



For Information: Richard Arndt, 410-436-1479

18 August 2023

Army Lab Hosts HBCU/MI Interns, Fellows Under DOD Program

By Aerial Storey



The DoD's HBCU/MI Summer Research Program members toured the Office of the Under Secretary of Defense. From left to right are Luke Barnett, Jordan Mack, Cynthia Mirzaie, Gregory Ige, Ashley Fru, Christian Better, Tekiyah Brewley, Aryanna Jones, Deborah Rosenblum, Brandi Vann, Tahiyah Brinkley, Jacqueline Ortiz, and Sabien Sykes. (Photo courtesy of the Office of the Under Secretary of Defense)

Aberdeen Proving Ground, MD – The U.S. Army Combat Capabilities Development Command Chemical Biological Center (DEVCOM CBC) hosted 12 interns and two fellows this year from the Department of Defense (DoD) annual Summer Research Program for Historically Black Colleges and Universities/Minority-Serving Institutions (HBCU/MI).

The program, taking place over ten weeks during the summer, enables a diverse group of students and researchers the opportunity to build their skills and professional careers in the fields of science, technology, engineering, and math (STEM) by allowing them to gain hands-on experience working on projects in a real-world laboratory and performing research that is relevant to the

defense mission while under the guidance of DoD scientists and engineers who serve as mentors.

The highly competitive application process vetted and admitted less than 10 percent of prospects, with only 100 positions available. This year, there was a total of 997 applicants that were narrowed down to 551 eligible candidates for the 100 internship positions. DEVCOM CBC is one of nine participating sites for the program.

Eugene Vickers, program coordinator and diversity,



DEVCOM CBC intern, Tekiyah Brewley of Tuskegee University, meets with her mentor, supervisory biologist Kyle Glover, to discuss the upcoming program during the DoD's HBCU/MI Summer Internship Program orientation at DEVCOM CBC on June 5, 2023. (U.S. Army photo by Ellie White)



equity, and inclusion officer at the Center, worked with the DoD and its branches to coordinate the program selections. The chosen applicants were paired with mentors at the Center to work on projects relevant to the educational and professional background of the program participants, ranging from biomedical engineering to animal science and more.

This year, the Center welcomed two faculty fellows, Dr. Mickey Mancenido, assistant professor of statistics from Arizona State University, and Dr. Santosh KC, assistant professor in chemical engineering and materials from San Jose State University, to assist in their continuing education.

The fellows were given the opportunity to work closely with researchers and scientists on projects related to their field of study to enhance their skillsets and provide in-depth knowledge for relevant academic applications. These applications can be used to collaborate with others in academia and further the knowledge in specific fields of study, especially to support warfighters and advise on chemical and biological agents.

Mancenido has been working on several projects at the Center within the respiratory protection group. The projects involve experimental design, additive manufacturing for research and development, and market surveys for field respiratory protection against biological agents. “Working in the public space has underlined the importance of studying the social and behavioral sciences, which are domains outside of my comfort zone,” said Mancenido of her experience. “When working on safety-critical applications, I learned very quickly that human considerations are as important as the science and math.” The experience Mancenido gained from the program enriches her perspectives in teaching and research. “As a statistician, I typically frame research as math problems. With my experience here, I have a new understanding of the broader impacts of my work on greater public good.”

KC reiterated a similar sentiment as his colleague in the program. “It’s been great to hear ideas and insight from the scientists here about their research to see how it overlaps with academia,” he said. For the program, KC has been working on computational modeling and simulation of materials to counter nerve agents for respiratory protection research at CBC. The research conducted at the Center will guide scientists through developments in protecting warfighters against chemical warfare agents. “Working with these experts will help me grow and collaborate in this field in the future,” he said of his experience.



Although interns and fellows were assigned to projects related to their educational and professional backgrounds, they also had the opportunity to be exposed to other projects that could correlate to their field, which piqued the interest and curiosity of several interns. Tahiyah Brinkley, program intern and graduate student studying biomedical engineering at the New Jersey Institute of Technology, has been working in the engineering branch developing polymer fibers as part of her project. “I’m doing something I’ve never done before and learning about new materials,” she said. “It’s been an interesting experience that has expanded my career path. After graduating, I want to pursue a Ph.D. in polymer science.”



Tahiyah Brinkley, program intern and graduate student studying biomedical engineering at the New Jersey Institute of Technology, works in the engineering branch developing polymer fibers as part of her research project. (U.S. Army photo)



Cynthia Mirzaie, program intern and graduate student studying material science and engineering at California State University, Los Angeles, works with DNA samples at DEVCOM CBC’s Biotechnology Lab as part of her project for the DoD’s HBCU/MI Summer Research Program. (U.S. Army photo by Ellie White)

Participants of the program highlighted the inspiring efforts of the mentors who guided them throughout their research journey at the Center. “The mentors have been very kind,” said Cynthia Mirzaie, program intern and graduate student studying material science and engineering at California State University, Los Angeles. “They have a desire to help the next generation thrive. They put in a lot of effort to build our skills.”

Overall, the program has proven to be beneficial for the program’s participants and has also provided an outlet for underserved groups to pursue their passion in the competitive field of STEM. “I’m very happy with the program,” Mirzaie said of the opportunity. “This program encourages professional and educational experience that directs students down the right path.”



DEVCOM
CHEMICAL BIOLOGICAL
CENTER

News Release

<https://cbc.devcom.army.mil>

###30###

For more information about the DEVCOM Chemical Biological Center, visit <https://cbc.DEVCOM.army.mil>

The U.S. Army Combat Capabilities Development Command (DEVCOM) Chemical Biological Center (CBC) is aligned under the U.S. Army Futures Command (AFC) and U.S. Army Combat Capabilities Development Command (DEVCOM.)

AFC provides Army modernization solutions (integrated concepts, organizational designs, and technologies) in order to allow the Joint Force, employing Army capabilities, to achieve overmatch in the future operation environment. DEVCOM is a major subordinate command of AFC. DEVCOM leads in the discovery, development, and delivery of technology-based capabilities to enable Soldiers to win our nation's wars and come home safely. DEVCOM CBC is the Army's principal research and development center for chemical and biological defense technology, engineering, and field operations. DEVCOM CBC is headquartered at Aberdeen Proving Ground, Maryland.