

Medgene to develop platform vaccines for Nipah Virus and Rift Valley Fever animal diseases

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Agricultural Research Service (USDA-ARS) and Medgene, a company that produces highly-targeted platform vaccines, recently signed a cooperative agreement. According to the agreements, Medgene will apply its proprietary platform vaccine technologies against Nipah Virus and Rift Valley Fever, two well-known foreign animal diseases.

In the case of Nipah Virus, a highly fatal disease currently affecting swine in Southeast Asia, the agreement is to test Medgene's platform vaccines developed on its proprietary baculovirus protein expression system. The Rift Valley Fever agreement is to develop an assay to measure the antibody activity of Medgene's platform vaccines in order to differentiate an infected animal from a vaccinated animal. This assay is especially important to international trade as it helps ensure that diseased animals are not being released into unaffected populations. Rift Valley Fever is also a highly fatal disease that originated in Africa and affects livestock.

Dr. Alan Young, immunologist and Chief Technology Officer of Medgene, explained the significance of these agreements. "Foreign animal diseases are monitored very closely for many reasons. As important as American agriculture is to the world, we must be prepared to address these and other diseases now. These projects with USDA-ARS will be a solid step forward in protecting against foreign animal disease outbreaks in the U.S."

These projects are part of the Biologics Development Module (BDM) at USDA's National Bio and Agro-Defense Facility (NBAF), which aims to create collaborations that will enhance and expedite the transition of research to veterinary-medical products. The ultimate goal of the collaboration between USDA-ARS and Medgene is to develop and maintain preparedness for foreign animal disease outbreaks within the U.S.Â