

SHAPING THE FUTURE OF NUCLEAR: LISA MARSHALL'S EDUCATIONAL MISSION AND GLOBAL IMPACT



ABOUT LISA MARSHALL

Lisa Marshall is the President of the American Nuclear Society and has been an active member, with leadership roles, since 2005.

With over 20 years of engineering education experience spanning precollege to graduate studies, Marshall is the inaugural Director of Outreach, Retention, and Engagement (starting in 2001), and the inaugural Assistant Extension Professor (starting in 2023) at North Carolina State University Department of Nuclear Engineering.

Marshall is a co-principal investigator or education outreach director on several U.S. Department of Energy-funded consortia. Lisa teaches in the First-Year Engineering Program, co-directs the Study Abroad Program in Engineering and Social Sciences, and serves on the Working Council for the Women in Science and Engineering Program. She is the past chair of both the Association of Women Faculty and the Justice, Equity, Diversity & Inclusion Committee for the American Association of Geographers.

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In a field powered by innovation and purpose, Lisa Marshall stands out as a dynamic force dedicated to education, engagement, and human capacity building. As President of the American Nuclear Society and Director of Outreach, Retention, and Engagement at NC State's Department of Nuclear Engineering, Marshall blends technical understanding with empathy, vision, and servant leadership. Her path—from a Caribbean Canadian-American upbringing to being a prominent voice in nuclear education—exemplifies what it means to lead with intention and build for the future.

Rooted in Education, Driven by Impact

Lisa's journey into nuclear wasn't conventional. With a background in geography, her academic path centered on understanding people, spaces, and how technology intersects with societal needs. It was a geography class that lit the spark—blending technical and social perspectives—and set her on a trajectory that would eventually lead to her deep involvement in nuclear science and education.

Her career at NC State began not with a technical degree but with skills the department needed: advising, program development, and community building. Those skills, combined with her relentless pursuit of learning and mentorship, allowed her to grow into a respected leader who shaped how students interact with and stay engaged in nuclear careers.

"I always ask myself: how do I create an environment for students to thrive?" she reflects. "It's not just about curriculum—it's about building confidence, allowing failure, and showing them that they belong."

From Outreach to Engagement: A Full-Circle Approach to Student Success

Marshall passionately advocates holistic education—what she calls "ecosystem building." From early STEM interest in pre-college programs to university experiences rich with research, internships, and leadership development, she emphasizes the importance of continuous support and real-world relevance. Under her leadership, NC State models engineering engagement from day one. First-year students participate in hands-on design projects, including a rebranded "Nuclear Probe Project" that makes nuclear engineering both exciting and approachable.

But her vision extends well beyond campus walls. "We need to start earlier," she insists. "We lose kids in middle school, even earlier, because they're not seeing themselves in STEM. That's where the pipeline starts—and that's where we need to be."

Her efforts include creating three-week residential summer programs, taking students on multi-hour trips to nuclear training centers, and providing constant exposure to the practical, human side of nuclear energy.



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ABOUT HOST: PHIL ZERINGUE

Phil Zeringue, Vice President of Strategic Partnerships at NuclearN, has dedicated over two decades to driving transformative growth in the nuclear industry. Renowned for his operational rigor, strategic insight, and unwavering commitment to excellence, Phil has established a reputation as a disciplined leader capable of addressing complex organizational challenges with precision and clarity.

With a career spanning engineering, maintenance, project management, and IT, Phil has cultivated a profound technical understanding of the nuclear sector. Over the years, his expertise has evolved into a visionary leadership style that leverages emerging technologies to deliver impactful and sustainable change.

Phil's ability to elevate company performance and inspire teams to transcend expectations has been a hallmark of his career. Through his structured, results-driven approach, he continues to lead initiatives that shape the future of the industry while ensuring meaningful, long-lasting success.

Mentorship, Professionalism, and the Power of Belonging

Whether through ANS student chapters, undergraduate research, or study abroad programs, Lisa believes that creating belonging is essential to retention. "An NC State engineering degree shows you have the technical skills," she says. "But companies want to know: Can you collaborate? Will you ask for help? Are you mission-driven?"

Marshall pushes against the term "soft skills," favoring "professional skills" that include communication, resilience, and emotional intelligence. She often advises students to step outside their comfort zones—not just for themselves, but to prepare for leadership in an industry that must evolve.

Through ANS, she found her own place—and her leadership grew organically. "I got tricked into going to my first ANS meeting," she laughs. "But from there, I found my people. It's where I started giving back."

A Global Perspective with Local Passion

Lisa Marshall's upbringing, education, and worldview shape the way she approaches nuclear: as both a science and a community. From exploring nuclear brownfields in graduate school to sitting on international committees at the OECD, she brings a unique perspective to nuclear's role in diplomacy, medicine, agriculture, cybersecurity, and energy.

She's also quick to point out that expanding the nuclear workforce isn't just about headcount—it's about culture. "We need relationship builders. People who will be there for the long term. Engagement isn't a one-time thing. It's the foundation."

Final Thoughts: Go Slow to Go Far

In every story she tells, Lisa's message is clear: the journey matters. "It's the steps we take, not the title at the end," she says. "We have to make space for curiosity, failure, growth, and connection. That's how we build a nuclear future that's innovative, inclusive, and strong."

With leaders like Lisa Marshall guiding the next generation, nuclear's future is in capable, compassionate hands.

To watch the full interview, visit <u>nuclearn.ai</u>.

Great Achievement rests on effective organization, meticulous preparation, and visionary leadership