

Infectious Diseases

TRANSLATIONAL PORTFOLIO PROGRAM ENCOMPASSING CGMP MANUFACTURING AND CLINICAL DEVELOPMENT OF DNA VACCINE CANDIDATES AGAINST BOTH LASSA VIRUS AND MERS CORONAVIRUS

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The Lassa virus (LASV), endemic to West Africa, infects 300,000+ people annually. Individuals hospitalized and diagnosed with the infection average a mortality rate of 15-20% due to the lethal hemorrhagic fever that accompanies the disease. Out of the infected patients who survive, an average of 33% experience life altering hearing loss. Although the severity of this disease is critical, there are currently no FDA-approved vaccines or treatments available.

To address the urgent need of a LASV treatment, Geneva researcher and employee Dr. Cashman and her research team are working to translate a distinct DNA-based vaccine candidate (INO-4500) against the Category A priority pathogen, LASV. Dr. Cashman's work currently supports the evaluation of the first-in-human Phase I clinical trial in the prevention of LASV infection.

A photograph showing two individuals in full personal protective equipment (PPE) for handling highly infectious agents. They are wearing white hooded suits, yellow outer sleeves, and green gloves. They also have clear face shields and goggles. The person in the foreground is holding a spray nozzle, suggesting a decontamination or disinfection activity. The background shows an outdoor or semi-outdoor laboratory environment with some equipment and a building structure.

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