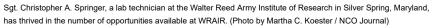
Soldiers Thrive in Wrair's Busy Laboratories

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Established in 1893 as the Army Medical School, the Walter Reed Army Institute of Research has a long and respected history of serving America's military. With more than 120 years of advances in military and public health, the goal at WRAIR remains to supply life-saving products to sustain the readiness of the warfighter.

Because infectious diseases threaten national and global security, WRAIR is able to shift focus quickly when illnesses, such as Ebola, emerge.

"Army medical research plays a foundational role in the success of our all-volunteer force," said Gen. Daniel B. Allyn, vice chief of staff of the U.S. Army, during a visit last year to WRAIR. "The success of our Army relies on trust – trust between Soldiers and the military institution, and trust between the military and the American public."

The emergence and swift spread of Zika in the outbreak zones of North and South

America and Southeast Asia, where service members are located, forced WRAIR's scientists to channel their expertise toward developing a successful vaccine earlier this year. Human testing is underway at WRAIR in Silver Spring, Maryland.

Col. Nelson Michael, director of WRAIR's Military HIV Research Program and Zika program co-lead, recently briefed Gen. Mark A. Milley, chief of staff of the U.S. Army, on WRAIR's Zika vaccine progress.

"One of the things I am going to tell the general is of one [new concern] we have got to think about when we send our troops overseas and they come back home," Michael said before his meeting with Milley. "We're obviously very obligated toward military families, and there has been one case that is not as well documented where a woman transmitted it to a man sexually. The problem with Zika is that even though it's been around a long time we didn't know much about it until very recently."

Soldiers help make successful medical technologies possible at WRAIR because they are accustomed to tackling problems quickly, Michael said. Sgt. Christopher A. Springer, a lab technician, is part of the team that developed the Zika vaccine at WRAIR.

"I am hoping someone like Sgt. Springer looks at this and at some point in his Army career says, 'I want to be like those guys,' and then continues to be involved at some level either as a noncommissioned officer or in some other capacity as a civilian scientist," Michael said. "At either rate, he is exposed to something that he would never see anywhere else in the U.S. Army."

Springer, as a young NCO, has found many opportunities to hone his leadership skills at WRAIR.

"I definitely like the new responsibilities as an NCO," Springer said. "I feel like I am more involved with WRAIR. Recently I was afforded the opportunity to become the NCO in charge here for the German Armed Forces Proficiency Badge. We get them trained up."

Named in 1953 after Maj. Walter Reed who was a military research physician best known for discovering yellow fever, WRAIR developed treatments for dysentery and malaria as well as vaccines for typhoid fever, dengue, Japanese encephalitis and meningitis. Among its many medical victories, WRAIR's Military HIV Research Program spearheaded the first clinical trial in humans showing vaccine protection from the AIDS virus.

"We are the largest biomedical research laboratory in the DOD [Department of Defense] and the largest laboratory in the Army," Michael said. "We work on diseases

that are either infectious or that cause Soldiers to not be able to do their jobs.

"We have focused on things such as malaria and HIV infections since 1986," Michael said. "We focus on the flaviviruses. Dengue has been the one that we have been banging away on for a very long time. We are very instrumental in the current leading candidates for vaccines for HIV, malaria and dengue, which is something we are very proud of. The institute also has a very strong program in bacterial infection diseases, especially with the growing problem of resistant bacteria."

WRAIR is recognized as the oldest school of public health and preventive medicine in the United States. The institute has been home to Michael for much of his military career, and he is proud to be a part of it.

"[The challenges] make me want to continue to stay in the Army even though I am 59 [years old]," Michael said. "I could go anywhere I want. I trained at Stanford University and Harvard University. With my degrees I could be anywhere I wanted to, but I choose to remain in the Army because I adore what I do."