

April 28, 2021

The Honorable Patrick Leahy
Chairman
Committee on Appropriations
U.S. Senate
Washington, DC 20510

The Honorable Richard Shelby
Vice Chairman
Committee on Appropriations
U.S. Senate
Washington, DC 20510

The Honorable Patty Murray
Chair
Subcommittee on Labor, Health and Human
Services and Related Agencies
U.S. Senate
Washington, DC 20510

The Honorable Roy Blunt
Ranking Member
Subcommittee on Labor, Health and
Human Services and Related Agencies
U.S. Senate
Washington, DC 20510

Dear Chairman Leahy, Vice Chairman Shelby, Chair Murray and Ranking Member Blunt:

We, the undersigned organizations, respectfully request that you provide \$60 million for the Advanced Molecular Detection (AMD) program at the Centers for Disease Control and Prevention (CDC) in the Fiscal Year (FY) 2022 Labor, Health and Human Services, Education and Related Agencies bill. The AMD program uses next generation sequencing (NGS) to bring the concept of precision medicine to bear for “precision public health.” AMD gives us new tools to detect disease faster, identify outbreaks sooner, and protect people from emerging and evolving disease threats. It informs vaccine development, helps identify and track antimicrobial resistance and foodborne illness, and informs the development of diagnostics for new, existing, and emerging diseases.

AMD has played a critical role in the response to the global COVID-19 pandemic, enabling the United States to sequence SARS-CoV-2 within one week of its detection last year. In late spring of 2020, the CDC launched SARS-CoV-2 Sequencing for Public Health Emergency Response, Epidemiology and Surveillance (SPHERES), a national genomics consortium to coordinate sequencing across the U.S among public and private entities. Now, as SARS-CoV-2 variants threaten our progress against the virus, supplemental emergency funding through the American Rescue Plan is boosting AMD capacity and making it possible to stay ahead of the new variants and make data-driven public health decisions. We thank Congress for the significant resources it has provided to the program in the short term.

Beyond the immediate health crisis, NGS technology continues to advance at an astounding pace and yet funding for the AMD **base** budget has remained flat since the program’s inception in 2014. As a result, the current, base funding level of \$30 million will not be sufficient to meet increasing demands for the equipment, training, and expertise required to support state and local health departments with precision public health and expanded collaborations. Returning to this level post-

pandemic also threatens the infrastructure that has been built over the past year that has strengthened the core program.

Beyond the work on COVID-19, the requested increase in base appropriations for the AMD program will support **three specific priority areas**:

- **Innovation in the field of public health.** The COVID-19 pandemic and the 2016 Zika outbreak exemplify how CDC and state and local public health laboratories now use AMD technologies on virtually the entire spectrum of emerging infectious diseases. Using NGS, labs have been able to apply sequencing to the novel virus and then make the data available through a global database. In the case of COVID-19, the increased capacity for microbial genomics as well as a greater openness about sharing that data continues to be essential to our response. Deploying AMD provides a timely and accurate picture of how the virus is spreading and mutating so our response can be more effective and save lives. Beyond COVID-19, there is an increasing need in the area of metagenomics to sequence pathogens directly from specimens without the need for culture. Data integration, specifically merging laboratory and epidemiologic data streams on the same platforms allow us to analyze and visualize both together, creating a fuller picture of a viral outbreak, food borne illness, or new antibiotic resistant bacterial strain.
- **Embedding AMD fully in state and local health departments.** State and local public health departments need the infrastructure to implement AMD programs that are capable of responding to emerging threats or changing priorities. CDC works closely with state and local health departments to build the capacity for each state to have an AMD program staffed by an AMD specialist to coordinate sequencing services. As a result of supplemental funding, we envision that every state will have an AMD unit that serves as a core facility, allowing for more efficiency and resilience through sharing of sequencing resources across the health department. Sustained funding is essential to ensure that states can continue to employ their AMD specialist to bolster our national capacity to utilize this innovative diagnostic technology and to be better prepared for the next pandemic.
- **Expanded collaboration between public health and academic research institutions.** The AMD program has several long-standing relationships with academic research institutions around the country. An increased investment towards these collaborations would further the US as a leader in this area and build on existing consortia like SPHERES that have demonstrated tremendous value. New competitive awards could be established that pair every AMD site with one academic institution and one public health department furthering collaborations and ensuring a solid public health infrastructure.

We recognize that you face difficult choices with respect to the budget; however, as we continue to grapple with the COVID-19 pandemic and other infectious threats, we must grow and sustain the base budget for this unique program. Annual sustained investments are the best way to build a public health infrastructure that is prepared to tackle the next health crisis. We respectfully request that the committee allocate \$60 million for the CDC AMD program in FY 22 to protect public health both now and in the future.

Sincerely,

AABB
AdvaMedDx
American Academy of Pediatrics
American Association for Clinical Chemistry
American Association of Bioanalysts
American Clinical Laboratory Association
American Medical Technologists
American Public Health Association
American Society for Clinical Pathology
American Society for Microbiology
American Society for Virology
American Society of Tropical Medicine & Hygiene
Association for Molecular Pathology
Association for Professionals in Infection Control and Epidemiology
Association of American Medical Colleges
Association of Public Health Laboratories
Association of Schools and Programs of Public Health
Association of State and Territorial Health Officials
Big Cities Health Coalition
Biophysical Society
Biotechnology Innovation Organization (BIO)
Boston University
Clear Labs Inc.
College of American Pathologists
Council of State and Territorial Epidemiologists
GenMark Diagnostics Inc.
Global Health Technologies Coalition
Helix
HIV Medicine Association
iGenomeDx Inc
Illumina
Infectious Diseases Society of America
Invitae
Laboratory Corporation of America Holdings
National Association of County and City Health Officials

National Independent Laboratory Association
Pacific Biosciences
Psomagen, Inc.
Quest Diagnostics
Shenandoah University
The Gerontological Society of America
The Society for Healthcare Epidemiology of America
Thermo Fisher Scientific
Trust for America's Health
University of Minnesota
University of Wisconsin-Madison School of Medicine and Public Health
Yale University