



# Two Los Alamos scientists win Presidential Early Career Awards

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LOS ALAMOS, N.M., July 15, 2019—Abigail Hunter, of Los Alamos National Laboratory's Computational Physics Division, and Shea Mosby, of the Laboratory's Physics Division, have received the Presidential Early Career Award for Scientists and Engineers.

"Abigail has become a technical thought leader within the Laboratory's weapons program and our materials modeling community, as well as an internationally recognized expert in materials science and the physics of solid-state materials," said Mark Schraad, Computational Physics Division leader. "She has established a critical skill set that serves her in a unique position at the intersection of Los Alamos' physics modeling, software development and supporting science endeavors."

The Presidential Early Career Award is the highest honor bestowed by the U.S. government on outstanding scientists and engineers in the early stages of their independent research careers.

"Shea is a deep-thinking early career scientist who has contributed to many of the nuclear reaction measurements done at the Los Alamos Neutron Science Center. He is currently developing a novel concept to measure nuclear reactions in radioactive isotopes," said David Meyerhofer, Physics Division leader.

## **About Abigail Hunter**

Hunter received her doctorate in Mechanical Engineering from Purdue University in 2011, and her bachelor's degree in Mechanical Engineering from the University of Utah in 2006. She became a postdoctoral research associate at Los Alamos in 2011 and converted to a staff scientist the following year.

Hunter's research focuses on understanding and modeling nanoscale deformation mechanisms in metals. She is a leading expert in phase field modeling of dislocation-based deformation behaviors. A primary goal of her work is to better understand defect physics at the mesoscale and then use this information to develop more physically informed continuum-scale material models that must integrate into large-scale, parallel codes used for predictive science at Los Alamos.

## **About Shea Mosby**

Mosby earned his doctorate in experimental nuclear physics from Michigan State University in 2011, where he studied nuclear structure. He came to Los Alamos as a postdoctoral researcher in 2012 to study neutron capture reactions for nuclear

technology applications. He became a technical staff member in 2014 and now leads projects studying the nuclear fission process.

Mosby's research at Los Alamos has focused on nuclear reactions relevant for applications using a variety of detector systems at the Los Alamos Neutron Science Center. He started at the Laboratory studying neutron capture using the Detector for Advanced Neutron Capture Experiments. Mosby recently began investigating novel approaches to measuring neutron-induced reactions for radioactive isotopes, which preclude traditional measurement techniques.

### **About the Award**

Established in 1996, the Presidential Early Career Award for Scientists and Engineers acknowledges the contributions scientists and engineers have made to the advancement of science, technology, education, and mathematics education and to community service as demonstrated through scientific leadership, public education, and community outreach. The White House Office of Science and Technology Policy coordinates the award with participating departments and agencies.

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