

# News from Savannah River National Laboratory

We put science to work.™

A U.S. DEPARTMENT OF ENERGY NATIONAL LABORATORY • OPERATED BY SAVANNAH RIVER NUCLEAR SOLUTIONS, LLC

Principal Media Contact: DT Townsend  
Savannah River Nuclear Solutions, LLC  
803.952.7566  
[dt-lawrence.townsend@srs.gov](mailto:dt-lawrence.townsend@srs.gov)

DOE Media Contact: Bill Taylor  
803.952.8564  
[bill.taylor@srs.gov](mailto:bill.taylor@srs.gov)

**FOR IMMEDIATE RELEASE**

## Students Travel to SRNL for Unique Intern Experience

AIKEN, S.C. (Nov. 13, 2013) – How many college intern students can say they've worked at a Department of Energy National Laboratory on a Federal Homeland Security project to develop handheld, mobile devices used to detect radioactivity at large gatherings of people? California Polytechnic State University student Robert ("Bo") Baker may be the one and only.

Being developed at the Department of Energy's Savannah River National Laboratory (SRNL), plans are for this futuristic device to be made available to law enforcement and security officials who will be working to ensure the safety of those attending large, highly attended events. Examples of such events would include the Super Bowl, presidential inaugurations and Olympic athletic competitions.

Designed to be attached to a police officer's utility belt, it will be used to deter and detect terrorists attempting to use radioactive material as a weapon. The unit is designed to identify the strength and location of radiation-emitting sources, as well as distinguish between different types of radioactive materials.

Baker's contributions and participation occurred during the testing phase. The tests involved simulating a multitude of different situations in which a police officer may need to use the device.



*Student intern Bo Baker (right) discusses with his mentor, Jean Plummer, and SRNL engineer, how he is assisting a team of SRNL employees to design and test a hand-held unit capable of identifying the strength and location of radiation-emitting sources to be used by law enforcement officers at large public events.*



**Savannah River National Laboratory™**  
OPERATED BY SAVANNAH RIVER NUCLEAR SOLUTIONS

AIKEN, SC USA 29808 • [SRNL.DOE.GOV](http://SRNL.DOE.GOV)

# News from Savannah River National Laboratory

“Loyalty to America has always been important for my family and friends,” said Baker. “When offered the opportunity to work at a National Laboratory and be a part of an important national defense project, I couldn’t pass it up. It’s been a great experience that will help shape my career.”

According to Jean Plummer, SRNL engineer, and Baker’s intern mentor, Bo has been an exceptional asset to the Homeland Security team at SRS. “We did not bring Bo on board just to watch and learn,” said Plummer. “He was essentially treated as a full-time employee and given a significant level of responsibility towards helping the team succeed during the testing of this new detection system.”

Plummer added that Baker learned a new computer programming language in order to be more deeply involved in the “hands on” aspect of his internship. “Bo’s work ethic, positive attitude and already highly developed skill set greatly aided us time and again. He will be missed,” said Plummer.

According to Natalie Ferguson, Program Manager, SRNL University Relations, it’s no longer unusual to receive intern applications from out of state students. “I’d like to believe our reputation as a National Lab and the positive feedback we frequently receive from the students, are two of the primary reasons for the popularity of our intern programs.”

Another of the several students who chose an internship with SRNL from a distant university was Megan Morse who attends Oregon Institute of Technology, Klamath Falls, Oregon. Morse conducted original research to develop methods designed to remove radioactive contamination from liquids. Under the direction of Charles Nash, Ph.D., SRNL, she constructed an apparatus and ran an experiment that successfully removed over 99 percent of a simulated waste isotope in a chemical liquid stream.

“Ms. Morse is one of our inaugural SRNL Office of Science internship participants, and she set an excellent standard to follow,” said Ferguson.

Morse noted that this summer’s experience has provided her confidence to attend graduate school and pursue a career in scientific research.

“I was impressed with the employees and opportunities at SRNL,” said Baker. “I’d highly recommend participating in an internship here to any student looking for a high quality experience.”

The Savannah River National Laboratory (SRNL) is a multi-program applied research and development laboratory for the U.S. Department of Energy. SRNL applies state-of-the-art science and engineering to provide practical, high-value, cost-effective solutions for our nation’s environmental cleanup, nuclear security and clean energy challenges.

Visit us on the web at <http://srnl.doe.gov>