Advanced Molecular Detection

National investment to advance genomic sequencing capacity

Western Region

Oregon

Total Investment[1]: $4,534,194

State and Local Investment: $3,452,294

Research Awards: $1,081,900

CDC's Advanced Molecular Detection (AMD) program builds and integrates laboratory, bioinformatics, and epidemiology technologies across CDC and nationwide. Since 2014, AMD has received support from Congress through an annual appropriation of $30 million—which was raised to $35 million in 2022—to implement these technologies in public health programs. Through investments in AMD technologies, CDC is improving both public health outcomes and preparedness in dozens of areas including foodborne disease, influenza, antibiotic resistance, hepatitis, pneumonia, and meningitis.

With funding from the American Rescue Plan Act of 2021, the AMD program has developed a multi-year plan to expand its support to state, local, and territorial public health laboratories with more staff and resources to collect specimens for COVID-19 testing, sequence them to identify and track SARS-CoV-2 variants, and share data, now and future years.

Workforce Development

Oregon is part of the Western region. In 2018, the AMD program established seven workforce development regions across the country. Each region has an AMD training lead and a bioinformatics lead. This provides a network of customized AMD support which helps develop skills and provides training assistance to public health labs across the country.

Through the Western region's training resources, Oregon receives lab support on data analysis and how to interface with IT departments. They also receive both pathogen-specific training and cross-cutting instruction to help staff develop the critical skills necessary to extract, analyze, and interpret sequencing data.

[1] Funding to public health departments includes support from the American Rescue Plan of 2021 and AMD annual appropriations. Awards to university and research partners were funded through appropriations supporting the COVID-19 response.

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University and Research Partners in Oregon

These awards are intended to fill knowledge gaps and promote innovation in the U.S. response to the COVID-19 pandemic. Funding awards are determined through a competitive selection process based on scientific needs and available funds.

Oregon Health & Science University

Expanded genomic surveillance of SARS-CoV-2 in Oregon (2021—$1,081,900)

In partnership with the Multnomah County Health Department and the Oregon State Public Health Lab, the Oregon Health & Science University will monitor emerging variants in the Portland metropolitan area and surrounding region. This project will expand SARS-CoV-2 surveillance efforts with a minimum sequencing capacity of 250 samples per week and establish low-cost sample sequencing pipelines.