

FY2024 NAHLN Projects

Number of Projects Recommended: 7
 Amount of Funds Recommended: \$1,019,458
 Total Proposals Submitted: 13
 Total Funds Requested: \$2,419,286

Funding Priorities: The FY2024 NAHLN funding priorities targeted projects that will enhance effectiveness of managing incoming samples and associated data or information within a laboratory’s Laboratory Information Management System (LIMS); improve capability to handle surge samples by increasing high-capacity throughput in the laboratory from receiving through reporting; increase the pool of individuals with an understanding of the specialized processes and knowledge required to provide technical expertise in a diagnostic laboratory; and enhance the ability to send and receive testing and testing associated data through standardization of IT processes.

Projects Recommended for Approval			
Project Title	State	Proposed Amount	Project Summary
Establishment of standardized NGS Sequencing, Data Analysis, and Reporting Protocols	Iowa	\$194,097	The absence of standardized NGS sequencing, data analysis, and reporting protocols has impeded the accuracy, reproducibility, and comparability of data. In response to this pivotal challenge, a collaborative consortium of seven veterinary laboratories is pioneering the development of standardized NGS protocols for sequencing, bioinformatics analysis, and results reporting. A comprehensive set of step-by-step guidelines for NGS sequencing will be provided, ensuring simplicity and precision in implementation, along with a nearly automated bioinformatics analysis pipeline.
Development of an Android/iOS application and enhancement of existing web-based tools to facilitate accurate and efficient field data capture and electronic submission to NAHLN laboratories by means of a standardized order message	Montana	\$170,950	This proposal builds on previous order message work and will involve development of both a mobile device application (android/iOS) and an internet portal to allow for standardized data capture and submission to any NAHLN laboratory. A group of six NAHLN laboratories (MT, SD, AZ, CT, MD, and WY) using the same LIMS (VADDS) have been collaborating on this project and will work with NAHLN and the VADDS vendor (ATC) to complete the order message project and build tools to streamline and simplify the submission process.
Symposium on International Experiences with High Consequence Animal Disease Outbreaks and Response	Ohio	\$40,500	With this Farm Bill funding, the co-chairs of the AAVLD virology committee plan to organize a full-day symposium during the AAVLD/USAHA annual meeting to host international speakers to share their experiences of outbreak response of transboundary diseases like African Swine Fever (ASF) and highly pathogenic avian influenza (HPAI). This symposium will disseminate current information about how countries and government-funded laboratories are responding to new outbreaks of high consequence animal diseases in their regions or country.

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Configurable online submission forms to improve speed and accuracy of sample submission data	Texas	\$200,000	This project proposes workflow adjustments in the field and the laboratory to reduce the time required for including mandatory data elements, thereby improving the speed and accuracy of NAHLN testing and reporting. The project will deliver a toolkit that offers immediate benefits for current NAHLN testing and will grow in value as NAHLN testing evolves and expands.
Evaluating Viral Enrichment Strategies for Next Generation Sequencing of Aquatic Viruses	Washington	\$200,000	Build and refine our previous work by addressing the time-to-detection and cost deficiencies by comparing or combining two advanced technologies to improve sample preparation specific to aquatic hosts.
Building Workflow Efficiency and Testing Capacity in Preparedness for ASF Outbreak Response	Wisconsin	\$109,984	A recent workload review identified gaps and opportunities to leverage our current workforce and new automation equipment to improve workflow efficiency. A strategic plan was developed that can better leverage sample receiving and necropsy staff to help with sample processing, which will then free up microbiologists' time on these tasks. The proposed equipment additions of 2 centrifuges and three liquid handlers will enable WVDL to build capacity for routine and NAHLN testing, focusing on increase efficiency in performing ASF PCR testing and high throughput ASF serology testing.
Building Sequencing Capacity and Efficient Workflows to Enhance Capability for the Detection of Emerging Diseases	Wisconsin	\$100,542	This proposal aims to acquire instrumentation and develop workflows for improved capability and capacity to rapidly identify novel pathogens that could threaten our animal populations. NGS capacity will enhance the WVDL's established diagnostic capabilities and augment targeted molecular methods for the detection of novel pathogens.