



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND**  
**EDGEWOOD CHEMICAL BIOLOGICAL CENTER**  
**8198 BLACKHAWK ROAD**  
**ABERDEEN PROVING GROUND, MARYLAND 21010-5424**

**Kelly A. Basi, Ph.D.**

Supervisory Biologist  
DEVCOM Chemical Biological Center  
BioTechnology Branch Chief  
Email: [Kelly.a.basi.civ@mail.mil](mailto:Kelly.a.basi.civ@mail.mil)  
Office: (410) 417-0177  
Mobile: (443) 655-0048



Dr. Kelly Basi serves as the BioTechnology Branch Chief, as a Supervisory Biologist, within the CBRNE Assessment Division at the U.S. Army Combat Capabilities Development Command Chemical Biological Center (DEVCOM CBC). The BioTechnology Branch provides cradle-to-grave development, testing, and scale-up manufacturing of organisms, genetically engineered cellular processes, or biomimetic systems to produce novel materials with defined structural, biophysical and functional properties. Currently, Dr. Basi is leading the Biomanufacturing Modernization Initiative at the Army's Biomanufacturing Scale-up Facility to support supply chain resiliency for the DOD biotechnology ecosystem. The focus areas include producing ingredients for energetics, armors, textiles and coatings and optical materials.

Dr. Basi received her Ph.D. in Microbiology & Immunology from Vanderbilt University, Nashville, TN in August 2010 under the mentorship of Dr. D. Borden Lacy. Her dissertation focused on determining and elucidating the structure of the Vacuolating cytotoxin (VacA) from *Helicobacter pylori* using x-ray crystallography and electron microscopy. Dr. Basi also earned a B.S in Biochemistry from Miami University of Ohio in 2005.

Following the completion of her doctoral degree, she worked at the U.S. Army Medical Research Institute (USAMRICD) as a Post-Doctoral Fellow as part of the Oak Ridge Institute for Science and Education (ORISE) Program from 2011-2012. While at USAMRICD, she received funding from the National Institutes of Health (NIH) CounterACT program for her research involving the preclinical development of cyanide countermeasures and comprehensive gene expression profile analysis in various tissues after cyanide exposure. Dr. Basi became a federal civilian employee, as a Research Microbiologist, in October 2012, when she joined the CBRNE Analytical and Remediation Activity (CARA) under the 20<sup>th</sup> Support Command. As part of this command, she tested its deployable Heavy and Light Mobile Expeditionary Laboratory, during simulated combat operations.

In 2013, Dr. Basi transferred back to USAMRICD to help establish the Absorption, Distribution, Metabolism, Excretion, Toxicity Center of Excellence (ADMET-CoE). She served as the PI for the Metabolism area and her research focused on metabolic stability, drug interaction, and cardiotoxicity of potential countermeasures against chemical agents. In addition, she continued her efforts on new and improved candidate countermeasures for cyanide poisoning that she started during her postdoctoral studies. She led a multidisciplinary team of scientists to include ORISE technicians and postdoctoral fellows, and government biological technicians. In addition, Dr. Basi collaborated and partnered with multiple universities and private companies. Her research resulted in peer-reviewed publications and she was a co-author for a book chapter for the "Toxicology of Cyanides and Cyanogens". Besides her role as a Principal Investigator, Dr. Basi served as the Program Advisor for the Toxicants Program Area, as a scientist on the Institutional Animal Care and Use Committee, and as the Biosafety Officer for the Institute.

In her spare time, Dr. Basi enjoys spending time with her husband, Anthony, a former K9 police officer for the DoD and their two children, Avery (10) and Eli (9).