LAMMPS instrument for commercial sale.

PROGRAM METRICS

VALUE OF PROGRAM ASSISTANCE IN 2014

In 2015 the state of New Mexico, along with Los Alamos National Laboratory and Sandia National Laboratories, invested nearly **\$4.77M** helping **366** small businesses in **24** counties to solve technical challenges. The following table contains the number of small businesses that received assistance from NMSBA, dollar value of the assistance for calendar year 2015, and cumulative value from 2000 to 2015.

	Los Alamos	Sandia	Total
Number of Small Businesses Served			
2015	166	205	366†
Rural	127	107	230†
Urban	39	98	136†
2000-2015*	706	2012	2,495†
Rural	536	1243	1,620†
Urban	170	769	875†
Value of Assistance Provided			
2015	\$2,368,073	\$2,399,691	\$4,767,764
Rural	\$2,051,933	\$1,657,671	\$3,709,604
Urban	\$316,140	\$742,020	\$1,058,160
2000-2015*	\$16,872,195	\$31,637,927	\$48,510,122
Rural	\$15,157,715	\$24,098,666	\$39,256,381
Urban	\$1,714,480	\$7,539,261	\$9,253,741

*LANL began participating in NMSBA in 2007. †Some companies are served by both laboratories.

ACCOUNTABILITY & ECONOMIC IMPACT

NMSBA, enabled by the Laboratory Partnership with Small Business Tax Credit Act, is accountable to the State of New Mexico for its expenditures. NMSBA measures its economic impact through client surveys conducted by Research and Polling, Inc., and economic analysis provided by Robert Grassberger, PhD Economist. The survey and analysis are performed six months to a year after the completion of the project.

Economic Impact for Businesses from NMSBA Projects	
	2000 - 2014
Return on Investment (ROI)*	1.19
Small Business Jobs Created and Retained	4,863
Mean Salary	\$38,768
Increase in Revenue	\$236,173,794
Decrease in Operating Costs	\$104,728,763
Investment in NM Goods / Services	\$97,556,703
New Funding / Financing Received	\$87,250,519

* ROI is based on salaries of jobs created and retained.

BENEFITS TO NEW MEXICO SMALL BUSINESS

New Mexico small businesses achieved positive results after receiving technical assistance from NMSBA. Feedback from companies that participated in the 2014 economic impact client survey revealed that:



NMSBA identifies the areas of technical expertise that the national laboratories and their contractors utilized in NMSBA technical assistance projects, as well as the industry sector for the participating companies. The counties in which the small businesses are located are tracked to gain a better understanding of the reach of the program across the state.

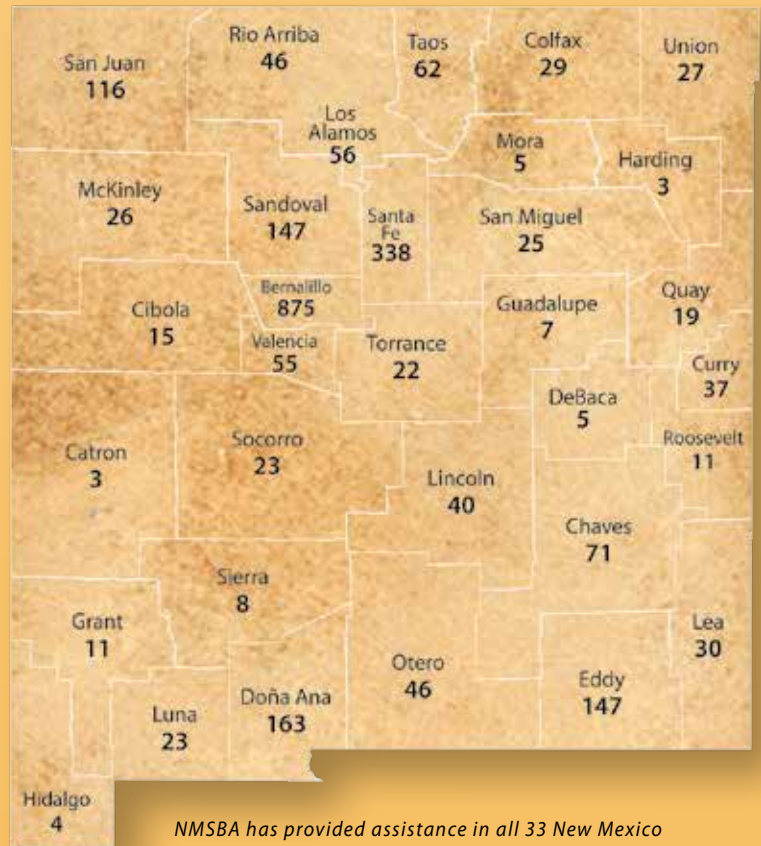
LABORATORY CAPABILITIES UTILIZED IN 2015

Manufacturing.....	26.5%
Engineering.....	20.0%
Energy.....	7.7%
Materials Science.....	7.1%
Advanced Modeling and Simulation.....	6.8%
Business Development.....	6.8%
Earth and Environmental Sciences.....	6.8%
Chemistry.....	6.0%
Math and Computer Science.....	5.7%
Biological and Medical.....	4.6%
Micro-Nano Technology.....	1.4%
Astronomy and Physics.....	0.6%

INDUSTRIES OF SMALL BUSINESSES SERVED IN 2015

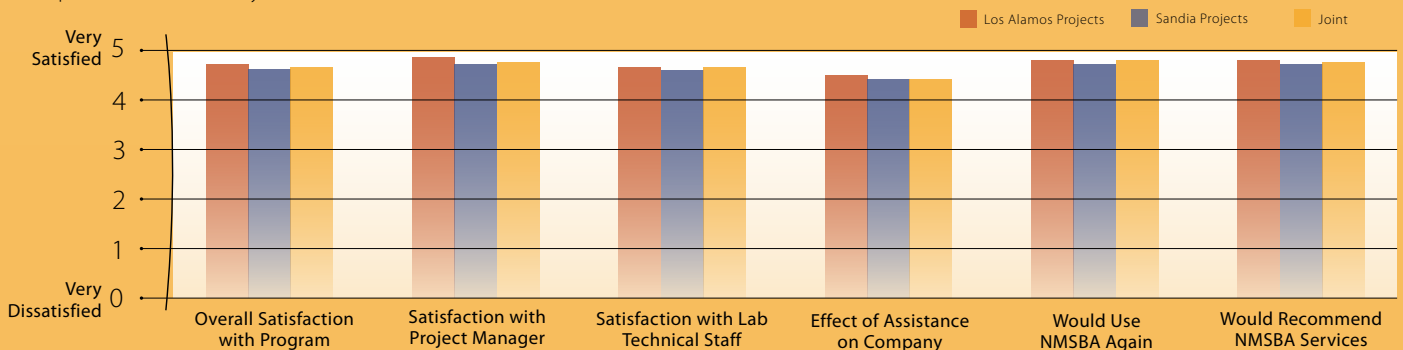
Manufacturing.....	37.7%
Professional, Scientific, and Technical Services.....	35.3%
Agriculture and Natural Resources.....	8.7%
Retail and Wholesale Trade.....	5.7%
Oil & Gas, Utilities, and Mining.....	3.6%
Other Services except Public Administration).....	3.0%
Real Estate, Finance, Insurance, and Management Services.....	2.7%
Education Services and Health Care.....	2.5%
Media and Hospitality.....	0.8%

BUSINESSES ASSISTED BY COUNTY 2000-2015



CUSTOMER SATISFACTION IN 2015

Each year, NMSBA surveys the participating businesses to learn about their satisfaction with the program. In 2015, 95% of the businesses responded to the survey.





▲ *Max Tenorio and Don Thompson
Partners
Siempre Wind Project*

MILAGRO RANCH RESOURCES

I've taught Spanish and PE, but ranching—it is in my blood. With the help we got from NMSBA on our Siempre Wind Project, our ranches may continue to survive in eastern New Mexico.

Max Tenorio
Owner
Milagro Ranch Resources



For the past 15 years, eastern New Mexico has suffered from what seems like a never-ending drought. Ranches are dwindling and ranchers like Don Thompson and Max Tenorio have in recent years sold cattle and land to survive. However, this flat landscape may offer another possible resource: wind to serve as an alternative energy source. The ranchers needed to prove to investors that wind on their land can produce consistent power.

To start their Siempre Wind Project, Thompson and Tenorio attended a five-month series of courses coordinated by the Coalition of Renewable Energy Landowners (CRELA) Landowners Institute presented by Los Alamos National Laboratory through NMSBA. At this series of courses, the ranchers connected with Los Alamos engineer G. Loren Toole. For this project, Toole and his team applied an innovative site-assessment method to estimate wind development potential. The method analyzed a variety of elements and factors of interest to commercial developers. The site assessment has a key element of wind profile mapping, a tool developed at Los Alamos specifically for this application.

With their assessment and wind map profile, Thompson and Tenorio secured a contract with a California wind developer who paid the ranchers an option lease/retention fee for a to-be-constructed wind-turbine farm. Transmitting the wind-generated electricity into New Mexico's grid will be a 345-kilovolt transmission line known as Western Spirit, now under development.

Los Alamos' site-assessment method has proven invaluable. Early estimates indicate that about 400 wind turbines could be built in eastern New Mexico, bringing an initial capital investment of \$1.6 billion.

Meet the
PRINCIPAL INVESTIGATOR

G. Loren Toole
Los Alamos National Laboratory



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▲ David Cook
Founder and CEO
Right Sized Inventory

RIGHT SIZED INVENTORY

Thanks to NMSBA, our statistical anomaly recognition and resolution capability has been very well received by our customers and undoubtedly contributed to us closing all of our large customer deals since the completion of this project.

David Cook
 Founder and CEO
 Right Sized Inventory, LLC



For 15 years, David Cook worked in supply-chain operations either as a company employee or as a consultant. During this time, Cook watched as hundreds of businesses attempted to solve inventory challenges with little more than spreadsheets. Cook then brought together individuals with similar interests and formed Right Sized Inventory. His goal was to create a computer-driven analysis platform that would enable users to identify and maintain an optimal amount of inventory for any item in any location.

Although his original software design worked well, Cook struggled with the ability to flag statistical “anomalies” in a way that reliably helped users fine-tune their inventory analysis. Sandia posted Cook’s problem on its SharePoint® site, where Andy Scholand of Sandia National Laboratories spotted it and was immediately intrigued. Scholand has extensive experience working on large-scale, agent-based economic models of critical infrastructures, such as food distribution, manufacturing, and petrochemical processing.

Sandia achieved three improvements: statistically valid identification of outliers, trend, and seasonality. These improvements dramatically improved customers’ ability to refine their inventory analysis, making the Right Sized Inventory software more accurate and dependable. The company has added revenues of approximately \$50,000 since rolling out the improved software, with much larger revenues expected in the coming years. Cook is excited about his highly scalable but reasonably priced software, and he sees huge market opportunities for continued growth. Scholand is similarly excited about this technology, as it provides real insight into a very common problem businesses often fail to recognize, with a solution that can lead to substantial cost savings.

SharePoint is a registered trademark of Microsoft Corporation in the United States and/or other countries.

Meet the
PRINCIPAL INVESTIGATOR

Andrew Scholand
 Sandia National Laboratories



SILENT FALCON

SILENT
So...



Long Endurance
for Extended
Operations

Multiple Payloads
Easily Configured
Different Missions

Easy to Transport
and Maintain

Safe

Acquisition
Operational

Global Capabilities and

SilentFalcon

▲ William Neeley
Electronics Engineer
Greg Walker
Chief Operating Officer
Silent Falcon UAS Technologies

SMART BATTERY MANAGER LEVERAGED PROJECT

*NMSBA pulled
together an awesome
team that helped us
realize our vision.*

Greg Walker
Chief Operating Officer
Silent Falcon UAS Technologies, Inc.



According to Markets and Markets, the global market for unmanned vehicles was worth \$2.29 billion in 2015 and will likely reach \$4 billion by 2020. Five small businesses, four at the Alamogordo Science and Technology Park and one in Albuquerque, are trying to capture a significant portion of this market with the development of advanced unmanned mobile robots.

Two companies, Emerging Technology Ventures, Inc. and North Alabama Robotic Systems, Inc. (NARS), make unmanned vehicles for land, air, and sea. Motion Picture Marine, Inc. uses unmanned vehicles to create sequences for motion pictures like *X-Men*, *Armageddon*, and *Star Trek*. American Lithium Energy Corporation manufactures lithium-ion batteries that power unmanned vehicles. Along with Albuquerque's Silent Falcon (a developer of aerial unmanned vehicles), these companies joined forces to develop a technology capable of monitoring the health of battery packs for all kinds of unmanned vehicles. To help them realize this technology, company representatives met with NMSBA, which partnered them with electrical engineer Von Trullinger at Sandia National Laboratories.

For the "smart battery manager," Sandia advanced the battery-monitoring electronics and advanced algorithms that could be embedded within the battery's hardware. They also improved the software designed to communicate with operators via web page or Ethernet connection.

As a result, users can now monitor battery condition and historical data, enabling them to plan even more complicated and involved missions. As word has spread regarding this technology, the companies have received \$2 million in new investments and added nine new employees.

Meet the
PRINCIPAL INVESTIGATOR

Von Trullinger
Sandia National Laboratories



▲ Richard Nebel
President
Tibbar Plasma Technologies

TIBBAR PLASMA TECHNOLOGIES

The technical evaluation performed through NMSBA enabled us to successfully compete and win grants to begin manufacturing prototypes of our technology.

Richard Nebel
President

Tibbar Plasma Technologies, Inc.



Eight years ago, Richard Nebel retired after serving as a theoretical plasma physicist at Los Alamos National Laboratory. Retirement did not suit him, however, and he craved the pursuit of science that by nature is high risk and high gain. So Nebel founded Tibbar Plasma Technologies to design plasma technologies for commercial applications.

Working with other like-minded individuals, Nebel has developed plasma-based AC-DC electrical transformers. These transformers can reduce costs associated with transmitting electrical power by 10 times. This technology also enables the transmission of electricity over great distances—as far as 1,200 miles, compared to current technologies, which transmit at a maximum 400 miles.

To validate the efficacy of this technology, Nebel requested technical assistance through NMSBA from senior scientist Juan Fernandez, team leader for experiments in Relativistic Laser Plasmas at Los Alamos. Fernandez evaluated the concept and design for the AC-DC single-phase transformer. Part of this evaluation consisted of reviewing the methodology for executing the experimental protocol to measure transformer efficiencies.

The company used the evaluation to compete for several grants. In 2015, Tibbar received a \$3.5 million contract from the Department of Energy's Advanced Research Projects Agency—Energy. Tibbar has hired 10 new people as of April 2016, and completed machine development for manufacturing these advanced transformers. The company has also secured a building which they are remodeling so that they can manufacture prototypes. According to research and consulting firm GlobalData, the market for this type of technology is estimated to be \$89.6 billion by 2020.

Meet the
PRINCIPAL INVESTIGATOR

Juan Fernandez
Los Alamos National Laboratory

LEVERAGED PROJECTS

Los Alamos National Laboratory and Sandia National Laboratories provide technical assistance for both individual and leveraged NMSBA projects. The following is a listing of this year's leveraged, or group, projects.

Lab	Project	Description	Business Participants	Counties	Funding
Sandia	Activated Carbon	The Labs characterized samples, tested different methods of activating the materials, and provided data about the relative time and temperature to process these materials as well as a description of the process at laboratory scale.	A Green Mechanical, LLC Energy Conversion Corporation GN Services	Bernalillo Dona Ana Santa Fe	\$47,000
Sandia	Algorithm Analysis	The Labs evaluated functionality of hardware and electronics and replaced the existing Neural Net algorithm with a more robust option for detection of suicide bombs hidden under clothing.	Active Security, LLC APPI, Inc. Indelible Enterprises, LLC McLemore Enterprises, LLC R3 Technologies, LLC The MacAleese Companies, Inc. dba Safe Zone Systems	Bernalillo Dona Ana	\$80,000
Sandia	Anaerobic Digester	The Labs provided technical consulting, formulated mathematical representations of processes, implemented computational models, and then tested the models to simulate an anaerobic digester system.	AgPower FP-1, LLC Living Arts Systems, LLC Tropical Institute for Sustainable Agriculture and Renewable Energy (TISARE)	Chaves Santa Fe	\$57,000
Sandia	Applied Cold Agriculture	The Labs provided technical and design consulting on a systems-level approach for adaptation of condensation-watering and demonstration of a more cost-efficient extension to Cold-Ag technology under New Mexico agricultural conditions.	AHL Garden Supply Cold Thumb Agriculture Crocker Construction, Inc. Energy Related Devices, Inc. McCune Solar Works, LLC Sentient Sensors, LLC	Bernalillo Quay Sandoval Santa Fe	\$77,000
Los Alamos	Automated RESA	The Lab enhanced the existing site analysis process: linking resource maps, creating a user interface, and ensuring quality controls to transition the RESA tool for use.	Heckendorn Ranch Himalaya Corporation WindForce	Bernalillo Quay Santa Fe	\$45,000
Sandia	Blended Water	The Labs provided technical assistance to identify, design, and assist with implementation and testing of an innovative pre-treatment step to overcome membrane fouling problems.	2FF, LLC Biosphere Environmental Sciences & Technologies, LLC (B.E.S.T.) M & M Production & Operation, Inc. Shoreline Oil & Gas Company Soil Remediation Systems, LLC TL Phillips Enterprises, LLC	San Juan	\$94,000

Lab	Project	Description	Business Participants	Counties	Funding
Los Alamos	Bone Attachment	The Lab evaluated and tested the chemical environment of metal surfaces before and after cell growth to show the general topography of the surfaces and measured cell survival. The team also used the High Throughput Sequencing technique to distinguish genetic level effects of cell growth.	Metallicum, Inc. Sigma Labs dba B6 Sigma, Inc. fka Beyond6 Sigma	Santa Fe	\$40,000
Sandia	Brewery Biofuel	The Labs provided technical consulting to determine the use of brewery spent grain to generate energy. This energy, in the form of steam, will be used in the production of beer.	Kaktus Brewing Company, Inc. Mt. Taylor Machine, LLC dba Mt. Taylor Manufacturing Welch's Boiler Service, Inc.	Bernalillo Cibola Sandoval	\$41,000
Los Alamos	CUB	The Lab advanced the instrumentation and control system architecture capable of monitoring and controlling various portable Critical Utility Base (CUB) energy and utility units. The team also performed a technical risk assessment of the instrumentation and control system architecture.	AM Energy, Inc. Amethyst Electric, Inc. CUB, Inc. Page Consulting dba Southwest Solar Products, Inc.	Sandoval Santa Fe	\$80,000
Sandia	Embedded Code	The Labs provided technical consulting to assess improvements of hardware and software in a wireless water management system along with accessing and implementing protocols into the design.	Anglim's Western Metal Works, Inc. Betatron Electronics IC Tech Incorporated Left Turn, Inc. LM Concrete Toltec Enterprises, Inc.	Bernalillo Santa Fe	\$65,000
Sandia	Ferroelectric Composites	The Labs applied advanced post processing techniques to test and characterize slurries for unique capacitive qualities.	1N1 Materials Radiant Technologies, Inc. TPL, Inc.	Bernalillo Santa Fe	\$37,000
Los Alamos	Fly Ash	The Lab performed laboratory analyses and developed procedures for sample preparation and classification based on the physical features of samples. For fabricated products, chemical and mineralogical analysis was conducted along with petrographic examination and engineering testing.	Aerblock Enterprises, LLC Los Alamos Business Incubation, LLC Luca Industries USA, LLC PORTAL Branding Company	Los Alamos Santa Fe Union	\$72,000
Sandia	Fuels from Biosolids	The Labs provided technical assistance demonstrating the extraction of fuels from biosolids and performed analysis characterizing the formulations.	Diver Solar, LLC ReGen Technology fka SoilCo, LLC	Bernalillo	\$19,000

LEVERAGED PROJECTS (CONTINUED)

Lab	Project	Description	Business Participants	Counties	Funding
Los Alamos	Geothermal Tool	The Lab assisted with the implementation of geophysical and hydrothermal models in the RAREEDGE tool, validated the models using synthetic data, and ran risk analyses to facilitate application to real world problems.	Earth System Sciences, LLC Geo-Risk TERRAMAR, Inc.	Santa Fe	\$60,000
Sandia	HDMI Display	The Labs consulted on the electronic and physical designs of a WiFi-enabled, microprocessor-controlled, HDMI adapter.	Quikbiteat, LLC Redon Systems, LLC The Circuit Shop, Inc.	Bernalillo Dona Ana	\$47,000
Los Alamos	Heppolt VAWT	The Lab performed simulations using high-performance computing software (HIGRAD/FIRETEC) using data collected from the VAWT prototype, derived a preliminary turbine power curve, and assessed noise, vibration, and wind shadowing issues.	Heppolt Wind, LLC Native Star Energy, LLC Southwest Heritage, Inc. TeePee C, Inc.	Bernalillo Curry Los Alamos	\$70,000
Sandia	Humate	The Labs provided technical evaluation on the concept of the potential use of humate material as a carbon, nitrogen, and water offset.	Enchantment Organics Lone Tree Partners, LLC Platinum Star IP Partners, LLC	Bernalillo Sandoval	\$49,000
Los Alamos	HydroFLOW	The Lab evaluated the product in a cooling tower simulated by evaporative coolers.	New Water Innovations Vibrantcy	Bernalillo Santa Fe	\$30,000
Los Alamos	LAMMPS Instrument	The Lab assisted in performing benchmark annealing and shock simulations to determine the effect of architecture on simulation time.	CreativeC, LLC Manufacturing Technologies, Inc. Materials Design, Inc.	Colfax Los Alamos Sandoval	\$49,000
Los Alamos	LIBS	The Lab analyzed the distribution of important plant nutrients in soil samples from participating farmers providing: data on the distribution, concentration of nutrients, and recommendations for modifications to improve crop yield.	Alvarez Farms Eaton Farms Martinez Hay & Cattle Seco Spice Company, Ltd. Willie Hernandez Farms	Dona Ana	\$50,000
Los Alamos	Microwave Biostimulation	The Lab characterized microwave source, amplifier, and antenna for bio stimulation platforms; developed protocols for algae growth and monitoring; and conducted control experiments in replicates for algae cultivation of different varieties.	BioStim, Inc. Innovative Organic Solutions Intl, Inc. New Solutions Energy Corporation Pocagua Consulting Technical Management Solutions, Inc.	Bernalillo Los Alamos Santa Fe	\$80,000

Lab	Project	Description	Business Participants	Counties	Funding
Sandia	OES	The Labs provided technical consulting to help optimize the current design of a portable, self-contained, modular hybrid power-generating system utilizing photovoltaic panels and battery power.	Carroll Machine & Tool David Chrissinger MS Enterprises, Inc. dba Metal Supermarkets Sustainable Planet Solutions (SPS)	Bernalillo	\$38,000
Sandia	Samobi	The Labs provided a conceptual design for and performance of structural and thermal testing. Tests included consideration of appropriate structural loading conditions and estimation of R-value for different configurations of a block concept. Both structural and thermal characteristics were compared to structural technology that is used for similar applications.	Bill Roth Plastering, Inc. Champion Truss, Inc. Pumice-Crete Building Systems of NM Samobi Industries, LLC (Manufacturing) Samobi Industries, LLC (Research) fka Samobi Block, LLC (Research)	Bernalillo Santa Fe Taos	\$84,000
Sandia	Smart Battery Manager	The Labs combined and tested existing technologies providing embedded battery management. Sandia then consulted on ways to monitor the battery condition and history data, and development of the battery system.	American Lithium Energy Corporation Bye UAS, Inc. dba Silent Falcon UAS Technologies, Inc. Emerging Technology Ventures, Inc. Motion Picture Marine, Inc. aka Perfect Horizon North Alabama Robotic Systems, Inc. (NARS)	Bernalillo Otero	\$85,000
Sandia	Solar Pond	The Labs provided technical consulting and assistance with modeling and calculations for a solar pond concept for energy storage. A scalable model was evaluated in order to benchmark/validate computational fluid dynamics code and structural dynamics code in order to determine the feasibility of deployment.	Daniel Buck Construction, Inc. El Milagro Herbs Epazote on the Hillside San Miguel Sun Dwellings	Santa Fe	\$76,000
Sandia	Space Propulsion	The Labs performed simulations and provided data to evaluate a code framework for modeling safety issues for a space nuclear rocket.	Little Prairie Services Power Source Services Surreal Studios	Bernalillo Santa Fe	\$38,000
Los Alamos	Sphere	The Lab evaluated and characterized a carbon dense by-product (HTC) for use as a remediation agent. Evaluations included metal binding capacity and Total Petroleum Hydrocarbon uptakes studies.	Cottonwood Technology Group Sun Mountain Capital TerranearPMC xF Technologies fka Incitor, Inc.	Bernalillo Los Alamos Santa Fe	\$57,000

INDIVIDUAL PROJECTS

Bernalillo

A-1 Service Company
ABARR, Inc.
Advanced Air Vehicles (AAV)
Advanced Optical Technologies, Inc.
Agilvax
Alternative Industry Resources (AIR) Division of Sandia Development, Inc.
Applied Technology Associates (ATA) / A-Tech Corporation / ATA Sensors
Aqua Research, LLC
Ark Enterprises, LLC
Armour Pavement, Inc.
Azano Pharmaceuticals
BabyPage, LLC
Backerworks Manufacturing
Bio-Detector, LLC
Biophagy
Blur to Focus Productions
Bogue Machine Company
Bosco Tech
BrightCores, Inc.
Burnley Design
CDS Lighting, Inc.
Century Sign Builders
Certified Packing & Crating, Inc.
Continental Machining Company
Cooper Core Technologies, Inc.
CR Technical Services, LLC
Creel Properties
Dark Sea Industries, LLC
Desert Paper & Envelope Company, Inc.
Diversified Tooling Corporation
DroneU
Earth Czar, LLC
Excel Manufacturing
EXHIB-IT!
Fiore Industries, Inc.
FIRES, Inc.
Flying Star Cafe, Inc.
Flying Star Foods
Galisteo Consulting Group, Inc.
Gilly Loco Salsa
Guardian Sensors, Inc.
fka Sentient Business Systems, Inc.
HT MicroAnalytical, Inc.
Improve Group, The
Integrated Machining Company
Innobright Technologies, Inc.
Jaguar Precision Machine Corporation
JC Riant
LAD Engineering
Lobo Cell Phone Solutions (CPS)
Los Poblanos Historic Inn & Organic Farm
Lotus Leaf Coatings, Inc.
Medici Technologies, LLC
Megalith Solutions

Michael Wallace & Associates (MW & A)
Mountain Road Soda
Mountain Top Tees
mPower Technology, Inc.
MVD Express
NM Nano
Obvious Engineering, LLC
OGB Architectural Millwork, Inc.
OptiSource, LLC
Orion International Technologies, Inc.
Osuna Development
Paragon Electric, Inc.
Peter Defries Corporation dba Dion's
Precision Grinding, Inc. (PGI)
PRISM Analytics Corporation
PureColor, Inc.
Radiation Detection Solutions, LLC
Rebel Luxe Management, LLC
Red Rock Distributing Company, LLC
fka Red Rock Roasters
Relios, Inc.
Resilient Solutions 21, LLC
Rio Bravo Brewing
RiskSense, Inc. fka CAaNES, LLC
Roberson Construction Company, Inc.
Senior Scientific, LLC
Sierra Peaks Corporation
Sigma Medical Technologies, LLC
Simply Albuquerque Foods, LLC
Skylite Aeronautics
SolaranRx, Inc.
Southwest Composite Works
Spa Enrichment Strategies dba My Sacred Fig
SpaceBooster, LLC
Squeezed Juice Bar
Steward's Plumbing
Strategic Services, Ltd. Company dba Document Imaging of the Southwest
Sugar House Brewery, LLC
Summit Industries, LLC
Sun Country Industries
TEAM Technologies, Inc.
fka TEAM Specialty Products
Team, LLC dba Tri-Tech Machine Tool Company
TH Chem, Inc.
Total Impulse, LLC
TriLumina Corporation
Turner Manufacturing
Unified Safety Group, LLC
Vamco, LLC
VanDevender Enterprises, LLC
Veritran, Inc.
Vibrant Corporation
Yamasato, Fujiwara, Higa & Associates, Inc.
dba Aquila Technologies Group, Inc.

Chaves

GeoScience Technologies
Liquid Rod Company, LLC

Cibola

Mt. Taylor Millworks

Colfax

Anthony & Cathie Hephner Ranch
Cimarron Real Mountain Jerky

Curry

Clovis Machine and Manufacturing, Inc.
Front Line Equipment Company

Dona Ana

Aztec Algae
bioLime Innovations, LLC
EcoSeal, LLC
GBS Environmental, LLC
Las Cruces Machine Company
Oso Coatings
PAR Associates
Wildlife Diagnostics, LLC
Zetaac, LLC

Eddy

George Rauch Ranch

Guadalupe

David Hamby Design
Milagro Ranch Resources

Lea

STD Quick Screen

Los Alamos

Alpha Analytics, LLC
MIMICRI, LLC
Mountain Storm Instruments, LLC
Oasis Skin Spa, LLC
Porcupine Holding
RockSmith Precision Machining, Inc.
Samitaur Medical Technologies, LLC
Sci Tac, LLC
Select Solar, LLC
Silverpeak Consultants

STRA, LLC
Tibbar Plasma Technologies, Inc.
UbiQD, LLC
VI Control Systems

Mora

Mora Valley Woodworking, LLC
Union Land and Grazing Company

Quay

Apache Canyon Wind Creations
eQsolaris, Inc.

Rio Arriba

Abiquiu Valley Farm
Growing Opportunities
McFarland Instrumentation Services, Inc.
Naturally New Mexico Food Products, LLC
Shaking Oak Productions, LLC

Roosevelt

Hampton Farms

San Juan

Bank of the SouthWest
Clay Groomer Machine Shop
Cooper Fire Protection Services
GG's Designs, Alterations & More, LLC
Glenhasbah Renewable
Energy Technologies, Inc.
Henry Production, Inc. (HPI)
Jack's Plastic and Welding, Inc.
Jumbo, Inc.
MMJ Delivery Courier, LLC
NextGas, LLC
One Source Service
PESCO, Inc.
Professional Janitor's
Quick Carriers dba Hauling Accessories
R & T Holdings, LLC
Real Green Building Systems (RGBS)
San Juan Closet Works
Tethering Ideas
Teton Energy Consulting, LLC
dba E3 Power and Water
Worthy, Inc.

San Miguel

Energy Concepts Corporation
Old Wood, LLC
Randy Huston Ranch

Sandoval

Applied AI, LLC
Arjuna Resources, LLC
Bladewerx, LLC
Bright Valley Enterprises, LLC
Cordova & Sons Tire Recycling & Manufacturing
fka Cordova & Sons Tire Disposal & Recycling
Double Horseshoe Brewing Company
ECOTerra, LLC
Fluid Analytics, Inc.
Focus, LLC
Giggling Springs / Giggling Star, LLC
Insight Lighting
Inspyrd Products Corporation
JSA Photonics
Mezel Mods
MyBeebe, LLC
RG Construction Services, LLC
Right Sized Inventory, LLC
SAB Investments
Safe Fueling Devices, LLC
Southwest Technical Service, Inc.
Walatowa Timber Industries
WEN Engineering

Santa Fe

American Natural Feed Ingredients
Arete Sigma, LLC
Aromaland
Atmocean, Inc.
AttoLight Group, The
Avisa Pharma, Inc.
Awesome Harvest, LLC
Big Sky Learning
bioLime, Inc.
CAFO Web Modules
Culinary Cocktails
Decysive Systems
Dixon, LLC
EarZin, LLC fka EarPod, LLC
Extraordinary Structures
FarmPod, LLC
Foxtrotter Geophysical, LLC
HBN-DSN, Heilbron-Design, LLC
Herbs, Etc., Inc.
Hollowpoint, LLC
HoneyMoon Brewery
iBeam Materials, Inc.
Idea Tree Live
IR Dynamics, LLC
Michelle Henrie, LLC
dba MHenrie Land Water Law
Mesa Photonics, LLC
Monika Kaden Fine Arts, LLC
Nano Catalyzer Systems, Inc.
National Water Services, Inc.
New Mexico Algae Production, LLC

NMGC Solutions, LLC
Pajarito Scientific Corporation (PSC)
Pharma Connect Xpress
Pleasanton Ridge Research
POV Fund 1, LLP
ProsserForge, Inc.
Rader Awning & Upholstering, Inc.
Resonant Body
Santa Fe Probiotics
SAVSU Technologies
SolarSPOT, LLC
STAR Cryoelectronics, LLC
Tazwell's Woodworks
Vapor Blast Solutions, LLC
Vista Therapeutics, Inc.
VM Technology, Inc.
Weka Biosciences, LLC
Zetanostics, Inc.
Zoetic Nourishing Earth
Zoetic, LLC

Socorro

EFX Energy Technologies, LLC
Solaro Energy, Inc.
Space Sciences Corporation

Taos

Beyond Laundry, LLC
Plenish Skincare
Private Label Select, Ltd. Company
Select One Consulting, Ltd. Company
Select Testing Labs, LLC
Taos Mountain Energy Foods, LLC
Vapour Organic Beauty

Torrance

Falcon Industries dba ERGO Grips
KemKey, LLC
Sandia Tobacco Manufacturers

Valencia

Col. Ichabod Conk Products, Inc.
Paideia, LLC
Sisneros Bros. Mfg., LLC
Soil Secrets, LLC
SouthWest Biosensors, LLC
Wall Colmony

AWARD CELEBRATIONS & INFORMATION SESSIONS

Award Celebrations and Information Sessions were held in six different counties throughout the state in 2015 to recognize the success of small businesses that received assistance from NMSBA in 2014.

In addition to honoring NMSBA participants, the events provided an opportunity for small businesses, local economic development representatives, elected officials, and community leaders to network and learn what NMSBA offers to help businesses grow. Panel discussions allowed company owners to share the positive impact they experienced as a result of their NMSBA projects. NMSBA project managers were also on hand to answer questions about the program.

On May 6, NMSBA held an event at the Taos County Economic Development Corporation to recognize Taos Mountain Energy Foods.



Isaac Schilling, Los Alamos National Laboratory NMSBA Project Assistant; Genaro Montoya, Sandia National Laboratories NMSBA Program Leader; Kyle Hawari, Taos Mountain Energy Foods CEO and Founder; Cathy Musgrave, New Mexico Manufacturing Extension Partnership Innovation Director; Carlos Cisneros, New Mexico State Senator; Bobby Gonzales, New Mexico State Representative; and Dan Barrone, Taos Mayor.

On May 27, NMSBA held an event at Arrowhead Center at New Mexico State University in Las Cruces to recognize Fundamentalist Flowerchild Productions.



Anthony Hyde, New Mexico State University M-TEC Director; Griselda Martinez, Arrowhead Center Program Manager; Kate Brown, Fundamentalist Flowerchild Productions Owner/Animator; Genaro Montoya, Sandia NMSBA Program Leader; Doreen Gallegos, New Mexico State Representative; and Greg Smith, Las Cruces Mayor Pro-Tem.

On July 22, NMSBA held an event at Katrinah's East Mountain Grill in Edgewood to recognize KemKey.



Jackie Kerby Moore, Sandia Manager; Matthew McQueen, New Mexico State Representative; Sue Wilson Beffort, New Mexico State Senator; Genaro Montoya, Sandia NMSBA Program Leader; Randy Brown, KemKey President and Owner; Juan Romero, Sandia Principal Investigator; Kim Sherwood, Los Alamos NMSBA Project Manager, and John Chavez, New Mexico Angels President.

On August 5, NMSBA held an event in Santa Fe to recognize iBeam Materials, Pharma Connect Xpress, and three Geothermal Tool Leveraged Project companies: Earth System Sciences, Geo-Risk, and TERRAMAR. In addition, Taos Mountain Energy Foods received the “Honorable Speaker Ben Luján Award for Small Business Excellence” for demonstrating the most economic impact.



Dylan Harp, Los Alamos Principal Investigator; and William Glassley, Earth System Sciences Executive Director.



Becky Coel-Roback, Los Alamos Project Manager; and Kimberly Corbitt, Pharma Connect Xpress CEO.



Terry Holesinger, Los Alamos Principal Investigator; Vladimir Matias, iBeam Materials President; and Kim Sherwood, Los Alamos NMSBA Project Manager.



Brooks Thostenson, Taos Mountain Energy Foods President Founder; and Ben Ray Luján, U.S. Representative (D-NM 3rd District).

On August 12, NMSBA held an event at Sisneros Bros. Mfg. in Belen to recognize the company.



Michael Sanchez, New Mexico State Senator; Kim Sherwood, Los Alamos NMSBA Project Manager; Jerah Cordova, City of Belen Mayor; Joaquin Sisneros, Sisneros Bros. Mfg. Vice President of Manufacturing; John Robert Laing, Sandia Principal Investigator; Thomas Bosiljevac, Sandia Principal Investigator; Genaro Montoya, Sandia NMSBA Program Leader; Barbara Brazil, State of New Mexico Economic Development Department Deputy Cabinet Secretary; and Jackie Kerby Moore, Sandia Manager.

On August 18, NMSBA held an event in Albuquerque to recognize Facility Facts, IC Tech, and five LASER Array Submounts Leveraged Project companies: TriLumina, Dynamic Photonics, 3D Glass Solutions, Theta Plate, and Ideum.



Gerald Ortiz y Pino, New Mexico State Senator; Deirdre M. Firth, City of Albuquerque Economic Development Department Deputy Director; Corey Cooper, University of New Mexico (UNM) Project Research Intern; Jason Strauss, Facility Facts CEO; Raaj Mohan, Facility Facts CTO; Lauren Elizabeth Lockett, UNM Project Research Intern; Becky Coel-Roback, Los Alamos Project Manager; Gale Chasey, New Mexico State Representative; and Genaro Montoya, Sandia NMSBA Program Leader.



Deirdre M. Firth, City of Albuquerque Economic Development Department Deputy Director; Gale Chasey, New Mexico State Representative; Michael Holzrichter, Sandia Principal Investigator, Brad Buffington, IC Tech CEO; Don Small, Sandia Principal Investigator; Becky Coel-Roback, Los Alamos Project Manager; Gerald Ortiz y Pino, New Mexico State Senator; and Genaro Montoya, Sandia NMSBA Program Leader.



Gerald Ortiz y Pino, New Mexico State Senator; Deirdre M. Firth, City of Albuquerque Economic Development Department Deputy Director; Gale Chasey, New Mexico State Representative; Richard Carson, TriLumina Director of Product Quality; Robert Brocato, Sandia Principal Investigator, Dan Lenskold, TriLumina Director of Product Line Management; Becky Coel-Roback, Los Alamos Project Manager; and Genaro Montoya, Sandia NMSBA Program Leader.

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- ▶ Thank you to all the Los Alamos and Sandia national laboratories' Principal Investigators who applied their expertise and knowledge to help New Mexico small businesses solve their technical challenges.
- ▶ Thank you to the Governor's office and the New Mexico State Legislature for supporting the Laboratory Partnership with Small Business Tax Credit Act.
- ▶ Thank you to the Advisory Council for their leadership, advice, and guidance in support of NMSBA.

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Woods Farms, Inc.; ZC Partners

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- ▶ And a final thank you to the Staff who work every day to ensure the success of NMSBA.

Becky Coel-Roback / Los Alamos

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Sharon Evans / Sandia

Judy Hendricks / New Mexico MEP / Sandia

Mariann Johnston / Los Alamos

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Jackie Kerby Moore / Sandia

Kimberly Sherwood / Los Alamos

Janelle Ulibarri / Los Alamos

Linda von Boetticher / Akima / Sandia

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Solving New Mexico's Small Business Challenges

www.NMSBAprogram.org



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