

ALUMNI PROFILE

Health Physics Takes Grad from Rocky Flats to Rocky Top

Health physics was not high on Sarah Roberts' list of majors when she went off to receive her higher education – in fact, she had never really heard of the field. But while in school, a work study assignment introduced her to a new world of dosimeters, bioassays, and radiation research that would open the door to a fascinating career.

Roberts grew up in Ohio and attended Ohio University where she received her Bachelor of Science degree in biology. While in school, her interest in radiology was piqued when she worked as a work study student for the university's radiation safety officer.

"I didn't know much about radiation but I was soon collecting, analyzing, and calculating bioassay samples, conducting surveys of campus laboratories, doing thyroid counts, and I just found it fascinating," said Roberts. Her boss encouraged her to apply for an Applied Health Physics Fellowship through the Department of Energy, for which she was selected. She could pick one of 20 programs nationwide and, having never been to Colorado but feeling adventurous, Roberts selected Colorado State University.

"Dr. Tom Borak was my advisor and he was a little concerned because I got a C in the only physics course I took as an undergraduate," said Roberts. "So he wanted me to take some additional courses before I started the program. That really motivated me to prove myself and I wound up getting A's in both of his classes. I had never studied that much in my life."

Upon graduation in 1993, Roberts got her first "real job," working to decommission the Fort St. Vrain Nuclear Power Plant in Colorado. After that, she went to work at another decommissioning,



Sarah Roberts

step toward the planned conversion of the site to a permanent wildlife refuge).

Roberts is now at the Oak Ridge Institute for Science and Education (ORISE), founded by the Department of Energy in 1992 with programs dating back to 1946. ORISE is managed by Oak Ridge Associated Universities (ORAU) for the DOE. ORISE's missions include strengthening the nation's research and development enterprise through education and research participation programs; ensuring the readiness of the nation to respond to terrorist incidents and other emergencies; and protecting workers, the public, and the environment through research, outreach, and verification activities. Roberts, who is a Certified Health Physicist, is primarily involved in verification and was recently promoted to Survey Projects Manager in the Independent Environmental Assessment and Verification group at ORAU.

"We provide radiological surveys and environmental assessments for the U.S. Department of Energy (DOE), Nuclear Regulatory Commission (NRC), and various state governments," said Roberts. "We verify the clean-up is completed to the standards required, and we work to support the successful decontamination and decommissioning of sites throughout the United States. The field changes as technology and knowledge change, but the ultimate goal is always the same: to ensure that sites meet the standards established in the clean-up management plan."

Roberts notes that for someone who came into the field almost accidentally, she enjoys her work immensely and hopes to be at ORAU for many years – especially after working so hard in those physics classes.

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Roberts inspects a holding wall at a nuclear power plant.