



# NM companies may receive up to \$150K in technical assistance



**TECHNICAL ASSISTANCE** — Sandia researchers Jim Pasch, left, and Darryn Fleming investigate a turbine and compressor inside a test facility in 2015. Sandia and Los Alamos national laboratories have accepted statements of intent from New Mexico businesses for the new Technology Readiness Gross Receipts Tax Credit Initiative. The program offers up to \$150,000 in technical assistance for businesses that provide promising concepts to mature licenses obtained from or developed with the labs into commercial products.

Photo by Randy Montoya

## National labs seek statements of intent for new tech development program

By **Manette Newbold Fisher**

**E**ligible New Mexico companies have submitted statements of intent to work with scientists and engineers at Sandia or Los Alamos national laboratories through a new program to advance technologies derived from the labs into market-ready products and services.

The **Technology Readiness Gross Receipts Tax Credit Initiative** allows selected companies to receive up to \$150,000 in direct technical assistance per year for prototyping, proof-of-concept, field demonstrations, technical validation, testing and development or other activities. The **statements of intent**, the labs' first call for proposals, were due Sept. 3. Companies registered to do business in New Mexico were required to have a licensed technology or a **Cooperative Research and Development Agreement** with Sandia or Los Alamos to apply.

"Sandia is looking forward to engaging with New Mexico companies in a new way," said Mary Monson, Sandia senior manager of Technology Partnerships

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## How to multitask when nuclear nonproliferation is on the line

*New cognitive science research aids nuclear treaty verification inspectors*

By **Kristen Meub**

**N**ew cognitive science research from Sandia shows that while maps can help you identify landmarks while being escorted, using one also limits situational awareness and knowledge of surroundings not highlighted on the map.

This finding is one of several coming from a three-year project that paired cognitive scientists and international nuclear safeguards experts to conduct human performance tests and develop recommendations for **International Atomic Energy Agency** safeguards inspectors. The goal is to help inspectors be more accurate, efficient and situationally aware while on the job, which ultimately helps ensure nuclear nonproliferation.

The tests focused on visual inspection, wayfinding and knowledge transfer tasks that are important for inspectors. While cognitive scientists have studied these areas in detail before, the existing research did not address the unique needs of international safeguards inspectors.

"Inspectors are on the road at least half of the time, sometimes going from country to country to save costs," said Zoe Gastelum, nuclear safeguards researcher and project lead. "They are jet-lagged, they are working in industrial, hazardous environments and they are often limited by the types of



**INSPECTING THE INSPECTORS** — An inspector checks her list during a 2015 International Atomic Energy Agency safeguards inspection at a Urenco facility in Almelo, Netherlands. A Sandia research team has completed a three-year project to conduct human performance testing and develop recommendations that lighten the cognitive load for safeguards inspectors.

Photo courtesy of the International Atomic Energy Agency

technology they can bring in with them."

IAEA inspectors visit nuclear energy facilities to verify that they are not misused, and nuclear material is not diverted from peaceful uses. While at a facility, they must complete specific tasks and record information while also being aware of their surroundings and analyzing discrepancies. They typically are communicating in a non-native language with people who are also speaking in a non-native language. Plus, inspection teams often change so they have to work from the notes and observations of others to compare changes in a facility over time, Zoe said.

"All these complicating factors make it a really challenging job and place a heavy cognitive load on the inspectors," she said. "With this project, we

saw that changing the way we provide information to folks who are working in the field can help them be more effective and efficient."

The research team performed a survey to determine the biggest needs for the nuclear safeguards community, and then reviewed it to identify the gaps in cognitive science literature.

"A lot of cognitive science work has been very lab-based and theory-heavy about mechanisms and processes in the mind and brain," said Mallory Stites, a cognitive scientist and research team member. "Sometimes there's a gulf between what you do in the lab and what you need for applied science. Our goal was to do lab-based work

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 LABNEWS Notes

## O'Hara named 2020 'Woman Worth Watching'

Sandia systems engineer earns Profiles in Diversity Journal honor

By **Luke Frank**

**S**andia systems engineer Carrie O'Hara has been selected as a 2020 Women Worth Watching award winner by Profiles in Diversity Journal. The awards, in their 19th year, recognize dynamic professional women who are using their talents and influence to change our workplaces and our world.

Carrie was nominated for dedicating her career to making the world safer. As a respected physical security expert and innovative instructional systems designer at Sandia, she collaborates with numerous federal agencies to develop and lead training programs for nuclear security professionals in the U.S. and across the globe.

Nominees for the award are judged on contributions and achievements in three of five categories: leadership, executive responsibility, professional achievement, innovation and mentorship.

Before becoming a systems engineer at Sandia, Carrie served as the Labs' security systems and technology training project lead for the U.S. Navy Strategic Weapons Facilities Physical Security Engineering programs for both the Atlantic and Pacific fleets. She developed and led training for all U.S. Navy and Marine security forces.

While serving in the role, Carrie also earned her master's degree in organizational learning and instructional technology at the University of New Mexico. She used the techniques she learned in her master's program to



**COMPLETE PROFESSIONAL** — Sandia systems engineer Carrie O'Hara teaches a workshop during the 2019 International Training Course on the Physical Protection of Nuclear Materials and Nuclear Facilities. Photo by Bret Latta

develop innovative technology-based simulation and gaming courses.

"This award was a surprise to me, but I'm honored," Carrie said. "I love working for Sandia Labs. I feel like my work here is important, and I appreciate the opportunities I've been given. We have a great community of people at Sandia."

Working in transportation security at Sandia has greatly expanded Carrie's knowledge of domestic and international nuclear physical security, she said. "This experience has given me invaluable insights for collaborating with other departments at the Labs to create training programs for a safer nuclear security complex."

### Confident problem solving, leadership

Carrie attributes her success in part to having the confidence to solve problems in difficult situations. "Leadership comes from having confidence," she said. "We all will encounter that 1% of people in our lives who are not accepting of us. It happens to everyone, but it's not an excuse not to succeed."

From 1993-2001, Carrie served in the U.S. Air Force as a combat survival, evasion, resistance and escape instructor, training air crew and special forces on the physical and psychological stresses of survival and teaching them the skills

needed to stay alive if they were to get separated from their units or aircraft.

"My advice to young women is to never take 'no' for an answer and never let someone else hold you back," Carrie said. "Put in the work and get the training you need to pursue your goals. Your success is a direct result of your efforts. It won't be easy, but 'no' is for other people, not you."

Sandia Chief Diversity Officer Esther Hernandez said Carrie is a great example of success through dedication and hard work. "Her focus and commitment throughout her career definitely make Carrie a woman worth watching."

"Carrie O'Hara is an outstanding candidate for Women Worth Watching," said James Rector, Profiles in Diversity Journal publisher and CEO. "Responsibilities, job performance, qualifications and experience are the true measure of a Woman Worth Watching, and Carrie exemplifies the complete professional."

Profiles in Diversity Journal is a quarterly magazine dedicated to promoting and advancing diversity and inclusion in the corporate, government, nonprofit, higher education and military sectors. 

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 LABNEWS Notes

**EDITOR'S NOTE:** Lab News welcomes guest columnists who wish to tell their own "Sandia story" or offer their observations on life at the Labs or on science and technology in the news. If you have a column (500-800 words) or an idea to submit, contact Lab News editor Tim Deshler at [tadeshl@sandia.gov](mailto:tadeshl@sandia.gov).

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# Bike to Work Week re-imagined

Short bike trips to 'somewhere' encouraged for annual cycling celebration



**BURNING CALORIES, SAVING ENERGY** — Patrick Burton, left, and John Sandlin cycle to work on-site at Sandia's Albuquerque campus. **Photo by Randy Montoya**

By **Patrick Burton**

**B**ike to Work Week is part of National Bike Month, an annual observance that celebrates biking as both transportation and recreation. Usually held in May, this year's events had to be postponed due to the pandemic. The 2020 Bike to Work week will be celebrated Sept. 21-27, with Bike to Work Day observed on Tuesday, Sept. 22.

Since many Labs employees are still encouraged to work from home to help prevent the spread of COVID-19, the [Sandia Bicycle Commuter Group](#) is adapting the annual event, encouraging participants to "bike to get somewhere."

Biking for transportation is a great way to add some more movement to your day (and earn Virgin Pulse Points). A short trip by bike to replace an errand you'd normally make by car has additional benefits. The direct energy and emissions savings are obvious, but there's a second emissions benefit that is just as, if not more, important.

Three-way catalytic converters are impressive, emissions-scrubbing powerhouses, but they only work at elevated temperatures. In order to prolong the life of the catalyst, the converter is located far from the engine block, and takes about five minutes to warm up. During this warm-up period, the exhaust is substantially higher in carbon monoxide, unburned fuel and nitrogen oxides. In

## Bicycle commuters share their experiences

### Q What do you enjoy most about biking to work?

"It's fun. Taking the scenic route (long way or trails) home also makes commuting to work the fun part of my day. Not having to plan my commute schedule around when I think the gates will be most busy makes biking more convenient than driving for me." — *Christina Ting*

"Biking to work is a great way to commute, and I get my exercise done for the day. Like most people, I have bad knees and biking is one of the few activities that satisfies my weekly cardio and doesn't cause any pain. At first, I was intimidated by the distance, but after I established my route, I realized my commute time is almost the same as driving. My favorite part is zipping past the long line of cars sitting in gate traffic!" — *Michelle Chatter*

"For me, being on the bike has a sense of freedom. Seems to remove you from the hustle and bustle of the day. I use the commute to forget about the stresses of work and recalibrate for home life. It definitely helps to separate the two, which is of great importance to family time." — *Christopher Eckstein*

### Q How does biking to work improve the rest of your day?

"I am generally more focused after riding in. I don't feel as groggy in the morning (post riding). And on the way home, it is nice to unwind and differentiate between work and home." — *Andrew Knight*

"I really love cycling. Starting the day off with a ride is just plain fun and puts me in a good frame of mind (assuming no close encounters with cars on the way)." — *Brian Podolny*

"Biking to work is a great way to get yourself awake and your brain working to start the day. As opposed to driving experience, while you're biking to work, all of your senses are stimulated: you can smell the freshly plowed field, you can hear the honking geese, you can see the squirrels scurrying to get out of your way, and you can feel the wind in your face. What's more, I find that if I take the trail routes, I have given and received 10 'good mornings' with fellow bike riders and walkers before pulling into the gate, usually with a smile on my face." — *Peter Marleau*

### Q Which gates have you used, and are there any helpful hints you can share?

"Bicycle gate, Eubank, Truman, Wyoming. Albuquerque actually has a lot of options in terms of bike paths, routes, and trails (400+ miles). There is usually a good route to any one of those gates; check the ABQ bike map or feel free to contact me for route suggestions!" — *Christina Ting*

"I've biked through the Eubank gate, before and during the construction, and I am eager to get familiar with the new road. I am a little nervous, so when I ride through the new gate, I'll choose a day and time when there isn't much traffic (an early Friday morning for example). Once I get more familiar and comfortable it'll be second nature!" — *Michelle Chatter*

"In Sandia California, there aren't many gate choices: the East Avenue gate is just about it. When I first started biking, I took the pedestrian gate there, but quickly learned that navigating these with a bike can be difficult and frustrating. Bikes are vehicles too, so just merge into the traffic lanes and enter there. I wait my turn along with the cars; though cutting ahead is possible, it's still cutting! Another piece of advice when you're commuting by bike is DON'T FORGET YOUR BADGE. The Sandia California badging office is on the other side of the site, so you have a four-mile ride from the East Avenue gate to get there." — *Peter Marleau*

fact, most of a car's emissions occur during the first five minutes of each trip. A short trip made by car doesn't allow enough time for the catalyst to warm up before arrival.

As an engineering lab, we always endeavor to use the best tool for the job. Offsetting short errands (around three miles or five minutes) with a bike ride would avoid most vehicle emissions without requiring so much exertion that it becomes a sweaty workout.

In a neighborhood setting with slower speed limits, the time needed for a bike trip is only marginally greater than the time to drive. Longer trips or hauling more cargo are where the utility of a car starts to overcome the initial energy and

emission costs. Shorter errands are the sweet spot for getting more exercise and reducing your carbon footprint.

Unfortunately, there can be several obstacles to using a bike as transportation, including safe paths, accessible routes and other factors. The [Sandia Bicycle Commuter Group](#) is happy to help in any capacity possible.

During this year's Bike to Work (or anywhere else) Week, look around your neighborhood and see where you can go on a bike. If biking to work isn't feasible for you this year, check out other biking destinations in Albuquerque at [bikethruburque.com](http://bikethruburque.com) or look for a biking organization in your community. [fb](#)

## NM business assistance

CONTINUED FROM PAGE 1

and Business Development. "The labs are dedicated to transferring technology and partnering with industry, and this program will help businesses use licensed lab technologies in new commercial applications."

The new tax credit initiative was [signed into law this year](#) and is a three-year pilot program to address a critical stage between technology development and commercialization. When technology is transferred out of the laboratories, often significant capital investment and development are required to mature the technology, and businesses frequently face a void in funding.

Through the new initiative, Sandia and Los Alamos can claim tax credits against their gross receipts tax liabilities for their work with businesses. Each lab

can claim up to \$500,000 the first year, \$750,000 the second year and \$1 million the third year. In total, the labs can provide up to \$4.5 million in time, technical assistance and resources over three years.

"We're lowering the barriers and moving R&D from the labs into New Mexico-based technologies," said Duncan McBranch, program director of Entrepreneurship for Mission Innovation at Los Alamos. "This matters because 99% of companies in New Mexico are small businesses with limited budgets for new product development. Access to the expertise and technologies at Sandia and Los Alamos national laboratories can make a huge difference for these companies."

### Selection process

The proposed projects must demonstrate a strong likelihood for successful maturation to a product

or service in the commercial field, Mary said. After receiving all statements of intent, the laboratories will complete an interview to establish eligibility by Sept. 17. Eligible companies will then complete written proposals and prepare presentations by Oct. 14. Invited companies will present to a review panel the week of Oct. 21 and funding decisions will be announced by Oct. 26.

Assistance provided through the program must not be available in the private sector, and all project work will be completed within a year from when the work begins. Participating companies cannot have an active [New Mexico Small Business Assistance](#) project within the same calendar year.

Visit [sandia.gov](http://sandia.gov) to learn more about the Sandia's technology and economic development partnerships. [fb](#)

# Road construction finishes early

Sandia and KAFB cooperate to increase base security, improve traffic flow ahead of schedule and under budget



**IMPROVED FLOW** — The new outbound traffic flow will reduce wait times when leaving the base during peak hours. A new shared-use path for cyclists and pedestrians also will improve commuting options.



**EARLY OPEN** — Lanes at the Eubank gate reopened to base traffic on Aug. 17. The project initially did not call for closure of the gate; however, pandemic work restrictions significantly reduced traffic during construction, so the gate was closed for several weeks, allowing crews to complete the project early.

By **Karli Massey**

**C**onstruction of the 12-month road project on Kirtland Air Force Base, west of the Eubank gate entrance, began Oct. 1, 2019. The purpose of the project was to make security improvements to the military base and to pave a road that provides access to the new NNSA Albuquerque Complex currently under construction.

Because of reduced traffic related to the telework policies put in place due to the pandemic, the project schedule was consolidated and finished ahead

of schedule and under budget.

## Project stats:

- 25,055 cubic yards of earthwork moved
- 10,000 tons of base course and 11,500 tons of asphalt used to repave existing roadways, pave two new roads and created a shared-use path
- 5,000 cubic yards of concrete used to construct curbs and gutters
- 42,000 linear feet of electrical wire fed for new streetlights and traffic signals
- 0 safety incidents 



**SAFE SPACE** — The 20th St. and G Ave. intersection was moved farther west to increase the threat containment distance after vehicles enter the Eubank gate and provide a roadway to the new NNSA Albuquerque Complex (background left) currently under construction.

Photos by **Rebecca Gustaf**

## Cognitive science research

CONTINUED FROM PAGE 1

grounded in cognitive theory that could be applied in the field.”

The team designed a series of human performance tests based on inspectors’ activities. For each task, the team provided relevant information in several ways to the participants and observed how the way the information was presented changed performance.

### Balancing accuracy, speed while searching lists and items

“While there has been a lot of research on visual search in cognitive science, the specific things the inspectors do in the field, which are usually comparing one list to another list or to physical objects, hadn’t been looked at much,” said Laura Matzen, a cognitive scientist and project team member. “We wanted to fill that gap by looking at different ways of organizing an inspector’s list to make the job easier.”

The team studied visual search and list formatting. One test had participants compare one list to another, much like an inspector would compare a facility’s current inventory with the inventory list provided by the national safeguards regulator to note what had gone in and out. They had each participant group try a different technique for organizing and comparing their lists, such as using color coding, numerical ordering or reorganizing the current list to match the order of the previous list as much as possible.

“We found that color coding really did help,” Laura said. “Anything we could do to the inspector’s list to constrain where they looked on the facility’s list helped speed up the process because they could zero in on the relevant column or section.”

Laura said the results also showed that reorganizing the lists to better match sped up the comparison process even more, but participants started missing subtle errors, such as number transpositions, and their accuracy decreased.

### Choose your emphasis: finding landmarks or observing details

The team set up experiments at a Sandia facility that was previously used for work with nuclear materials but is no longer active.

“The facility had a lot of the same visual characteristics that inspectors see,” Mallory said. “It was

big, kind of loud, pretty warm and an easy space to get turned around in.”

The goal, she said, was to see how or whether maps could help inspectors learn the layout of a facility and remain aware of their general surroundings, particularly while they are being led on a guided route.

“When you’re not in control of your own navigation, like being a passenger in a car, it’s really hard to keep track of where you’re going,” she said.

Some participants were given a map to study before going into the facility for a guided tour, some were allowed to bring a map with them on the tour and some didn’t get any time with a map before or during the tour.

“We found that if inspectors can get a map of the facility in advance, that’s definitely better for enhancing their ability to know their route, recognize landmarks and form a birds-eye view of the facility,” Mallory said. “However, the inspection team should make a choice based on their objectives about whether or not to carry the map with them inside the facility. If their main goal is learning the layout, the answer is yes. If their main goal is situational awareness, we found they are better off not bringing in and consulting a map while inside.”

### Taking notes for knowledge transfer

The research team set up a series of experiments to determine how notetaking and pictures can help or hinder inspectors from transferring knowledge to other inspectors, often years later without any in-person conversation or interaction.

The team created four poster boards full of images of nondescript industrial-looking parts and gadgets.

In different studies, the participants had 12 minutes with each board and were asked to take notes by hand, take pictures with a camera, or take handwritten notes and pictures with a camera.

In the first set of experiments, the same person came back either two days or six months later and were given their notes and a new set of similar but different boards and then were asked to determine what had changed from the first set of boards and images.

In the second set of experiments, the notes from the participants who had seen the first set of boards were given to new participants who were only shown the second set of boards. They, too, were asked to determine what had changed, simulating a second inspection team going in with notes from a previous team.

Laura said the items on the board might have changed places, or their texture, material or

orientation might have changed, but participants were not told in advance what kind of changes to expect. Participants also were free to take notes with their pencil and paper in any way they wished.

“We did some analysis on the premise of, if you only have pen and paper, how do you make the most of it?” Laura said. “We found that people who had something in writing and something visual in their notes were better able to detect changes. Try to organize your information spatially, list all the important features, write descriptions and draw whenever possible, to help the next person to understand.”

Laura said participants who had cameras were unsurprisingly more accurate on detecting changes in the objects, but also were slower to analyze the objects and would often lose track of where the object they had photographed had been placed on the board. Inspectors using a camera were understandably more confident in their responses, but that confidence included when they were incorrect. For inspectors who are able to bring in a camera, the team recommends enhancing this by jotting down a few notes about the photos you are taking — orientation, part of the building you were in or other helpful situational information.

### Getting the word out

The research team has presented papers on [visual inspection](#) and [notetaking for knowledge transfer](#) at the International Conference on Human-Computer Interaction, on [human performance testing](#) at the IAEA Safeguards Symposium and on [list-comparison activity research](#) and [simulating safeguards information environments](#) for human performance testing at the Institute of Nuclear Materials Management Annual Meeting. They also have published in The European Safeguards Research & Development Association Bulletin, presented at the ESARDA annual symposium and published in Cognitive Research: Principles and Implications.

The team has started a related two-year project to characterize the impact of errors from machine-learning and deep-learning algorithms on human cognitive performance, with the goal of providing evidence-based recommendations for integrating AI with human decision making in analytical systems.

This project was funded by Sandia’s [Laboratory Directed Research and Development](#) program. 

# Sandia joins national center for quantum computing research

Team uses science, tech, education to spur US leadership in quantum information science

By **Troy Rummler**

**S**andia will serve as the leading partner in one of five national research centers for quantum information science established by DOE in August.

The Quantum Systems Accelerator is a multi-disciplinary team comprising dozens of researchers from 15 labs and universities. Together, they will collaborate to transform rudimentary quantum computers and related technologies into machines that perform valuable work for DOE and the nation. Such work could include advances in scientific computing, discoveries in fundamental physics and breakthrough research in materials and chemistry.

The new organization, led by Lawrence Berkeley National Laboratory, will receive \$115 million over five years to co-design advanced algorithms, devices and engineering solutions; foster collaboration with industry and nongovernmental organizations; and lay the groundwork to train a future workforce.

“The QSA combines Sandia’s expertise in quantum fabrication, engineering and systems integration with Berkeley Lab’s lead capabilities in quantum theory, design and development and a team dedicated to meaningful impact for the emerging U.S. quantum industry,” said Sandia’s Rick Muller, deputy director of the Quantum Systems Accelerator.

Quantum computers and other devices operate using peculiar laws of physics — quantum mechanics — that affect matter at its tiniest scales. Sandia and its partners believe these machines would perform certain calculations much faster than normal computers if they could be made to run reliably.

“The global race is on to build quantum systems that fuel discovery and make possible the next generation of information technology that greatly improves our lives. The Quantum Systems Accelerator will transform the enormous promise of quantum entanglement into an engineering resource

for the nation, forging the industries of tomorrow,” said Berkeley Lab’s Irfan Siddiqi, director of the Quantum Systems Accelerator.

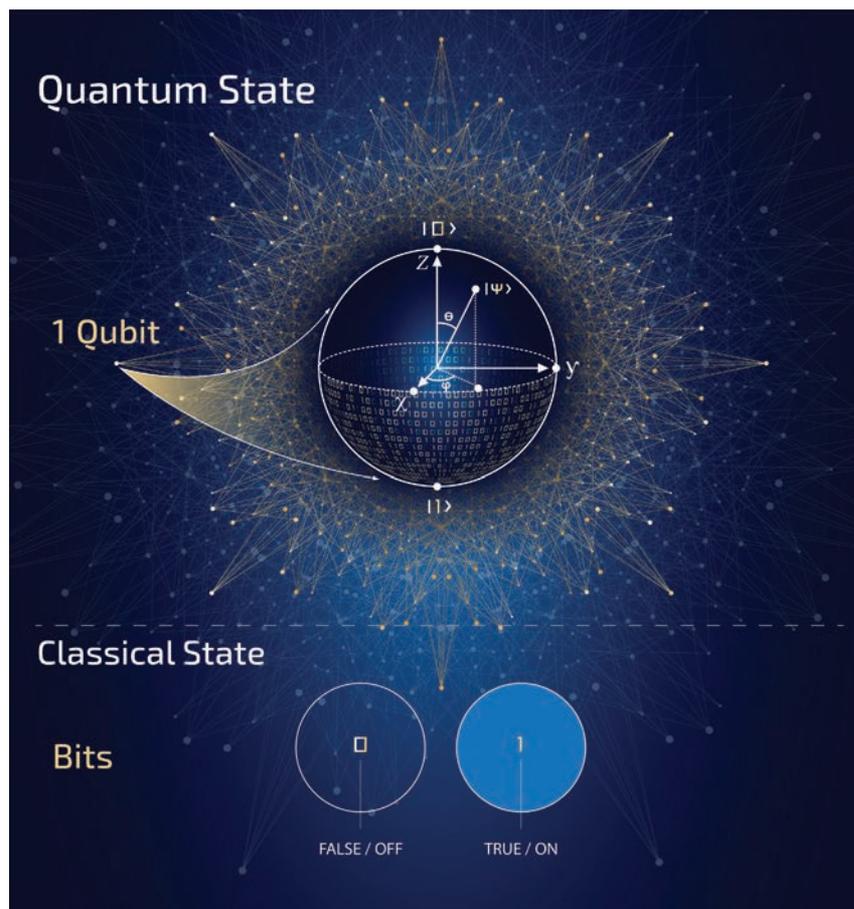
The research center is established under the National Quantum Initiative Act, signed into federal law in 2018.

“The quantum processors developed by the QSA will explore the mysterious properties of complex quantum systems in ways never before possible, opening unprecedented opportunities for scientific discovery while also posing new challenges,” said John Preskill, Richard P. Feynman Professor of Theoretical Physics at the California Institute of Technology and scientific coordinator for the Quantum Systems Accelerator.

## Preparing for a quantum economy

Future quantum computer manufacturers, software developers, technicians, network administrators and cybersecurity professionals, to name a few, might all need some knowledge of quantum mechanics to do their jobs. But relatively few people learn about this science in school.

“The ability of the U.S. to out-innovate other countries in quantum computing depends on our most important capability — people,” said Scott



**CHOMPING AT THE QUBIT** — Sandia and fellow members of the Quantum Systems Accelerator are collaborating to fast-track advances in information science and prepare the nation’s workforce for a future quantum economy. Quantum bits of information, or qubits, have the potential to make powerful calculations that classical bits cannot.

Image by **Michael Vittitow**

Collis, director of computing at Sandia. “This makes workforce development a critical element of the new initiative to ensure that we help train the next generations of scientists and engineers who can advance and utilize advances in quantum computing.”

To cultivate this future workforce, the Quantum Systems Accelerator will create training programs for working professionals and teaching strategies for educators to bring quantum mechanics into their classrooms.

“We’d like curricula to address quantum issues and technology at an earlier stage,” Rick said. “We need to educate the workforce with what they’ll need to support the emerging quantum economy.”

Total planned funding for the center is \$115 million over five years, with \$15 million in fiscal year 2020 dollars and out-year funding contingent on congressional appropriations. [f](#)

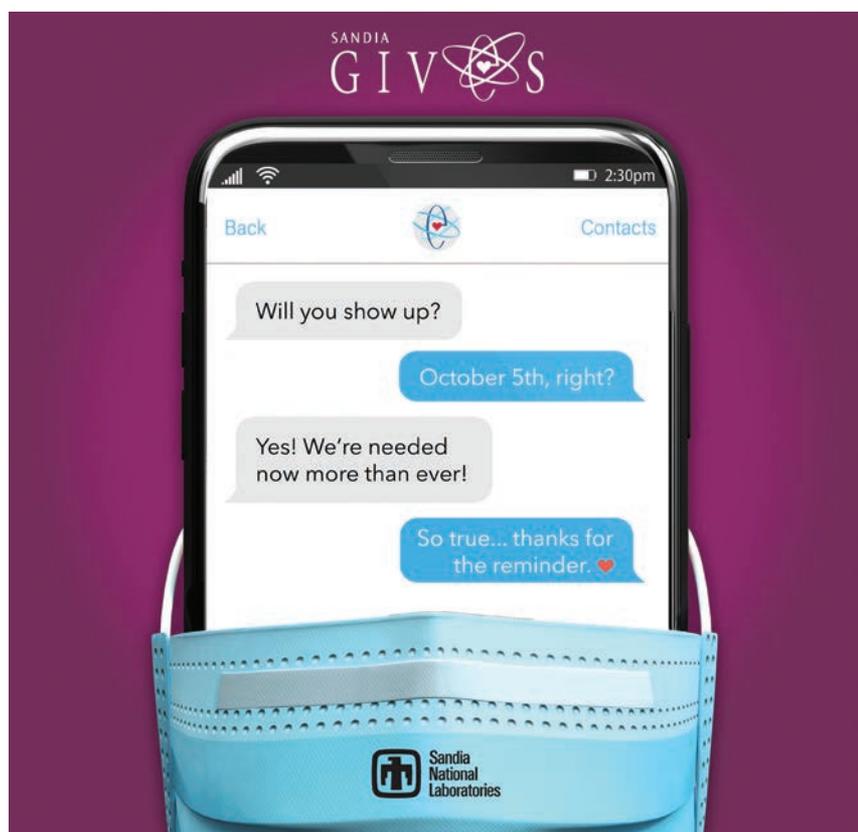


## QUANTUM SYSTEMS ACCELERATOR

Catalyzing the Quantum Ecosystem

**NATIONALLY RECOGNIZED** — The Quantum Systems Accelerator is a multidisciplinary team of researchers across 15 labs and universities. Together, they will collaborate to transform rudimentary quantum computers and related technologies into machines that perform valuable work.

Image courtesy of the Quantum Systems Accelerator



**GEN. WOLTERS VISITS SANDIA** — Supreme Allied Commander Europe, NATO, and Commander, United States European Command, U.S. Air Force Gen. Tod Wolters, center, visited Sandia’s Albuquerque campus on Aug. 26 for an update on the Labs’ nuclear deterrence efforts. During the visit, he met with Labs Director James S. Peery, left, and NNSA Sandia Field Office manager Jeff Harrell.

Photo by **Lonnie Anderson**

# Protocol moves into high gear during pandemic

Executive Protocol Office ensures smooth visits for distinguished guests amid COVID-19 challenges



**SOCIAL DISTANCING** — Creative Services placed “stand here” labels on the floor of the Steve Schiff Auditorium lobby to help NNSA Administrator Lisa E. Gordon-Haggerty, center, and other attendees at a July COVID-19 poster session ensure they were maintaining a safe distance. **Photo by Lonnie Anderson**



**SIX FEET APART** — Strategically placed seating assignments help ensure social distancing in Sandia conference rooms. **Photo by Annie Waters**

By **Whitney Lacy**

On any given day, Sandia’s Executive Protocol Office hosts distinguished visitors that focus on the multitude of Labs priority programs; but during a pandemic, nothing is normal.

“We have COVID-19 safety protocols that everyone must follow, including distinguished visitors,” said Annie Waters, who manages the team. “Everyone must adhere to these safety protocols, and as you might imagine, communication with visitors and their teams is paramount when managing expectations.”

Sandia will host a variety of visitors throughout the year, and each visit involves multiple layers of coordination among many organizations, including Badging, Security, Facilities, Transportation, Media Relations and Creative Services. Protocol ensures that all the behind-the-scenes activities and logistics are as seamless and distraction-free as possible.

Each visit may involve weeks of planning, but requirements and decisions can change frequently, even up to and during the event itself. The pandemic has added a new challenge.

Sandia’s partial shutdown followed the state of New Mexico’s lockdown in mid-March, and at that

time, the Executive Protocol Office was in the middle of preparations for multiple high-level visitors. Many of these visits were either cancelled, postponed or turned into a virtual event, until recently.

“Our first post-COVID-19 visit was in early July for the Undersecretary of the Department of Energy,” Annie said. The team aggressively forecasted a path forward within the confines of the pandemic that added several new layers of planning in addition to the usual requirements.

“Now, we’ve added Medical for COVID screenings of all our guests. We included the Risk & Emergency Management team and we involve the Pandemic Response Team in all planning processes,” she said. “These additional steps consume much more time, especially with COVID provisions, travel restrictions and other variables changing on a weekly to daily basis.”

## New normal

To ensure compliance and safety, all visitors, including distinguished visitors such as NNSA Administrator Lisa E. Gordon-Hagerty, who visited Sandia on July 15, must complete Sandia’s Health Check screening before coming on-site and must wear a face covering.

Catering, which normally is brought on-site by outside vendors, must now be picked up by Protocol staff; all food items are pre-packaged and team members wear gloves when handling the food.

Social distancing is required in everything from the buses used to transport visitors from place to place, to where each person can sit or stand. Per Sandia’s requirements, conference rooms also are limited to a maximum of 10 participants, and everyone must be spaced, to the greatest extent possible, a minimum of six feet apart.

This was demonstrated during Administrator Gordon-Hagerty’s visit, which included, among other events, a conference room briefing with Labs leadership and a COVID-19 poster session in the lobby of the Steve Schiff Auditorium.

“Creative Services did a great job of printing and laying down ‘stand here’ labels across the lobby and having seating assignment labels for the auditorium,” Annie said.

At the end of each visit, the team works out the bugs and improves their logistics with a post-event meeting that will better prepare them for the next visit.

“Everyone, including visitors, needs to know what to expect during these uncertain times.”

## SANDIA CLASSIFIED ADS

**NOTE: The classified ad deadline for the Sept. 25 Lab News is noon Friday, Sept. 18.**

### AD SUBMISSION GUIDELINES

**AD SUBMISSION DEADLINE:** Friday noon before the week of publication unless changed by holiday.

Questions to Michelle Fleming at 505-844-4902.

Submit by one of the following methods:

- **EMAIL:** Michelle Fleming (classads@sandia.gov)
- **FAX:** 505-844-0645
- **MAIL:** MS1468 (Dept. 3651)

- **INTERNAL WEB:** Click on the News tab at the top of the TechWeb homepage to visit the News Center, then select Announcements >> Submit Announcement.

Due to space constraints, ads will be printed on a first-come, first-served basis.

### MISCELLANEOUS

**TRACFONE ZTE**, Majesty ProPlus LTE, never activated w/\$15 phone card, \$19; “The Agatha Christie Hour” DVD, set 1, \$10; “Ray Charles” w/Jamie Foxx, DVD, \$5; all excellent condition. Wagner, 505-504-8783.

**PATIO FURNITURE**, by Telescope: 2-seat sofa, 2 swivel rockers, 2 tables, 3 pillows, bronze & taupe, like new, \$1,750 OBO. Negin, 505-294-3117.

**WHEELS & TIRES**, factory 4Runner, brand new, 265/70R17, all terrain tires, w/2020 TRD Sport wheels, also fits Tacoma, \$650. Mihalik, 505-816-8469.

**BABY EINSTEIN JUMPER**, excellent condition, interactive toys, adjustable height, w/paperwork. Clah, jclah3@gmail.com.

**SARIS M2 SMART TRAINER**, 6 mos. old, \$450; Shimano thru axle wheel/tube/tire (no cassette), \$150. Shelton, 505-331-8987.

**CONSOLE TABLE**, 60”x14”, dark wood top, black metal scroll bottom, good condition, \$200. Pholphiboun, 505-400-1457.

**ELLIPTICAL RECUMBENT CROSS TRAINER**, Teeter FreeStep, like new, \$425 OBO. Hietala, vhieta1a@comcast.net.

**COACH HANDBAG**, large, black leather, \$75 OBO. Dennett, 505-379-9971.

**INVERTER GENERATOR**, portable, Champion, 3100-W, slightly used, in East Mountains, \$550. Willmas, djwillmas@gmail.com.

**INKJET PRINTER**, Dell model V313, new-in-box, needs new cartridges, \$25. Garner, 505-269-3350.

**HEADBOARD**, queen, Potterybarn, seagrass, hand-woven natural fiber, solid hardwood frame & legs, excellent condition, \$250. Hedrich, 505-220-8204.

### TRANSPORTATION

’18 **WHEELCHAIR CONVERTED DODGE GRAND CARAVAN SE**, BraunAbility lowered floor, wheelchair accessible, excellent condition. Evans, 505-280-2452, ask for Lynette.

’97 **FORD RANGER XLT**, 4x4, many new parts, 220K miles, runs great, shell & lumber rack negotiable, \$2,750. Callaway, 925-577-4501.

### RECREATION

’18 **ROCKWOOD**, hard side A-frame, camping trailer, A122THESP toy hauler, excellent condition, perfect for hunting, \$14,500. Ordenez, 505-750-7782.

’03 **CASITA TRAILER**, sleeps 4, 12-ft., easy to tow, single owner, kitchenette, perfect if you like outdoors, dry beds. Messex, 505-463-3680 or 505-228-2569.

’17 **KTM 500 EXC-F**, street legal dirt bike, low miles, great condition, \$6,800 OBO. Rantanen, 505-228-6586.

### REAL ESTATE

.72 **ACRES**, Angel Fire, NM lot 947, Alamagordo Terrace, cul-de-sac lot, walking trail, \$22,900 negotiable, Martin, 505-249-7175.

### WANTED

**VOLUNTEERS**, want to help cats? Fabulous Felines charity, fabulousfelines.org. Stubblefield, 505-263-3468.

### AD RULES

1. Limit 18 words, including last name and home phone (web or email address counts as two or three words, depending on length).
2. Include organization and full name with ad submission.
3. Submit ad in writing. No phone-ins.
4. Type or print ad legibly; use accepted abbreviations.
5. One ad per issue.
6. The same ad may not run more than twice.
7. No “for rent” ads except for employees on temporary assignment.
8. No commercial ads.
9. For active Sandia members of the workforce and retired Sandians only.
10. Housing listed for sale is available without regard to race, creed, color or national origin.
11. Work wanted ads are limited to student-aged children of employees.
12. We reserve the right not to publish any ad that may be considered offensive or in poor taste.

# Mileposts




Harold Hjalmarson 40



Danny Rey 40



David Vehar 40



Doug Bentley 35



Imelda Quam 35



Connie Adams 30



Anna Baca 30



Kevin Baucom 30



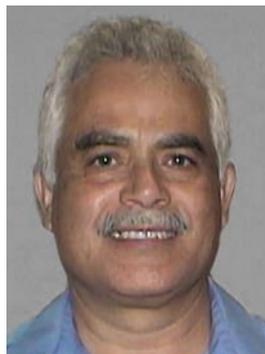
Brian Thomson 30



Reuben Martinez 25



Sarah Renfro 25



Salvador Rodriguez 25



Sean Carey 20



Cynthia Figueroa-McInteer 20



Paula Jernigan 20



Brian Adams 15



Jo Anez 15



Manuel Chavez 15



Joe Hardesty 15



Robert Hennessey 15



Zak Kreiner 15



Andrew Zeitler 15

# Recent Retirees




Rod May 42



Jack Wise 41



Mae Lambert 37

# Retiree Deaths

Mar. 1-June 25, 2020

Delfino Bird (age 77)	Mar. 1
Karen Watts (88)	Mar. 2
Loyd Keller (96)	Mar. 2
Melvin Johnson (89)	Mar. 2
Robert Read Evans (92)	Mar. 7
Gene Angvick (87)	Mar. 8
A. Donald Bertholomey (89)	Mar. 11
Daniel Finnegan (71)	Mar. 16
Evelyn Arterburn (93)	Mar. 28
Donald Hurt (89)	Mar. 30
Randy Normann (65)	Apr. 5
Janell Crego (83)	Apr. 8
Glenda Acosta (75)	Apr. 10
Roger Busbee (79)	Apr. 10

Richard Mills (75)	Apr. 11
Lowell Watkins (98)	Apr. 12
Bobby Little (91)	Apr. 13
Norman Brown (79)	Apr. 16
Adelico Cordova (83)	Apr. 16
Felicia Duran (57)	Apr. 16
Shirley Craig (84)	Apr. 19
Stanley Serpa (93)	Apr. 20
Barbara Macias (63)	Apr. 21
Gerald Peace (65)	Apr. 24
Grace Sheldon (92)	Apr. 25
Joseph Watts (82)	Apr. 25
Mercedes Belarde (86)	Apr. 27
Edward Tooley (76)	Apr. 28
Irene Valdez (84)	Apr. 29
Walter Wolf Joseph (90)	May 1
Gerald Brown (85)	May 3
Lennox Green (91)	May 3

Ronald Hafner (74)	May 6
Betty Brumfield (85)	May 7
Louella Byrum (90)	May 7
Charles Loeber (81)	May 10
Robert Axline (72)	May 11
J. Porter (91)	May 13
Julian Lovato (83)	May 15
Dorothy Wiemken (87)	May 17
Rosa Steele (101)	May 17
C. Donald Lundergan (96)	May 18
Jose Gutierrez (88)	May 27
Herbert Stanley (94)	May 29
Ralph Cozine (90)	June 10
Louis Archuleta (80)	June 11
Richard Olson (77)	June 12
Kevin Marbach (62)	June 14
Dominic Archuleta (43)	June 20
Carmel Mares (95)	June 25

# While waiting on 'the' vaccine, another vaccine is recommended



**SHOOTING A SHOT** — In this 1977 photo, then Lab News photographer Bill Laskar reports to Sandia Medical Clinic for his annual flu shot. Nurse Eileen Kuruzovich administers the shot via an air gun. The clinic inoculated about 4,200 employees that year. For those concerned, Sandia's medical team assures us they will not use air guns to administer flu shots this year.

Photo courtesy of Lab News archives

**W**hile the world awaits an effective vaccine for COVID-19, Sandia is encouraging employees to get another vaccine that is available now: the 2020 flu vaccine.

Off-site vaccines currently are available at places like Walgreens and CVS and are covered by Sandia's health plan. And, employees can earn 500 Virgin Pulse Points for getting the vaccine.

Vaccines through Sandia Medical are expected to be available starting later this fall, but Employee Health Services recommends getting one sooner because of the implications it has for COVID-19. Some off-site locations may require an appointment, so call ahead.

Dr. Dan Azar, lead physician for Sandia's California site, said the need for widespread vaccination is especially important this year because:

- Concurrent infection of influenza and COVID-19 is likely to cause more severe illness than either alone.
- Fewer influenza cases means more medical resources left to treat COVID-19.
- Fewer influenza cases means fewer flu-related absences for a workforce already impacted by COVID-19-related illness and quarantine.

Sandians typically get the flu vaccine at a higher rate than the general public — 26.2% compared to 21.4%.

## Protecting workforce, community

"We'd like to see the ratio of vaccinated to not vaccinated flip in 2020," said Renee Holland, director of Employee Health Services. "This year, too much is at stake to risk introducing seasonal flu into our Lab during a pandemic."

Vaccinations are especially important for those at increased risk for serious illness from influenza — those 65 and older and those with a chronic illness.

"I encourage anyone without a medical contraindication to influenza (a rare circumstance) vaccination to get vaccinated yearly and as early in the year as possible," Dan said.

Employees can report that they've taken the vaccine through the [Health Check app](#) and qualify for 500 Virgin Pulse points once per calendar year. Employees can also charge up to one hour of time to TRC 461 to get vaccinated.

Visit the [Centers for Disease Control and Prevention \(cdc.gov/flu\)](#) to learn more about the importance of getting a flu vaccine this year. [@](#)



**ON-SITE HEALTH CHECK** — Mary Mauldin checks Labs Director James S. Peery's temperature outside the Sandia Medical Clinic.

Photo by Lonnie Anderson



**LEADING BY EXAMPLE** — Labs Director James S. Peery receives a flu vaccination from Sean Blanchfield at the Sandia Medical Clinic. Sandia clinics will offer flu vaccines later this fall, but employees can get a shot now at off-site locations such as Walgreens and CVS.

Photo by Lonnie Anderson