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# National security leader Laura McGill named next director of Sandia

Laura to lead Labs effective May 1

By **Troy Rummler and Darrick Hurst**

Laura McGill will become Sandia’s 17th Labs director, effective May 1, 2025. Laura, who has served as deputy Labs director for Nuclear Deterrence and chief technology officer since January 2021, succeeds James Peery, who is retiring at the end of April.

“Laura’s extensive experience in defense systems engineering and her proven leadership within Sandia make her exceptionally qualified to guide the Laboratories into the future,” said Rich DeGraff, chair of

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PASSING THE TORCH — Laura McGill has been named the next director of Sandia Labs.

Photo by Craig Fritz

# DOE secretary visits Sandia

By **Katherine Beherec**



Z MACHINE TOUR — Sandia’s Greg Rochau, the director of Power Pulsed Sciences, addresses, from left, DOE Secretary Chris Wright, his wife Liz Wright, DOE Senior Advisor Audrey Barrios, DOE Personal Assistant Jake Fulkerson and DOE Director of Scheduling Isabelle Lamanna at Z machine during their tour of Sandia on Feb. 25.

Photo by Mike Cleary

On Tuesday, Feb. 25, three weeks after his swearing-in, Secretary of Energy Chris Wright visited Sandia to address staff, tour the Labs, meet with leadership and receive briefings on various programs and their contributions to national security.

During his visit, Wright praised the critical research and work being done at Sandia. “I want to start with a huge thank you for the tremendously important research you do and work you do in maintaining our stockpile, modernizing our nuclear weapons stockpile and of course, the work in computation, cyber and AI,” Wright said in an address to the Labs’ workforce, recorded from Sandia’s 75th anniversary exhibit at the National Museum of Nuclear Science & History.

After the address, Wright answered media questions during a news conference at the museum, then moved to

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**EDITOR'S NOTE:** Please send your comments and suggestions for stories or for improving the paper. If you have a column (500-800 words) or an idea to submit, contact the Lab News editor at [labnews@sandia.gov](mailto:labnews@sandia.gov).

# One fluid motion as heavy as possible

By [Magdalena Krajewski](#)



**CLEAN AND JERK** — Software engineer Andi Johnson lifts 75 kilograms, or 165 pounds, while Olympic weightlifting training at Albuquerque Strength Academy. **Photo by Craig Fritz**

**W**hen Andi Johnson steps behind a barbell with plates on each end, she thinks about her next movements like an optimization problem.

“The goal is to perform the movement while lifting as heavy as possible,” Andi, a mathematician at heart and Sandia computer scientist by day, said. “The barbell has to move in one fluid motion along a particular pathway, accelerating at certain points, to optimize the motion so I can lift the most weight.”

“It’s this beautiful blend of physical movement, math and the theory behind it.”

### Kismet

A lifelong athlete, Andi discovered Olympic weightlifting in graduate school while playing rugby.



“Another player on the rugby team asked me if I did Olympic weightlifting, and when I said no, they said they thought I would be good at it,” Andi said. “It was random, but they ended up being right.”

Olympic weightlifting consists of two movements: the snatch and the clean and jerk. The snatch involves lifting a barbell from the ground to overhead in one smooth motion with a wide grip. The clean and jerk is a two-part lift where the barbell is first raised from the ground to the shoulders, the clean, and then pushed overhead, the jerk, in a quick, powerful movement.

Andi fell in love right away and soon traded her rugby jersey for a lifting belt.

“As someone who had always played team sports, I competed with others toward a common goal, and I loved that,” Andi said. “But weightlifting was this new challenge where I was competing with myself. It was hard but also really cool to see what I was capable of.”

## The accident

Andi continued to get stronger, hitting new personal records and competing in several Olympic weightlifting competitions around the country.

She was set to compete in the American Open Series Finals in December 2024, a highlight of her career, but a week before the competition, she was hit by a semitruck.

“The day of the accident, I was in such great shape. I had just hit a new PR and was feeling ready and excited to compete,” Andi said. “This was something I had been working towards for three years.”

Andi and her boyfriend, a fellow Olympic weightlifter, were driving back to New Mexico from Portland over the Thanksgiving holiday when they encountered car trouble in Idaho.

“We were pulled over on the side of the road waiting for a mobile mechanic when this semitruck hauling two trailers swerved, jackknifed and slammed into us, obliterating our truck,” Andi said. “I got thrown around pretty badly and suffered a major concussion and a lower back injury.”

While Andi acknowledges that she and her boyfriend were lucky, coming to terms with going from the best shape of her life to starting over has been hard.



**EMPOWERED** — Software engineer Andi Johnson poses at Sandia’s satellite antenna, which offers technology that is used in her work. **Photo by Craig Fritz**

## A new competition

“I wasn’t able to lift for six weeks, and when I started again, I had to start simple just the barbell and maybe some squats,” Andi said. “Before the accident, I felt so strong. I could lift this weight like it was nothing, and now it feels so heavy.”

“I’ve had to give myself a lot of grace and understanding that it’s going to take time to get back to where I was.”


And Andi is getting there. As of our interview, she was able to lift about 85% to 90% of what she could before.

Currently, her goal is to qualify for this year’s American Open Series Finals, and from there, she says she wants to go as far as she can.

“I love competing and being up there on the platform,” Andi said. “Weightlifting is often associated with masculinity, but as a woman, I have found it incredibly empowering.”

As Andi rebuilds her strength, she’s in a new competition with herself, her setback being a new factor in her optimization problem.

So as she steps behind her barbell with a little less weight on each end, Andi takes a deep breath, grants herself permission to not be where she was before, and moves the barbell in one fluid motion along that particular pathway, accelerating at certain

points, optimizing the motion so she can lift as much weight as she can right now. And she trusts that when her body’s ready, it will be more. 

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## New Labs director

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the National Technology and Engineering Solutions of Sandia LLC Board of Managers and president of Control Systems at Honeywell Aerospace. “Her commitment to national security, innovation and modern engineering aligns perfectly with Sandia’s mission.”

Laura will oversee Sandia’s diverse portfolio of national security programs, ensuring the continued delivery of innovative solutions to complex challenges.

“I am honored to lead Sandia National Laboratories and build upon its rich legacy of scientific excellence and national service,” Laura said, reflecting on her appointment. “Together with this tremendously talented workforce, we will further advance our capabilities and performance, enhancing the nation’s response to evolving security challenges.”

As deputy Labs director for Nuclear Deterrence, Laura has been responsible for ensuring the safety, security, effectiveness and modernization of the U.S. nuclear stockpile. She has guided Sandia’s

contributions to nuclear weapon systems engineering, development and surveillance. In her role as chief technology officer, she has led strategic initiatives and emerging technologies, positioning Sandia to meet future national security challenges.

Before joining Sandia, Laura dedicated more than 30 years to the defense industry, where she served as deputy vice president of Engineering at Raytheon Missiles & Defense, an organization of 15,000 engineers and scientists, where she oversaw the development and operational support for advanced weapons systems for the DOD. In 2019, she was inducted into the [National Academy of Engineering](#), recognizing her significant contributions to the field.


Laura holds a bachelor’s degree in aeronautical and astronautical engineering from the University of Washington and a master’s degree in aerospace systems from West Coast University. She is a Lifetime Fellow of the American Institute of Aeronautics and Astronautics, serving



**A CLEAR VISION** — Laura McGill gets firsthand operator experience with Jim Rini in a ME-16 telescope during a visit to Tonopah Test Range in May 2022. The telescope is used to provide high speed documentary video. **Photo by David Coleman**

as the president from 2022 to 2024, and has served as an adjunct professor at Johns Hopkins University’s Whiting School of Engineering.

James, who has served as [Labs director since January 2020](#), announced his retirement in October 2024. Under his leadership, Sandia advanced its nuclear deterrence capabilities and expanded its research in cybersecurity and energy resilience.

“We extend our deepest gratitude to James for his dedicated service and visionary leadership,” DeGraff said. 


## DOE secretary visit

CONTINUED FROM PAGE 1

the Weapons Integration Facility, where Labs Director James Peery and Deputy Labs Director Laura McGill provided an overview of Sandia and its nuclear deterrence programs.

Wright also visited the Microsystems Engineering, Science and Applications facility, then spoke with Labs program directors on cyber counterfeit detection, the satellite mission program and energy initiatives. After lunch, he toured the Z machine and received briefings on hypersonics and future nuclear deterrence strategies.

During the news conference, Wright shared his enthusiasm for AI and energy research and emphasized the significance of the work conducted at Sandia and other national laboratories.

“We need to grow our electricity production from sources all over the map. We need to keep the grid reliable, push prices down and give greater opportunities for Americans,” he said. “I’m proud and thrilled to be partners with President Trump in trying to better energize America and expand opportunities for Americans.” 



**INAUGURAL VISIT** — From left, Sandia’s Director of Integrated Security Solutions Andy McIlroy, DOE Advance Lead Jonathan Wardell, DOE Senior Advisor Audrey Barrios, Sandia Labs Director James Peery, Sandia Protocol Officer Dan Brandt, DOE Director of Scheduling Isabelle Lamanna, DOE Secretary Chris Wright, DOE Senior Advisor Theodore Garrish, Liz Wright, Sandia Senior Manager of External Engagements Bianca Hill, DOE Chief of Staff Alex Fitzsimmons, Sandia Strategy and Executive Operations Manager Rene Sells, DOE Personal Assistant Jake Fulkerson and NNSA Sandia Field Office Manager Daryl Hauck gather during Wright’s visit to Sandia on Feb. 25. **Photo by Mike Cleary**



# Back to where it started

## Weapon Intern Program visits Trinity Site

By **Kenny Vigil**

The Class of 2025's Weapon Intern Program is in full swing, with 23 participants from across the nuclear security enterprise engaged in the program at Sandia.

The 11-month program includes rigorous coursework, team projects and approximately nine trips to various labs, plants and sites across the enterprise.

"The Weapon Intern Program is one of the only opportunities to see the sites in this depth," said Matt Wingle, a systems engineer who has led the program for about four years. "You see the entire facility and gain a deep appreciation for the capabilities at each site."

About a month into the program, and many hours of learning about nuclear deterrence history and policy, the first class trip was to the Trinity Site near Alamogordo in October. This historic site is where scientists



**LEARNING FIRSTHAND** — During a trip to the Trinity Site, Weapon Intern Program participants walk through the remaining vessel from the Jumbo Test. The 214-ton steel container was built to contain plutonium from a test, in which no nuclear explosion resulted. **Photo by Lonnie Anderson**



**CLASS TRIP** — Weapon Intern Program participants pose for a photo in front of the 12-foot obelisk, which marks ground zero of the Trinity Test. **Photo by Lonnie Anderson**

tested the first atomic bomb in 1945 as part of the Manhattan Project. It's only open to the public one day a year.

"You get there, and you're almost transported back in time to the night of the test," Matt said. "It humbles you. We think it's important to go there first."

Despite working in the nuclear security enterprise, the visit to Trinity was a first for many of the Weapon Intern Program's participants.

"Nuclear deterrence started at the Trinity Site," said Zeke Villarreal, who works in nuclear safety at Sandia. "It was sobering to think about my day-to-day job and how it matters."

Zeke, who has worked at Sandia for about a year, applied to the program early in his career.

"When I entered the nuclear security enterprise, there were many things I didn't know. I thought having this context would help me do my job better," Zeke said.

Abby Kerber, a mechanical engineer at the Kansas City National Security Campus, temporarily moved to Albuquerque to participate in the program. It was also her first time visiting the Trinity Site.

"If we had to do that all over again, what would it look like?" she asked, referring to

the first atomic bomb test.

"I love learning," Abby said. "The trip to the Trinity Site brought what we learned in the first month of class full circle."

Abby and Zeke agree that having participants from at least nine different sites in the nuclear security enterprise is invaluable.


"We've bonded as a class. We're doing group projects," Zeke said. "Hearing my colleagues' perspectives helps us grow together. We bring experiences that are valuable now and in the future."

Abby noted that while it's impossible to remember everything from the class, she's taking extensive notes.

"I'm writing down names, and when I have a question, I can refer to my notes and reach out to them for input. The Weapon Intern Program is a great opportunity to make connections," she said.

For Matt, who has worked in nuclear deterrence for 24 years, watching participants grow in the program is invigorating.

"It's a grueling program by design. Sometimes it's more than they think they can handle," Matt said. "It's energizing and satisfying to see their progress and the quality of their work."

This year's class will conclude in late August. 

# Building a team that builds

*How Jerod Bosey and in-house design and construction teams are transforming Sandia*

By James Stewart

**J**erod Bosey always dreamed of being an architect. While other kids wanted to be doctors or firefighters, he imagined designing buildings and creating something lasting. Now, as a manager for Sandia's in-house design team, Jerod is turning that passion into something even greater. Beyond shaping physical spaces, Jerod and his construction counterpart Ramon Baca are building something entirely new at Sandia — a homegrown capability that is transforming the Labs from within.

His journey to Sandia involved years of traveling across the country, designing and tackling projects big and small. But in 2018,



**BRINGING IT IN HOUSE** — In-House Design manager Jerod Bosey, left, and Facilities team lead Preciliano Narvaiz observe the construction progress at an office remodel project. Jerod played a major role in establishing Sandia's in-house design capabilities, which brought together a multidisciplinary team of experts whose projects have saved the Labs time and money compared to external firms' design and construction costs. **Photo by James Stewart**

seeking a better work-life balance for his growing family, he joined Sandia as an operations architect. At the time, a structured in-house design and construction group didn't exist. Architects primarily scoped projects for external firms to handle, but Bosey and others saw potential for something more.

## A vision for in-house expertise

For years, Sandia relied on external architectural, engineering and construction firms to design and implement facility upgrades and modifications. While effective, this model came with inefficiencies, such as costly contracts, extended timelines and a reliance on outside firms unfamiliar with Sandia's mission and security constraints.

"We had the talent. We had the capability. We just needed the structure in place to do it ourselves," Jerod recalled.

His insights aligned with management's growing interest in greater self-sufficiency, culminating in 2022 with the Division Agility Transformation initiative, a strategic shift that ultimately led to the creation of Sandia's in-house design and construction teams.

What started as an idea quickly became reality. Jerod's insights blended with Construction's expertise, and they formed Sandia's in-house capabilities. Over the past two years, both teams grew from just a handful of architects, engineers and craftsmen to a fully staffed operation with expertise spanning many disciplines. Today, the in-house design and construction teams work closely together, operating as a full-service firm embedded within Sandia, providing tailored solutions at a fraction of the external cost.

## Better, faster, cheaper

Since its inception, and with input from partners in Facilities Planning and Projects



**POWERING UP** — From left, electricians Manuel Archuleta and Michael Martinez review electrical drawings for an office remodel construction. Projects like this one used to be performed by external firms but can now be completed by in-house teams. **Photo by James Stewart**

and Operations and Maintenance, the division's in-house capabilities have delivered measurable results. In-house design and in-house construction have a shared philosophy to be more agile, efficient and cost-effective than external firms without compromising quality.

Recent numbers confirm their impact. Compared to external firms, Sandia's in-house capabilities have reduced design costs by up to 67 percent for indirect-funded projects. Turnaround times have also improved.

"We're Sandians designing for Sandia," Jerod said. "We focus on providing a strategically thought-out, constructible solution. We save time and costs because we know how the Labs function. We can walk into a facility, assess the needs, collaborate with project managers, operations and systems engineers and get started right away."

That agility has been crucial in tackling recapitalization projects, which involve reconfiguring and modernizing existing lab spaces. From overhauling office suites to upgrading sensitive research facilities, in-house design and construction teams collaborate to take on projects that once languished in backlogs, slashing wait times and ensuring mission-critical work isn't delayed.



## From backlogged to breakthroughs

One of the in-house teams' and project management's early wins was tackling a growing facility backlog that had plagued Sandia for years. At its peak, there were 362 pending requests for office modifications and infrastructure updates, some waiting in queue for more than 16 months. Working in lockstep with Facilities Express, this collaboration developed a streamlined process to prioritize and address these requests.

"We focused on prioritization and efficiency," Jerod said. "We set clear priorities, established rules of engagement and made sure designs were executed in sync with the project management and construction teams."

The result? The backlog was burned down in months, not years — a dramatic turnaround that cleared the way for new requests to be addressed in real time. But beyond eliminating the backlog, this process gave the burgeoning in-house teams something even more valuable: momentum.

The experience and collaboration with project management and in-house construction sharpened the team's ability to navigate Sandia's complex operational landscape, helping them refine how work was

scoped, approved and executed. It also strengthened collaboration between design, construction and facilities management, creating a more agile system where work moved faster and decisions were made with greater confidence.

"We learned Sandia, our clients, our policies and our challenges," Jerod said. "Now, we're not just designing, we're shaping how we operate."

With that foundation in place, Jerod and the in-house design and construction teams are ready for bigger challenges.

## Growing a culture of excellence

Sandia's in-house design, project management and construction teams have been on a roll, delivering a string of impressive wins from high-security infrastructure upgrades to mission-critical improvements. Each project has reinforced the value of

keeping expertise in-house, saving time, cutting costs and ensuring Sandia's needs are met with precision.

One standout success was the neutron generator equipment replacement project, where in-house teams streamlined the workflow to replace 11 high-risk units in six months, saving \$100,000.

Another was a high-security door relocation, where the team used their deep knowledge of Sandia's security protocols to complete the job two months faster than external bids, saving \$122,000.

Meanwhile, the in-house construction team took on a 360-degree berm for explosive testing, enhancing safety while mitigating environmental hazards. By



**SANDIANS BUILD** — From left, Preciliano Narvaiz, Wyatt Lewis and Jerod Bosey from in-house design and in-house construction teams hold up a caution sign at one of the Labs' construction projects. **Photo by James Stewart**

completing the project ahead of schedule, they saved \$115,000.

Beyond the numbers, Jerod takes the most pride in the team.

"Every single person here epitomizes professionalism. They show up every day ready to take on new challenges," he said.

Unlike designing outside of Sandia, where designers may never see their projects come to life, Sandia's in-house teams work side by side with the engineers and scientists using these spaces. That proximity fosters a culture of accountability and continuous improvement.


"We're not just designing in a vacuum. We see the impact of our work every day," Jerod said.

## The road ahead

For Jerod and his team, the work is just beginning. As Sandia expands its self-sufficiency in both design and construction, the vision is clear: more complex projects, more efficiency and greater independence.

A major focus moving forward is fast-track project execution — reducing bureaucratic hurdles to accelerate design and construction timelines. The team is also refining a digital journey mapping tool to improve project intake and feedback loops, ensuring Sandia's evolving needs are met with precision.

"Unless we're told otherwise, there's no limit to what we can do," Jerod said.

From an architect to a leader, Jerod's story is one of a vision reshaping Sandia's environment and building the teams that are building the Labs' future. 

A promotional poster for the "Community Engagement Speaker Series". At the top, it says "COMMUNITY ENGAGEMENT SPEAKER SERIES". The main title is "WORKING TOGETHER" in large white letters, with the subtitle "To improve our community" below it. A circular inset shows a photo of Mayor Tim Keller speaking. The event is scheduled for "Tuesday March 25th" from "11:00 a.m. - 12:00 p.m." at the "Steve Schiff Auditorium and On-Demand". It is "Hosted by David Gibson". At the bottom, it says "Mayor Tim Keller will address homelessness, crime, addiction and economic development." and provides the website "communityspeakers.sandia.gov". A small note at the bottom states: "Sandia badges are required to attend the event. Though not livestreamed, video will be available on-demand following the event."

# Where STEM takes flight



**CLOSER LOOK** — Student Tanelle Toledo examines a racing drone during a tour of the Uncrewed Aircraft Systems Aviation Operations Unit. The visitors were part of the McKinley School District’s STEM Core program, which supports students through advanced math classes, introductions to technical courses, skill development, intern preparation and potential employer visits.

**Photo by Craig Fritz**

**DRONE DEPOT** — Sandia manager Kristopher Klingler speaks with about 25 students, teachers and escorts from the McKinley School District’s STEM Core program about Uncrewed Aircraft Systems.

**Photo by Craig Fritz**

## Retiree Deaths

Oct 26, 2024 - Feb 24, 2025

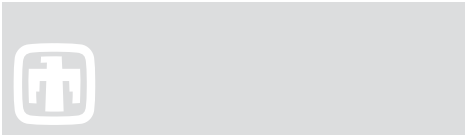
Lawrence Kent (age 90)	October 26
Ray Mosteller (94)	October 29
Wayne Sundberg (81)	November 2
George Treadwell (96)	November 4
William Leisher (93)	November 5
Richard Weatherbee (78)	November 7
Jerry Cashen (83)	November 8
David Trujillo (68)	November 18
Leroy Perea (73)	November 20
David Johnson (81)	November 21

James Cordova (73)	November 28
James Davis (91)	December 7
Joe Gonzales (84)	December 7
Patrick Hoffman (77)	December 9
Randall Van Cleave (69)	December 9
George Fisk (84)	December 10
Raye Knoff (100)	December 11
Judith Tripp (81)	December 13
Dale Buchanan (94)	December 13
Richard Coats (89)	December 14
Charlie Blaine (96)	December 21
Wynn Patton (89)	December 26
Kenneth Ludwick (90)	December 27
Philip Georg (75)	December 29

Eugene Chavez (93)	December 31
Larry Perrine (80)	January 4, 2025
Clarence Filip (69)	January 12
Vipin Gupta (57)	January 12
Robert Neel (94)	January 17
Cameron Smith (71)	January 19
Carolyn Vine (82)	January 22
Fidel Gabaldon (86)	January 22
Ronald Hoffman (96)	January 26
Thomas Cleveland (87)	January 30
James Mace (96)	February 2
Donald Argyle (91)	February 9
Elaine Rutten (84)	February 13
Clarence Collins (69)	February 24



**Mileposts**



**Retirees**



Miquelita Carrion

25



David Bravo

20



Todd Monson

20



Matthew Mora

15



Karen Baca

20



Joel Zupfer

17

# Career journeys unveiled



**LEVEL UP** — From left, corporate communications specialist Myles Copeland asks Labs Director James Peery and Associate Labs Director of Integrated Security Solutions Andy McIlroy about their career journeys at Sandia and what they learned along the way during Career Journeys: Unveiled at Steve Schiff Auditorium on March 4. Director of Business Operations, California, Trish Benguerel also spoke about her career journey during the event. This event marks the beginning of a series of Careerpalooza events designed to inspire career growth. Sandians can watch a video recording at [careerpalooza.sandia.gov](https://careerpalooza.sandia.gov).

Photo by Meagan Brace