# Tulane Receives $15 Million NIH Contract to Develop Vaccine and Treatment for Deadly Fever

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The National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH), has awarded a five-year contract totaling $15,254,919 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.

The contract will include collaboration between Tulane; Scripps Research Institute; The Broad Institute; Harvard University; the University of California at San Diego; Boston University; Autoimmune Technologies, LLC; Corgenix Medical Corporation and various partners in West Africa.

Dr. James Robinson, professor of pediatrics at Tulane University School of Medicine and principal investigator of the program, said researchers plan to evaluate antibodies from patients who were infected by the Lassa 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 said. “We have assembled a very strong and diverse group of institutions to collaborate on this project.”

In some areas of Sierra Leone, up to 16 percent of people admitted to hospitals have Lassa fever. Lassa fever is also associated with occasional epidemics, during which the fatality rate can reach 50 percent.

But Dr. Robert Garry, professor of microbiology and immunology at Tulane, who serves as program manager of the contract, sees hope.

“We have been very pleased with the results of our research efforts over the past five years,” he said. “The diagnostic products we have developed have been shown to be remarkably 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.”

Another team member, Dr. Daniel Bausch, associate professor of tropical medicine at Tulane University School of Public Health and Tropical Medicine, says that the group intends to expand this program to address other important infectious agents such as Ebola, Marburg and other hemorrhagic fever viruses that are of concern to the public health and bioterrorism preparedness communities.