U.S. Army Medicine Leads In Infectious Disease Research

(NAPSA)—In 2004, U.S. Army Col. Jerome Kim, an infectious disease physician, flew to Bangkok to oversee a massive HIV vaccine study.

It was the opportunity of a lifetime—and the stakes were high. If successful, it could be the first vaccine to show even moderate protection against HIV infection—a critical milestone in the fight against HIV.

Sponsored by the U.S. Army in partnership with the government of Thailand, the Phase III clinical trial known as RV144 followed 16,000 Thai volunteers. The results announced in 2009 "showed an efficacy rate of 31.2 percent in vaccine recipients," said Dr. Kim, now the Deputy Director of the U.S. Military HIV Research Program (MHRP) at the Walter Reed Army Institute of Research (WRAIR).

"This achievement paved the way for us to learn more about the HIV virus, refine the vaccine and boost the immune response so the next generation of the vaccines will be more effective," he said.

Protecting Our Troops... And The World

The Army has been a global leader in infectious disease research since Maj. Walter Reed confirmed yellow fever is transmitted by mosquitoes in 1901. The Army partners with foreign governments and militaries, businesses, universities and NGOs to develop vaccines and treatments for diseases such as malaria, dengue, influenza, hepatitis and HIV/AIDS. Army research is presented at major international meetings and appears in top medical and scientific journals. Army researchers have conducted two Ebola vaccine studies in Uganda and the U.S., and are set to start another one in Nigeria this year.

Force protection is the primary reason for the Army's investment in infectious disease research. For instance, troops stationed in tropical areas are vulnerable to malaria. In the case of HIV, force-wide screening since 1986 ensures that the Army's blood supply is infection-free and enables earlier

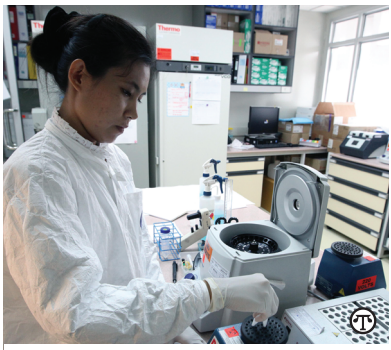

Photo credit: Armed Forces Research Institute of Medical Sciences (AFRIMS)

A scientist in the U.S. Army research laboratory in Thailand

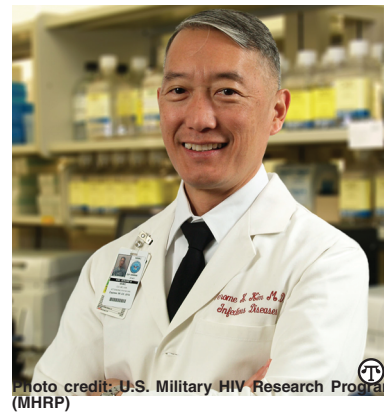

Photo credit: U.S. Military HIV Research Program (MHRP)

U.S. Army Col. Jerome Kim, Deputy Director, U.S. Military HIV Research Program

care for any troops who receive a positive diagnosis. While America's defense needs drive the Army's efforts, people around the world and at home also benefit.

Based in Maryland, MHRP is a network of military research labs and facilities in Thailand, Kenya and other African nations that welcome the clinical infrastructure, jobs and training opportunities the labs offer their scientists. "When the president of Tanzania came to Washington, he asked to visit WRAIR because of the work we're doing in his country," recalled Kim. "It was a reminder that our work has a global impact and is really a form of medical diplomacy."

A Career Like No Other

In the years since RV144, Kim has led efforts to understand how the vaccine works against HIV.

In addition, MHRP is leading efforts to search for a cure for HIV, working with volunteers from Thailand treated in the first days after infection. "This work," says Col. Nelson Michael, MHRP director, "ensures that MHRP will continue to be an important force in the fight against HIV."

Kim will retire from the Army later this year to head the International Vaccine Institute, an organization committed to providing affordable vaccines in developing countries. "I would encourage anyone interested in the field of infectious disease to consider the Army," he said. "We are looking for medical professionals who want experience in global health to work in our labs and field programs in Africa and Asia. Army medicine allows people to gain professional experience and training they won't get anywhere else.

"The Army offers infectious disease specialists the chance to participate in all aspects of research and prevention," he added. "In my time at MHRP, I've been able to lead research efforts in virus and human genome sequencing, teach, and do clinical work—often at the same time. It's really the best of all worlds."