Los Alamos technology to be featured on CSI: NY

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LOS ALAMOS, New Mexico, March 27, 2008—A state-of-the-art, multipurpose sampling device developed at Los Alamos National Laboratory will be used in an episode of Crime Scene Investigation-New York (CSI: NY) scheduled to air at 9 p.m. Mountain Daylight Time April 2 on CBS.

The multipurpose “sampler gun” rapidly collects and tracks radiological, chemical, and biological samples in solid, liquid, or gaseous forms. The technology has a “hands-off” capability that minimizes the risk of sample cross-contamination and exposure risks to sampling personnel. Among the gun’s features are a temperature probe, digital camera, GPS, microphone, pocket PC, e-compass, sonic distance sensor, real-time force sensor, and a voice recognition module.

In the upcoming high-tech episode of CSI: NY, the gun is used by Dr. Sheldon Hawkes (played by Hill Harper) to collect blood samples at a crime scene.

The sampler gun is a development from the Homeland Defense Technologies Team headed by researcher Torsten Staab. According to Staab, the catalyst for this technology is the area of industrial hygiene.

After talking to industrial hygienists at the Laboratory and other Department of Energy sites and learning how time consuming their field sample collection and tracking processes are, Staab thought there must be a faster, more efficient way.

“The general idea is to minimize the potential for sample and human cross-contamination, digitize all the sampling-related field data acquisition, and get away from the traditional pen and paper-based tracking,” Staab said.

Development of the gun began in 2004 with a technology commercialization grant from the Department of Defense, Center for Commercialization of Advanced Technology. Such grants are aimed at sponsoring emerging technologies that have applications in homeland security.

After learning of the industrial hygienists’ challenges, Staab realized that forensic and crime-scene investigators have similar issues when it comes to tracking field data and documenting chain-of-custody for samples. He then started talking to the Federal Bureau of Investigation about potential features that could be added to make the gun useful for law enforcement.

According to Staab, the technology has received significant exposure through leading international forensic publications over the last six months. It also was featured on Court TV in July 2007 in an emerging forensic technologies segment and on national TV in December 2006 on a show called Discoveries & Breakthroughs – Detecting Deadly Chemicals, produced by Ivanhoe Broadcast News.

“I think it’s pretty cool to see your own technology on such a popular TV show,” Staab said of the gun’s debut on CSI: NY. “Even my parents in Germany will be able to see it, as CSI is also very popular in Europe. I think that this will be also a good marketing tool for LANL and its Technology Transfer Division.”

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