Hope for Hemorrhagic Fevers

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The National Institute of Allergies and Infectious Diseases, part of the National Institutes of Health, has awarded a five-year contract totaling more than \$15 million to Tulane University for its ongoing efforts to treat and prevent Lassa fever, an often deadly viral disease that threatens hundreds of thousands of people annually in West Africa and is classified as a potential bioterrorism threat.



Investigators Robert Garry, left, and Dr. James Robinson, right, are heading up a research effort at Tulane that targets Lassa fever, a viral disease that is a potential bioterrorism threat. (Photo by Paula Burch-Celentano)

Dr. James Robinson, professor of pediatrics in the School of Medicine and principal investigator for the <u>project</u>, says researchers plan to evaluate antibodies from patients who were infected by the virus and recovered, to see if those antibodies might play a role in the development of a vaccine or treatment for the illness.

"This study will result in a fundamental understanding of the mechanisms of antibody responses and how they neutralize the Lassa virus," Robinson says. During <u>Lassa fever</u> epidemics the fatality rate can reach 50 percent, but Robert Garry, professor of microbiology and immunology, sees hope.

"We have been pleased with the results of our research over the past five years," says Garry, program manager for the contract. "The diagnostic products we have developed have been shown to be effective in clinical settings in Africa and will not only have a meaningful impact on health care in that part of the world, but will also fill a critical gap in bioterrorism defense. Now under the new NIH award, we will move to the next level allowing us to better treat the disease or ultimately prevent it altogether."

Team member Dr. Daniel Bausch, associate professor in the <u>School of Public Health</u> <u>and Tropical Medicine</u>, says that the group intends to expand this program to other infectious agents such as Ebola, Marburg and other hemorrhagic fever viruses that are of concern to the public health and bioterrorism preparedness communities.