ICAN
SOCIETY FOR
MICROBIOLOGY

The Advanced Molecular Detection (AMD) program brings cutting edge technology to the front lines of public health by harnessing the power of next-generation sequencing and high performance computing with bioinformatics and epidemiology expertise to study pathogens.

To build and sustain the program in the coming years, the AMD program at the Centers for Disease Control and Prevention (CDC) needs $175 million in annual base funding. The programT y

How do we use AMD?

Lessons Learned during COVID-19

AMD technology played a pivotal role in identifying, understanding, tracking and tracing SARS-CoV-2 and its variants as they have evolved. Thanks to short-term, supplemental investments made by Congress, the U.S. was able to stay on top of SARS-CoV-2 variants and ensure that tests, vaccines and therapeutics remained effective against an evolving threat. The AMD program also helped establish the SPHERES Consortium to bring public and private sectors together to enable viral sequencing, tracking and tracing. With supplemental funding, the AMD program has established Pathogen Genomics Centers of Excellence around the country that have enormous promise for tracking and understanding infectious disease threats.

Next-generation sequencing has allowed CDC to:

Improving Vaccines

Applying AMD to vaccine-preventable diseases, such as the flu, helps CDC monitor genetic changes and understand why vaccine e□ectiveness may decrease.

- Utilize next-generation sequencing data to forecast relative importance of emerging strains and assess risk, characterize viruses used in vaccine effectiveness studies and inform treatment for patients infected with viruses that have high-pandemic risk, such as COVID-19.

ASM Calls on Congress to:

Increase the base investment in Advanced Molecular Detection (AMD) technologies to $175 million per year to both support its current successes and to expand its scope of innovation as technology continues to advance. This will facilitate the existing work in public health and keep pace with needs in all state and local public health laboratories, provide critical coordination with academic institutions to strengthen the public health workforce pipeline and ensure the U.S. stays ahead of the next potential deadly disease.