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U.S. House of Representatives  
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Washington, DC 20515

The Honorable Rosa DeLauro  
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The Honorable Andy Harris  
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The Honorable Sanford Bishop, Jr.  
U.S. House of Representatives  
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The Honorable Mario Diaz-Balart  
U.S. House of Representatives  
Rayburn House Office Building  
Washington, DC 20515

The Honorable Barbara Lee  
U.S. House of Representatives  
Rayburn House Office Building  
Washington, DC 20515

March 24, 2023

Dear Chairs and Ranking Members of the Labor-HHS-Education, Agriculture, and State and Foreign Operations Appropriations Subcommittees:

The undersigned organizations, representing clinicians, scientists, patients, public health, animal agriculture and the pharmaceutical and diagnostics industries, urge you to significantly increase federal funding for domestic and global antimicrobial resistance (AMR) programs. We call for a comprehensive One Health approach that encompasses human, animal and environmental health with increased funding for surveillance, prevention, stewardship, research and innovation.

Antimicrobial resistance is one of the greatest public health threats of our time. Drug-resistant infections sicken at least 2.8 million people and kill at least 35,000 people in the United States each year. Just 6 of the worst resistant pathogens increase U.S. health care costs by \$4.6 billion annually. Infections are a primary or associated cause of death in [50% of patients with cancer](#), as AMR can make these infections difficult or impossible to treat. [Globally](#), resistant infections directly caused 1.27 million deaths in 2019 and played a role in 4.95 million deaths. If we do not act now, antibiotic resistant infections will be the leading cause of death by 2050 and could cost the world \$100 trillion.

AMR has a [disproportionate impact](#) on certain communities due to variance in risk of exposure, susceptibility to infection or treatment received. Rates of several serious antibiotic resistant infections, including community-associated MRSA, are higher incidence in Black populations.

Addressing AMR is central to strengthening our preparedness for future public health emergencies, as patients with respiratory infections, serious wounds or burns, or other conditions requiring hospitalization are all at risk for secondary resistant infections. A 2022 CDC [report](#) found that hospital associated AMR infections and deaths rose 15% in 2020 due to the COVID-19 pandemic, wiping out progress made in 2012-2017 to lower U.S. deaths from AMR.

Safe and effective antimicrobials are essential to enable modern medical advances, including cancer chemotherapy, organ transplantation and other complex surgeries, which all carry a risk of infection. A recent outbreak of [drug resistant eye infections](#) causing blindness due to contaminated eye drops is demonstrating that serious resistant infections are a threat to us all.

Unfortunately, the pipeline of new antibiotics in development is insufficient to meet patient needs. Small companies that are responsible for nearly all current antibiotic innovation are struggling to stay in business. Factors unique to antibiotics, including the need for their judicious use, make it challenging for companies to earn a return on investments in antibiotic research and development. Additionally, new diagnostic tools are needed to help guide appropriate antibiotic use and enable surveillance, and greater investments are needed to support prevention and antibiotic stewardship.

While we are grateful for funding for AMR provided by Congress in FY2023, increased federal appropriations commensurate with the gravity and importance of AMR are urgently needed to improve our defenses against this escalating health crisis. We are encouraged that the President's Budget Request for FY24 prioritizes AMR in multiple ways, including a proposal to strengthen antibiotic research and development through the use of federal contracts that delink payments for novel antimicrobials from their use. For FY24, we recommend:

### **Labor, Health and Human Services, Education and Related Agencies**

**The Centers for Disease Control and Prevention (CDC)**. We recommend \$400 million in funding for the **Antibiotic Resistance Solutions Initiative**. This is needed to expand antibiotic stewardship across the continuum of care; double state and local grant awards; expand the AR Laboratory Network globally and domestically to strengthen the identification, tracking and containment of deadly pathogens; support antimicrobial resistance (AMR) research and epicenters; and increase public and health care professional education and awareness.

We recommend \$175 million for the **Advanced Molecular Detection (AMD) Initiative**. Funding would ensure continued innovation in the detection and tracking of existing and emerging resistant pathogens. Funding would also enable federal, state, and local public health laboratories to expand the use of pathogen genomics, sustain important partnerships with academic research institutions, and bolster training to ensure integration of genomics into AMR surveillance and response.

We recommend \$100 million for the **National Healthcare Safety Network (NHSN)**. Full funding is needed to modernize and automate NHSN to alleviate reporting burden and speed access to actionable data. Funding would bolster data collection on antibiotic use and resistance in healthcare facilities and provide technical support for more than 65,000 users of NHSN.

We recommend \$1.37 billion overall for the **CDC Center for Global Health**, including the **Division of Global Health Protection** (\$842.8 million). Increased resources are needed to improve global health capacity to stop AMR threats before they reach domestic soil as well as address growing drug resistance in developing countries. This Division works to enhance AMR surveillance systems, strengthen laboratory capacity, train health care workers and disease detectives, improve antibiotic use, provide technical assistance to 30 countries and support emergency operations centers. Funding would expand global health capacity address threats in 60 countries.

### **Assistant Secretary for Preparedness and Response (ASPR)**

We recommend funding of \$330 million to support **Broad Spectrum Antimicrobials and CARB- X at the Biomedical Advanced Research and Development Authority (BARDA)**. The BARDA broad spectrum antimicrobials and antifungals program and CARB-X leverage public/private partnerships to develop innovative products that prevent, detect and treat resistant infections. These efforts have led to new FDA approved antibiotics. Despite this progress, the pipeline of new antibiotics and antifungals in development is insufficient to meet patient needs.

We recommend funding of \$200 million for the **Project BioShield Special Reserve Fund, Broad Spectrum Antimicrobials**. The Project BioShield SRF is positioned to support the response to public health threats, including AMR. BARDA and NIAID efforts have been successful in helping companies bring new antibiotics to market, but those companies now struggle to stay in business and two filed for bankruptcy in 2019, with others on similar trajectories. In 2019, SRF funds supported a contract for a company following approval of its antibiotic—a phase in which small biotechs that develop new antibiotics are particularly vulnerable. In October 2022, a second contract was awarded through Project BioShield to support the development and procurement of a novel antimicrobial product that addresses multi-drug resistant infections and supports national preparedness efforts. Full funding is needed to expand this approach.

### **National Institutes of Health (NIH)**

We recommend \$7.060 billion for the **National Institute of Allergy and Infectious Diseases, including \$608 million for AMR Research at NIAID**. Funding at this level would allow NIAID to address AMR while carrying out its broader role in supporting infectious diseases research. Increased funding would support the training of new investigators; enhance basic, translational and clinical research on mechanisms of resistance, therapeutics, vaccines and diagnostics; and support the development of a clinical trials network to reduce barriers to research on difficult-to-treat infections.

### **Agriculture-FDA**

#### **Food and Drug Administration**

We recommend \$20 million to support FDA's One Health efforts to combating antibiotic resistance bacteria. This level of support is required to measure changes in antibiotic stewardship in animals and to protect antibiotic effectiveness for human and animal populations. With suggested resources, FDA can complete the remaining goals of its 2018 five-year antibiotic stewardship action plan, including strengthening the National Antimicrobial Resistance Monitoring System (NARMS) to make it consistent with One Health principles, and issuing a draft and final guidance on establishing duration limits to ensure that all current FDA-approved veterinary indications carry duration limits that conform to appropriate and judicious veterinary antibiotic use. These plans were delayed due to the COVID-19 pandemic so additional resources are needed to complete the existing plan and to identify ongoing needs. This funding could also advance FDA's plan to create and implement a functional and efficient system for collecting antimicrobial use data in animals. This additional funding is needed to assist academic institutions and other partners in the development of veterinary educational materials, and support surveillance capacity-building through FDA's Veterinary Laboratory Investigation and Response Network (Vet- LIRN).

### **US Department of Agriculture (USDA)**

We recommend an increase of \$85 million for antimicrobial resistance priorities at USDA. With most emerging diseases and pandemics originating from animals, including food animals, USDA needs more

resources to support its work on biodefence to protect both people and animals from resistant infections that are transmitted between humans and animals (zoonosis). An increase of \$25 million for the Animal and Plant Health Inspection Service is needed to strengthen the Zoonotic Disease Management program, which has been chronically underfunded, and to support the and the National Animal Health Laboratory Network (NAHLN). At least \$60 million in additional funding is needed for Research, Education, and Economics to support agricultural research at USDA's Agricultural Research Service (ARS) and the National Institute of Food and Agriculture (NIFA) Agriculture and Food Research Initiative (AFRI). These funds will enable USDA investigators and scientists at public universities, veterinary colleges and other research settings to better understand the factors driving the emergence of resistant pathogens, and help producers find new vaccines, antibiotic alternatives and improved animal management and husbandry practices that can be shared directly with farmers and livestock growers through USDA's Cooperative Extension Service.

### **Report Language Recommendation**

Without updated breakpoints, clinicians are not able to use up-to-date information to treat bacterial infections with the most effective antibiotics. This has serious implications for antibiotic stewardship, as continued use of ineffective antibiotics allows the proliferation of antibiotic resistant bacteria and jeopardizes patient outcomes. Ensuring that FDA updated breakpoints have wide uptake ensures that health care professionals have access to best information available when diagnosing conditions and prescribing antibiotics and antifungals. We therefore recommend the following report language:

*Antibiotic Breakpoints.--- The agreement recognizes that the FDA needs to ensure that breakpoints are updated in a timely fashion to promote stronger stewardship efforts. The agreement directs the FDA to convene stakeholders, including manufacturers and laboratories, and report back to the Committee within 180 days of the convening on the barriers to uptake for updating breakpoints.*

### **State and Foreign Operations**

#### **US Agency for International Development (USAID) and Department of State**

We recommend \$1 billion for **USAID global health security efforts** to enhance technical assistance to partner countries to prevent and respond to rising rates of AMR in resource-limited settings and strengthen global capacities to prevent and respond to outbreaks while improving U.S. and global health security. We also recommend \$1 billion for **USAID's Tuberculosis Program**, which supports high-quality screening, diagnosis and treatment services for patients affected by multidrug-resistant TB. Finally, we recommend \$2 billion for the **Global Fund to Fight AIDS, TB, and Malaria** to allow continued reductions in malaria and TB and help staunch the growth of drug-resistant forms of these infections including airborne, drug-resistant TB, the biggest infectious disease killer globally in addition to COVID-19.

### **Conclusion**

We greatly appreciate your leadership in providing strong investments in AMR in FY2024. We urge you to continue to place a high priority on AMR to continue making strides to protect patients and public health and spur needed innovation.

Signed,

Abgenics life Sciences Pvt ltd  
AdvaMedDx  
Aelin Therapeutics  
Alliance for Aging Research  
Alpha-1 Foundation  
American Academy of Allergy, Asthma & Immunology  
American Academy of Pediatrics  
American Association of Small Ruminant Practitioners  
American Association of Veterinary Medical Colleges  
American College of Allergy, Asthma & Immunology  
American College of Emergency Physicians  
American Public Health Association  
American Society for Microbiology  
American Society of Transplant Surgeons  
American Society of Tropical Medicine and Hygiene  
AMR.Solutions  
AN2 Therapeutics, Inc.  
Antibiotic Resistance Action Center, the George Washington University  
Appili Therapeutics USA Inc  
Arietis Corporation  
ArrePath  
Association for Professionals in Infection Control and Epidemiology  
Association of Public Health Laboratories  
Association of State and Territorial Health Officials  
Astellas Pharma Global Development, Inc.  
AUROBAC THERAPEUTICS  
Bactria Pharmaceuticals, LLC  
Bazan  
BD (Becton Dickinson & Co.)  
BEAM Alliance  
Beckman Coulter  
bioMerieux Inc.  
Biotechnology Innovation Organization (BIO)  
BioVersys AG  
Blacksmith Medicines  
Boehringer Ingelheim Venture Fund USA  
BUGWORKS RESEARCH INC  
Cancer Support Community  
CancerCare  
Chemical Biology Ventured Ltd  
Clarametyx Biosciences, Inc.  
Coalition of Skin Diseases  
COPD Foundation  
CUBRC, Inc.  
Cystic Fibrosis Foundation  
discoveric bio beta Ltd.  
Ebright Laboratory, Waksman Institute, Rutgers University  
Emory Antibiotic Resistance Center

Emory University  
F2G Inc.  
Febris Therapeutics. Inc.  
Food Animal Concerns Trust  
Genentech  
Global Antibiotic Research and Development Partnership (GARDP)  
Global Coalition on Aging  
Global Health Technologies Coalition  
Greater San Diego Biological Solutions  
Harvard Medical School/Brigham & Women's Hospital  
Health Care Without Harm  
HealthCare Institute of New Jersey (HINJ)  
Hesed Medical Associates  
HIV Medicine Association  
HSC College of Pharmacy  
ICAN, International Cancer Advocacy Network  
Infectious Diseases Society of America  
International Immunocompromised Host Society  
JMI Laboratories  
JU & LMU  
Kathera Bioscience, Inc  
Kern Medical  
Locus Biosciences  
Lupus and Allied Diseases Association, Inc.  
Making-A-Difference in Infectious Diseases  
McCarthy Consultants, Inc.  
Michigan Antibiotic Resistance Reduction Coalition  
Microbion Corporation  
Mosul University  
Mycoses Study Group Education and Research Consortium  
National Association of Pediatric Nurse Practitioners  
National Athletic Trainers' Association  
NBCO Inc  
Nexys  
Novo Holdings Equity U.S. Inc.  
NTM Info & Research  
Ohio Osteopathic Association  
Omnix Medical  
Oragenics, Inc  
Pediatric Infectious Diseases Society  
Peptilogics  
Phagelux Canada Inc.  
Queen Biotechnologies Inc.  
Qpex Biopharma  
ReNewVax Ltd  
Sepsis Alliance  
Sequella, Inc.  
Seres Therapeutics

Shionogi Inc  
Society for Healthcare Epidemiology of America  
Society of Critical Care Medicine  
Spina Bifida Association  
Stuart B. Levy Center for Integrated Management of Antimicrobial Resistance (Levy CIMAR)  
TB Alliance  
The Bonnell Foundation: Living with cystic fibrosis  
The Ohio State University  
The Pew Charitable Trusts  
Thunder Biotech, Inc.  
Treatment Action Group  
Trust for America's Health  
University of Edinburgh  
University of Mbandaka (UNIMBA)  
University of Texas San Antonio (UTSA)  
Valley Fever Institute  
Vogar Publishing, LLC  
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