American Academy of Pediatrics • American Autoimmune Related Diseases Association •
American Lung Association • American Thoracic Society • Association of Public Health Laboratories • Birth Defect Research for Children • Breast Cancer Prevention Partners (formerly Breast Cancer Fund) • Children's Environmental Health Network • Endocrine Society • Environmental Working Group • Green Science Policy Institute • Healthy Schools Network • Huntington Breast Cancer Action Coalition, Inc. • Learning Disabilities Association • National Center for Environmental Health Strategies • National Environmental Health Association • Society for Occupational and Environmental Health • Society for Women's Health Research • Society of Toxicology • The Honest Company • The Michael J. Fox Foundation for Parkinson's Research • West Harlem Environmental Action (WE ACT)

March 13, 2017

The Honorable Roy Blunt Chairman, Labor-HHS-ED Subcm. Committee on Appropriations U.S. Senate Washington, DC 20510 The Honorable Patty Murray Ranking Member, Labor-HHS-ED Subcm. Committee on Appropriations U.S. Senate Washington, DC 20510

Dear Chairman Blunt and Ranking Member Murray:

Thank you for your leadership on biomedical research and public health. As you consider the Fiscal Year 2018 Labor-HHS-Education and Related Agencies appropriation bill, the undersigned members of the Friends of the National Institute of Environmental Health Sciences (NIEHS) ask you to provide at least \$2 billion above the final fiscal year 2017 level still pending for the National Institutes of Health (NIH). We urge Congress to sustain, not curtail, the innovative biomedical research pipeline that generates prevention strategies, treatments and cures for diseases affecting millions of Americans. Included as part of our overall recommendation for the NIH, we ask you to provide \$735 million for the NIEHS in FY2018.

The NIEHS plays a unique role within the NIH. It is the leading institute conducting research to prevent human illness and disability by understanding how the environment influences the development and progression of human diseases and illnesses such as cancer, autism, asthma, Parkinson's disease, autoimmune diseases and chemical sensitivities. NIEHS research encompasses all types of exposures that can impact human health, including air pollution, endocrine disruptors, nanomaterials, and other contaminants. NIEHS-funded researchers are also advancing our understanding of complicated scientific issues related to exposure research, such as the effects of mixtures, biomonitoring, and developmental vulnerability. The results of NIEHS research provide policymakers with essential, unbiased science to support informed decision-making affecting our health.

The Institute's studies have been instrumental in advancing our new knowledge about the causes of cancer, including the discovery of the first breast cancer susceptibility gene. More recently, by studying blood samples from women in the NIEHS Sister Study, NIEHS epidemiologists have discovered how certain gene modifications, called methylation, in blood cells differ between women who have breast cancer and women who remain cancer free. This research has revealed

how a technique called "blood methylation profiling" holds the potential for early breast cancer detection and risk prediction.

Children are uniquely vulnerable to harmful substances in their environment, and the NIEHS plays a critical role in uncovering the connections between environmental exposures and children's health. Today's pediatric health challenges include chronic conditions such as obesity and asthma and neurodevelopmental disorders including learning disabilities and autism. For all of these health challenges, the environment plays a role in the cause of the disease, the ability to prevent the disease, or the effectiveness of efforts to mitigate the disease consequences. Recent NIEHS funded studies have shown that exposure to traffic-related air pollution (nitrogen dioxide, PM_{2.5}, and PM₁₀) during pregnancy and the first year of life may be associated with the development of autism. Additional research on likely biological pathways is needed to determine whether these associations are causal.

Using new imaging techniques, NIEHS-funded researchers recently discovered how environmental exposures including ultraviolet exposure and chemical compounds in paint, plastics and other consumer products can damage human DNA. These changes result in cell death which may lead to cancer, diabetes, hypertension, cardiovascular and lung disease and Alzheimer's disease.

In June 2010, the Director of NIH, Francis S. Collins, M.D., Ph.D., asked the NIEHS to lead a study on the health of the workers and volunteers most directly involved in responding to the Gulf oil spill crisis. The NIEHS immediately began working with Gulf communities, as well as agencies, researchers, and outside experts, to design the study. More than 32,000 people from Alabama, Florida, Louisiana, Mississippi, Texas, and other areas have enrolled in the study. The long-term health study will help determine if oil spills and exposure to crude oil and dispersants affect physical and mental health.

The NIEHS is poised to generate many new exciting discoveries about the impact of environmental factors on human health. We therefore ask you to provide **\$735** million for the NIEHS in the FY2018 Labor-HHS-Education and Related Agencies appropriations legislation.

Sincerely,

American Academy of Pediatrics American Autoimmune-Related Diseases Association American Lung Association American Thoracic Society Association of Public Health Laboratories Birth Defect Research for Children Breast Cancer Prevention Partners (formerly Breast Cancer Fund) Childrens Environmental Health Network Endocrine Society Environmental Working Group Healthy Schools Network Huntington Breast Cancer Action Coalition, Inc. Green Science Policy Institute Learning Disabilities Association of America Lupus Foundation of America March of Dimes National Center for Environmental Health Strategies National Environmental Health Association Society for Occupational and Environmental Health Society for Women's Health Research Society of Toxicology The Honest Company The Michael J. Fox Foundation for Parkinson's Research The Myositis Association West Harlem Environmental Action (WE ACT)