Infectious Disease Research Institute Awarded BARDA Funding for Development of Intranasal Influenza RNA Vaccine

- Funds for proof-of-concept of an RNA vaccine administered as a spray up the nose, eliminating the need for needles and syringes.
- The influenza vaccine will be developed on IDRI’s thermostable RNA platform, which has demonstrated for other vaccine constructs the ability to be stored at refrigerated or room temperatures for at least 6 months.
- Intranasal RNA vaccines that do not require a deep cold chain for transport and storage can be developed for other diseases on IDRI’s platform, if successful.

SEATTLE, Washington, December 14, 2021 - The Infectious Disease Research Institute (IDRI), a Seattle-based non-profit biotech research institute, announced today a contract with the Biomedical Advanced Research and Development Authority (BARDA) DRIVE (Division of Research, Innovation, and Ventures) “Beyond the Needle” program to develop an intranasally delivered RNA vaccine for pandemic influenza.

Beyond the Needle funds the development of new technologies to make vaccine and therapeutic administration easier, to ultimately create globally accessible vaccines. The development of an intranasally administered flu vaccine using IDRI’s RNA vaccine platform could improve RNA vaccine protection against respiratory viruses, remove the need for the deep cold chain that makes RNA vaccines inaccessible to low-and-middle income countries (LMICs), and alleviate fears in needle-hesitant individuals. BARDA entered into a contract with IDRI for the development of an intranasal RNA vaccine platform with long-term storage stability using H5N1 influenza as an initial proof-of-concept target.

“IDRI’s RNA platform has enhanced stability compared to current RNA vaccines, which directly addresses the challenges of cold chain distribution, allowing for increased access to vaccines in places where freezers and even refrigeration are not always readily available,” said Alana Gerhardt, PhD, Senior Manager of Process Development, who will support optimizing the vaccine platform for thermostability and intranasal delivery.

“Intranasal administration of RNA vaccines may offer improved protection against respiratory pathogens – as well as easier administration and potentially higher uptake rates – relative to injected vaccines,” said Emily Voigt, PhD, Senior Manager of the RNA program. “Potent vaccines combined with ease of administration, even by non-trained medical staff, and increased stability means we can more quickly reach more people and offer the protection needed from respiratory viruses, regardless of where you live.”

IDRI will deliver results of its BARDA-funded research as project milestones are met throughout the 2-year contract. IDRI plans to build on this work to make potent RNA vaccines cheaper and easier to manufacture, store, ship, and administer across the world.
This project has been funded in whole or in part with federal funds from the Department of Health and Human Services; Office of the Assistant Secretary for Preparedness and Response; Biomedical Advanced Research and Development Authority, under contract number 75A50121C00087.

IDRI is a nonprofit biotech organization located in Seattle, Washington that combines high-quality scientific research with product development and manufacturing capabilities to help combat some of the world’s deadliest diseases, including COVID-19. For nearly three decades, much of IDRI’s work has been focused on creating immune-enhancing technologies that improve the body’s natural response to disease. It is IDRI’s mission to make these technologies widely available at a low cost and to build a world in which every person has access to the tools that harness their immune systems and allow for a long, healthy life free of disease.

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