

THE HEART OF WHAT WE DO VIDEO

Exceptional service in the national interest

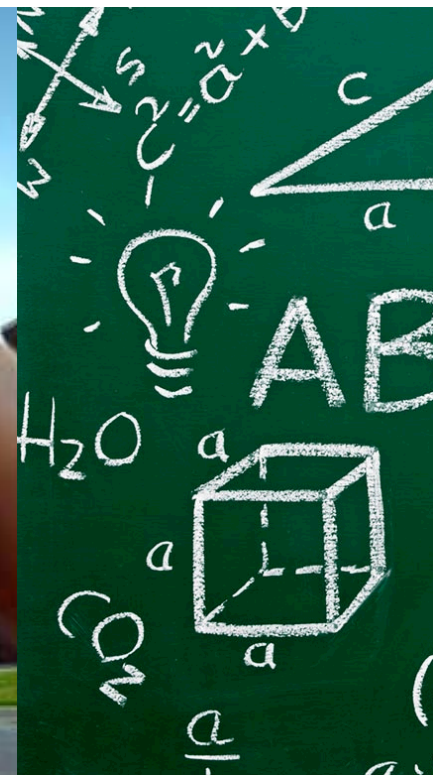


An Engineer's Path

Jill Hruby, President and Laboratories Director
Sandia National Labs

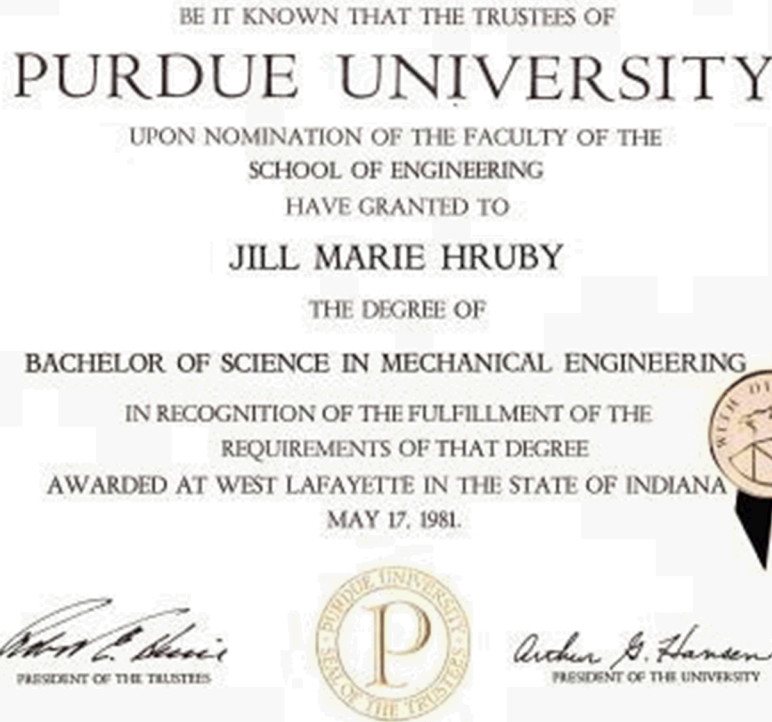


Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000. SAND2015-9800 PE.



GROWING UP

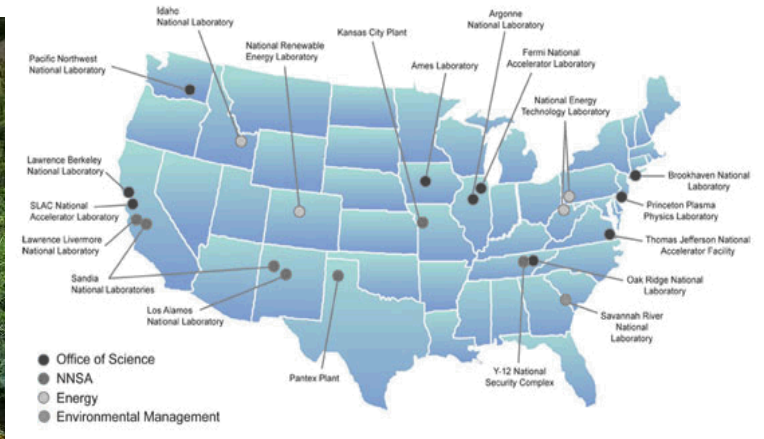
- *Raised in Ann Arbor, Michigan*
- *Curious about the world and how it works*
- *Interested in math and science*



GETTING STARTED

- University studies provided knowledge and confidence
- Sandia offered an opportunity to serve our country by working in a variety of engineering and science fields with world-renowned experts

Department of Energy National Laboratories

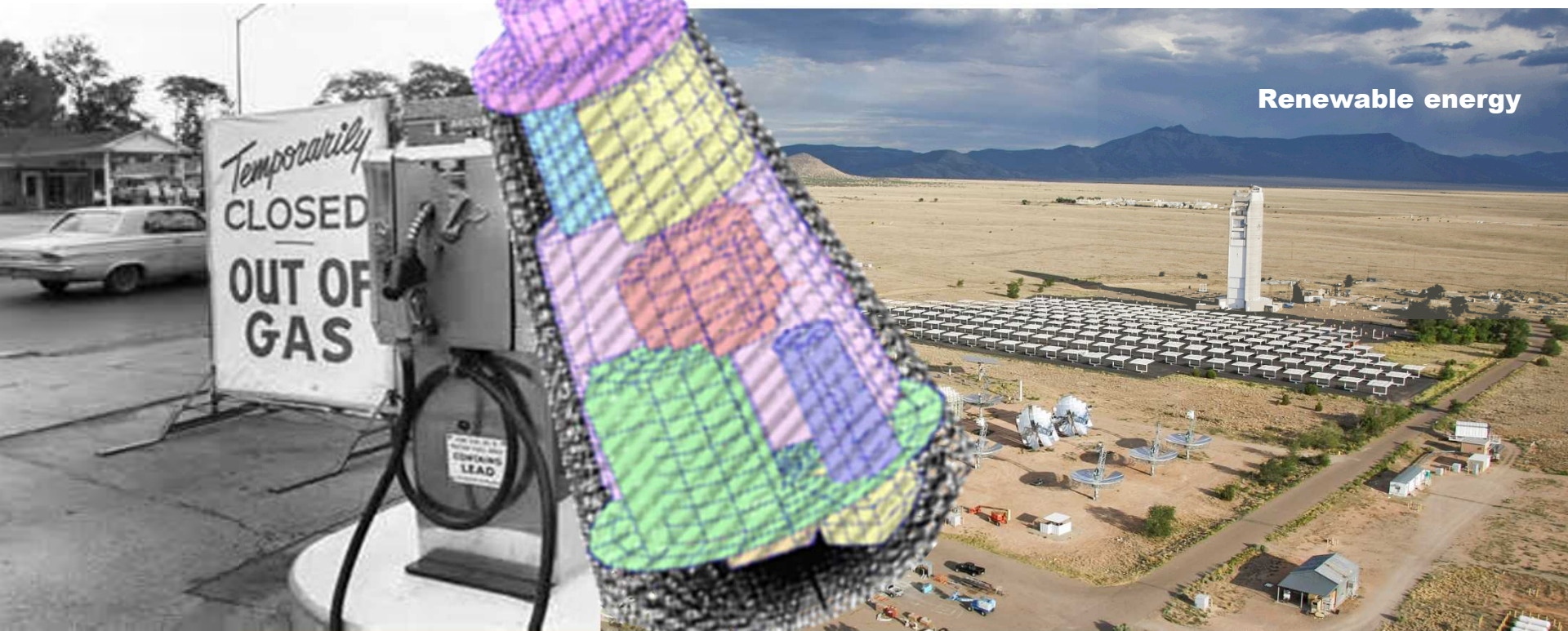


ENGINEERING A BRIGHTER FUTURE

- National laboratories use engineering and science to solve complex national problems
- Sandia's interdisciplinary teams of experts tackle big problems by imagining, testing, and building creative and practical solutions for a better world

Component design

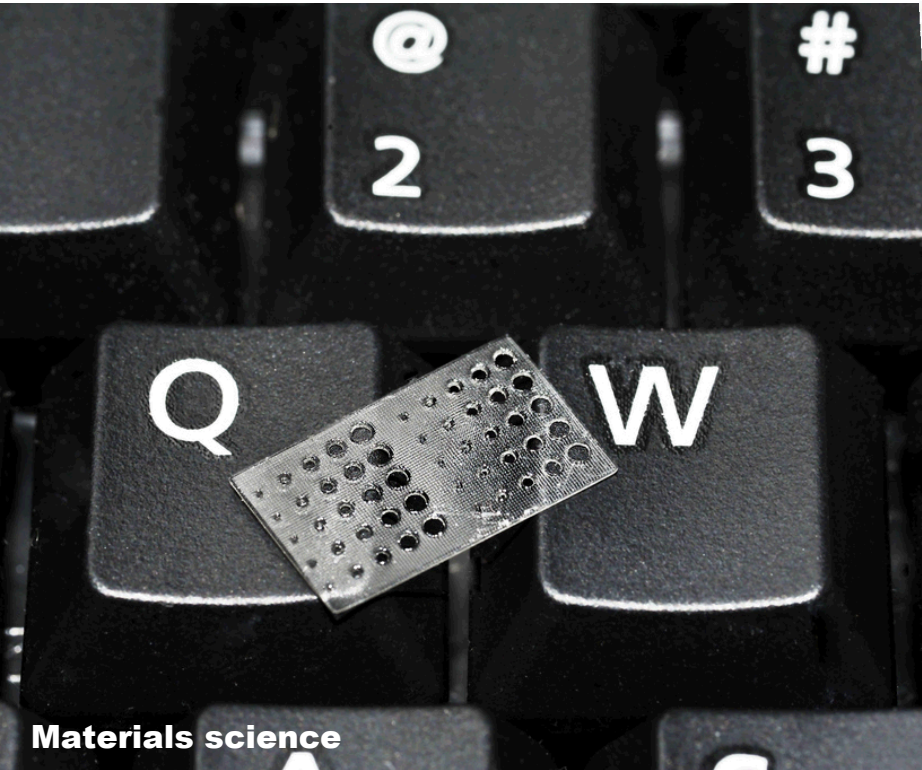
Renewable energy



EARLY CAREER FOCUS

- Developing renewable energy resources to reduce the ongoing national energy crisis
- Supporting national defense with work in nuclear weapon component design and weapons systems

Nonproliferation



Materials science



JILL HRUBY

Supervisory Appointment

JILL HRUBY to supervisor of Inorganic and Physical Chemistry Div. 8313, effective July 16.

In 1983, Jill joined the Applied Mechanics Department, where she worked on thermal analysis in support of weapon and solar-energy programs. Later, she became lead engineer for the solid particle receiver program in the Solar Central Receiver Department. In 1986, she transferred to the Engineering Technology Department, where she was involved with the x-ray laser program and advanced gas transfer technologies.

She has a BS in mechanical engineering from Purdue University and an MS in the same field from UC Berkeley.

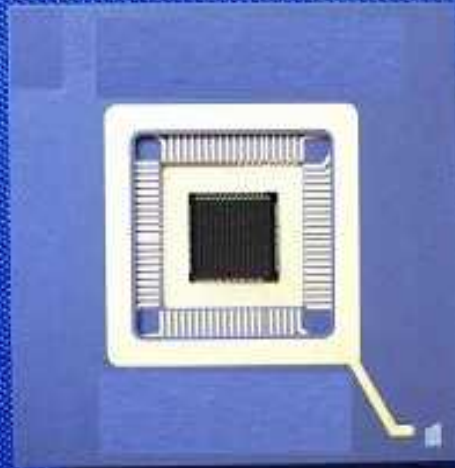
Jill's spare-time activities include backpacking, skiing, and gardening. She and her husband Don Sweeney (8435) live in Alamo with three daughters.



MOVING INTO MANAGEMENT

- *Foreign policy dictates a need for science-based stockpile stewardship*
- *Supervisory position brought new challenges*
- *Beginnings of nuclear weapon dismantlement*

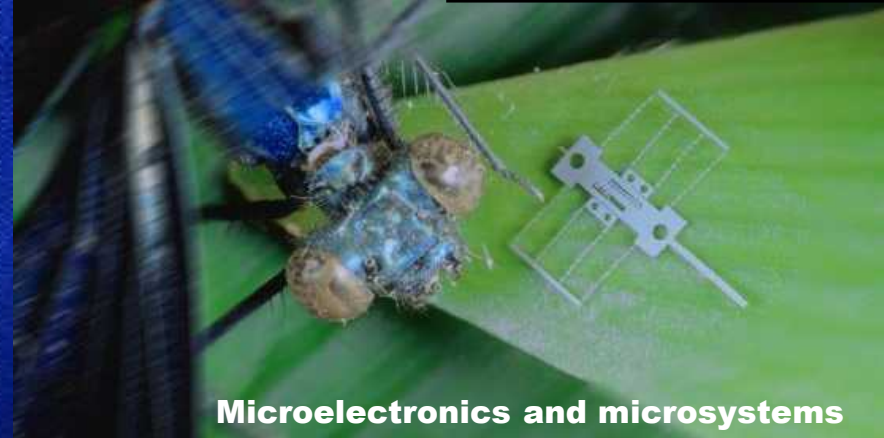
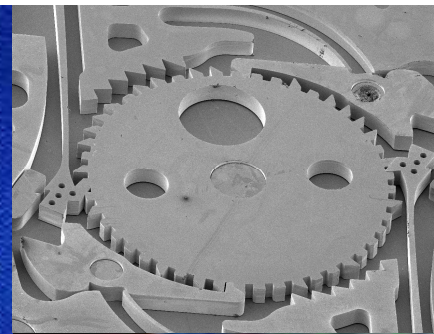
Digital Pixel Sensor



CdZnTe

5mm

Radiation detection




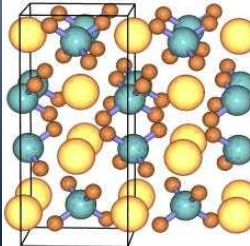
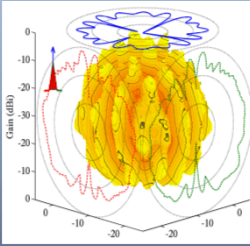
Microelectronics and microsystems



GROWTH AND OPPORTUNITY

- National economic expansion brings increased science and technology competitiveness and opportunities
- Collaboration between engineers and scientists from different fields improves production processes, tools, and components

Biological sensors and systems


RESPONDING TO THE NEEDS OF THE NATION

- After the attack on 9/11/2001, homeland security and defense become a priority
- Increased responsibility at director level
- Focus on using science-based engineering to save lives and increase the safety of our nation



Sandia Labs appoints VP of defense tech

Longtime employee in Livermore will oversee 1,000 staff members in unit focusing on nuclear security, terrorism

By Jeanine Benca
jeaninebenca@sandia.gov
 Jill Hiraby, a 25-year veteran of Sandia National Laboratories in Livermore, has been named Sandia's new vice president for Energy, Security and Defense Technologies.

Hiraby, who previously served as the director of Homeland Security and Defense Systems at Sandia's Livermore site, assumed the high-profile, Albuquerque, N.M.-based position this month.

As vice president of the defense technologies division, Hiraby will oversee about 1,000 staff members, as well as laboratories and experimental facilities, in support of Sandia's ongoing efforts in energy and nuclear power, officials said.

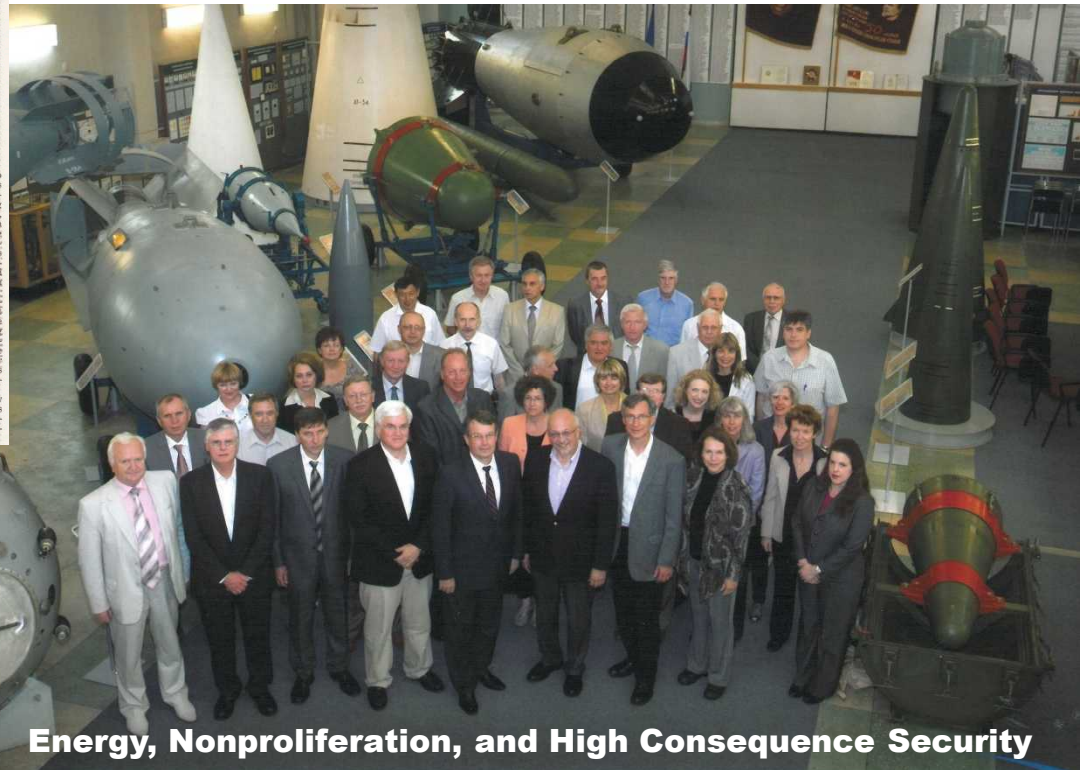


Hiraby

California, Hiraby, who holds a master's degree in mechanical engineering from UC Berkeley, was with Sandia Livermore for more than 25 years. During her tenure as Homeland Security chief, she oversaw efforts in cybersecurity, and chemical, radiological and aviation protection.

Her most recent and visible focus area, said Stulen, was airport security in the aftermath of the Dec. 25 attempted airline bombing in which police say a Nigerian citizen attempted to detonate plastic explosives hidden in his underwear while on board Northwest Airlines Flight 253, en route from Amsterdam to Detroit.

As part of a multi-laboratory team, Hiraby worked to address the limitations of traditional detectors and improve security capabilities at airports, he said.



Energy, Nonproliferation, and High Consequence Security

MAKING A GLOBAL DIFFERENCE

- Programs of national and international concern
- Work on renewable energy, nuclear energy, and arms control and treaty verification efforts
- Responsible for a staff of more than 1000



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SANDIA NATIONAL LABORATORIES

Jill Hruby

In first, a woman will run U.S. nuclear weapons laboratory

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Warren Cornwall is a freelance journalist in Washington State.

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By Warren Cornwall | 23 June 2015 12:15 pm | 11 Comments

Engineer Jill Hruby was named director of the Sandia National Laboratories on Monday, becoming the first woman to head one of three U.S. government labs charged with developing and maintaining the country's nuclear arsenal.

The 32-year veteran of the Albuquerque, New Mexico-based labs has overseen a wide range of research there, including studies focused on nuclear weapons, solar power, and machines that build minuscule electrical components the width of a human hair.

Hruby's promotion is a significant milestone in a system historically dominated by men, says Hugh Gusterson, an anthropologist at the



LEADING THE LABS

- *Became Labs director in July 2015*
- *Helping to protect the nation on many fronts*
- *How can we anticipate our national security needs?*

WHERE HAS MY PATH TAKEN ME?

- Component design
- Renewable energy
- Materials science
- Nuclear nonproliferation
- Microsystems development
- Arms control technologies
- Advanced manufacturing
- Biological sensors and systems
- Infrastructure modeling
- Leadership

A career in engineering has given me the opportunity to combine my technical and leadership skills while pursuing my passion for public service.



WHERE HAS MY PATH TAKEN ME?

- *Two beautiful, successful daughters*
- *Nation and international travel*
- *Hobbies and healthy cooking*
- *Volunteering and community service*

*My career has also allowed me to
have a family and enjoy a full life*

One on one with Jill Hruby

By Jessica Dyer / Journal Staff Writer
Sunday, February 7th, 2016 at 11:40pm



Jill Hruby, director of Sandia National Laboratories. (Greg Sorber/Albuquerque Journal)

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ALBUQUERQUE, N.M. — Jill Hruby had her first management position before she even had a high school diploma.

She was just 13 when she started working for the concessionaire at University of Michigan sporting events and not much older by the time she had her own crew reporting to her. Even her supervisors came to count on Hruby to mitigate the potential disasters associated with handling hungry, 100,000-fan crowds at one of



WHERE DOES YOUR PATH BEGIN?

- *You must begin with a foundation of formal education, following by a lifetime of learning*
- *Cultivate your passion beyond textbooks*
- *Seek internships and mentors*
- *Stay with it, despite the obstacles*
- *It is all within your reach!*

“Engineers are changing the world all of the time. They dream up creative, practical solutions and work with other smart, inspiring people to invent, design and create things that matter.”

DiscoverE Website



**MEET IMANI
AND SHAUNA
ADAMS**

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