



# News Release

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## ECBC Scientists Turn Joppatowne High School Students into Investigators

**Aberdeen, Md.** — Summer camp students from Joppatowne High School spent two days side by side with scientists and engineers from U.S. Army Edgewood Chemical Biological Center (ECBC), unveiling the use of science, technology, engineering and mathematics (STEM) in fictional investigations July 13-14.

“We framed a new initiative, CSI:Edgewood, around ECBC’s core capabilities that requires students’ hands-on participation to learn about the work conducted in our laboratories,” said the Center’s Community and Educational Outreach Program Manager Mary Doak. “We gave Joppatowne’s summer camp students the opportunity to apply various science and engineering techniques to real-world problems such as biological, chemical or environmental threats.”

After presented with a crime scene scenario, students and their chaperones turned into investigators. They were on a mission to safely handle three unknown samples, render a potentially contaminated area safe and perform analyses of unknown compounds.

Sponsored by the National Defense Education Program, ECBC’s scientists helped immerse students into a STEM working environment and educate them about the Center’s capabilities and career fields.

“Instead of just listening to presentations, I truly appreciated Army scientists coaching us through their area of expertise and letting us do some of the work,” said eleventh-grade student Amanda Ranch. “This approach held our attention span longer and kept us engaged throughout the tour.”

In addition to conducting forensics-focused experiments, students explored chemical and biological research solutions that help protect our Nation and the environment.

This STEM outreach experience encompassed a series of hands-on activities, to include the process of protection factor testing, operating the Robot Recon, 3D laser scanning, the sample receipt and triage process, strawberry DNA extraction, Raman spectroscopy, soil forensics, an oil clean-up experiment, and an environmentally-friendly pyrotechnics demonstration.

Eleventh-grade Joppatowne High School student Brianna Cook shared her enthusiasm for the career fields at ECBC and the real-world application of STEM concepts.

“Experiencing the array of career fields in chemistry and biology makes me reconsider my previous career aspirations,” she said. “I’m very inspired and interested to pursue one of these career fields.”

Joppatowne High School’s summer career camp coordinator Zackery Lovelace participated in the individual activities and commented on their pedagogical value for his students.

“This has been our best ECBC summer camp experience yet,” he stated. “All activities were truly hands-on, educational and exciting. I would like to say that our students were engaged throughout the entirety of the two-day outreach initiative.”

Please click on the link for the full article:

[http://www.ecbc.army.mil/outreach/news/ECBC\\_Scientists\\_Turn\\_Joppatowne\\_High\\_School\\_Students\\_into\\_Investigators.html](http://www.ecbc.army.mil/outreach/news/ECBC_Scientists_Turn_Joppatowne_High_School_Students_into_Investigators.html)

Please find more pictures on ECBC’s Flickr stream:

<http://www.flickr.com/photos/edgewoodchembiocenter/sets/72157627255685640/>

For more information about ECBC, visit <http://www.ecbc.army.mil/>.

*ECBC is the Army’s principal research and development center for chemical and biological defense technology, engineering and field operations. ECBC has achieved major technological advances for the warfighter and for our national defense, with a long and distinguished history of providing the Armed Forces with quality systems and outstanding customer service. ECBC is a U.S. Army Research, Development and Engineering Command laboratory located at the Edgewood Area of Aberdeen Proving Ground, Maryland. For more information about the Edgewood Chemical Biological Center, please visit our web site at <http://www.ecbc.army.mil/> or call (410) 436-7718.*

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