Statement by the Ad Hoc Group for Medical Research on
FY 2021 Appropriations for the National Institutes of Health
Submitted for the Record to the House Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies – March 23, 2020

The Ad Hoc Group for Medical Research is a coalition of more than 330 patient and voluntary health groups, medical and scientific societies, academic and research organizations, and industry. We appreciate the opportunity to submit this statement in support of strengthening the federal investment in biomedical, behavioral, social, and population-based research conducted and supported by the National Institutes of Health (NIH) through a recommendation of $44.7 billion for NIH in FY 2021.

As a result of the strong, bipartisan vision of Senate and House Labor-HHS-Education Appropriations Subcommittees over the last five years, Congress has helped the agency regain some of the ground lost after years of effectively flat budgets. This renewed investment in NIH has advanced discovery toward promising therapies and diagnostics, reenergized existing and aspiring scientists nationwide, and restored hope for patients and their families.

In FY 2021, the Ad Hoc Group recommends $44.7 billion for the NIH, a $3 billion increase over the NIH's program level funding in FY 2020. This funding level, supported by more than 330 stakeholder organizations, would allow for meaningful growth above inflation in the base budget that would expand NIH's capacity to support promising science in all disciplines in addition to special initiatives. It also would ensure that funding from the Innovation Account established in the 21st Century Cures Act would supplement the agency's base budget, as intended, through dedicated funding for specific programs.

We further recommend a funding allocation for the Labor-HHS Subcommittee that allows for the necessary investment in NIH and other agencies that promote the health of our nation. Our community recognizes the difficult fiscal choices that lawmakers face. We believe

that science and innovation are essential if we are to continue to meet current and emerging health challenges, improve our nation's physical and fiscal health, and sustain our leadership in medical research. As the Subcommittee has recognized, to remain a global leader in accelerating the development of life-changing cures, pioneering treatments, and innovative prevention strategies, and in this time of unprecedented scientific opportunity, it is essential that Congress sustain robust increases in the NIH budget.

NIH: A Partnership to Save Lives and Provide Hope. The partnership between NIH and America's scientists, medical schools, teaching hospitals, universities, and research institutions is a unique and highly-productive relationship, leveraging the full strength of our nation's research enterprise to translate this knowledge into the next generation of diagnostics, therapeutics, and cures. More than 80 percent of the NIH's budget is competitively awarded through nearly 50,000 research and training grants to more than 300,000 researchers at over 2,500 universities and research institutions located in every state and Washington, D.C. The federal government has an essential and irreplaceable role in supporting medical research. No other public, corporate or charitable entity is willing or able to provide the broad and sustained funding for the cutting edge basic research necessary to yield new innovations and technologies of the future.

NIH has supported biomedical research to enhance health, lengthen life, respond to emerging health threats, and reduce illness and disability for more than 100 years. The following are a few of the many examples of how NIH research has contributed to improvements in the nation's health.

- Amidst an unfolding, global pandemic, NIH funding has enabled the initiation of Phase 1 clinical trials in record speed to develop a SARS-COV-2 vaccine. Vaccines continue to be one our most cost-effective public health tools. Every $1 spent on routine childhood vaccinations is estimated to save $5 in direct costs, and $11 in broader costs to society.

- Breakthroughs in the treatment of depression came in 2019 with FDA approval of two new drugs – one for treatment-resistant depression and the first ever treatment for postpartum depression. These approvals follow nearly three decades of research funded by the NIH to identify novel mechanisms of drug action.
- The NIH has supported research on sickle cell disease (SCD) since 1948, and the disease currently affects about 100,000 Americans. Today, an ongoing multi-center clinical trial is using gene therapy to replace the defective gene that causes SCD, beta globin, in patient's blood cells and effectively curing them of disease.
- In 2007, induced pluripotent stem cells (iPSC) were discovered when adult cells were re-engineered into early non-differentiated versions of themselves. In late 2019, the National Eye Institute launched a first-in-human clinical trial to test the safety of a novel patient-specific iPSC therapy to treat the "dry" form of Age-related Macular Degeneration (AMD), the most common form of the disease and the leading cause of vision loss in the age 65+ population.
- NIH-supported researchers continue to work toward strategies to better prevent, identify, and treat pain and substance use disorders through the HEAL (Helping to End Addiction Long-term) Initiative. HEAL aims to support research into new, non-addictive medication and to establish public and private partnerships to develop best practices in communities.
- Today, treatments can suppress HIV to undetectable levels, and a 20-year-old HIV-positive adult living in the U.S. who receives these treatments is expected to live into his or her early 70s, nearly as long as someone without HIV.
- NIH funding supported research that contributed to all of the 210 new drugs approved by the FDA between 2010 and 2016.

- The death rate for all cancers combined has been declining since the early 1990s for adults and since the 1970s for children. Overall cancer death rates have dropped by nearly 29% with more than 2.9 million deaths avoided in total between 1991 and 2017. Research in cancer immunotherapy has led to the development of several new methods of treating cancer by restoring or enhancing the immune system's ability to fight the disease.

For patients and their families, NIH is the "National Institutes of Hope."

Sustaining Scientific Momentum Requires Sustained Funding. The leadership and staff at NIH and its Institutes and Centers have engaged the broader community to identify emerging research opportunities and urgent health needs and to prioritize precious federal dollars to areas demonstrating the greatest promise. Sustained robust increases in NIH funding are needed if we are to continue to take full advantage of these opportunities to accelerate the development of pioneering treatments and innovative prevention strategies.

One long-lasting potential impact of investments in NIH is on the next generation of scientists. Sustained increases in NIH funding over the last five years has allowed NIH to double the investment in early stage investigators (ESIs). In 2015, NIH only funded about 600 grants for ESIs and the career outlook for early career researchers seemed grim. This past year, NIH was able to fund about 1300 grants for ESIs reinvigorating the spirits of researchers in the biomedical workforce. Sustained increases will allow NIH to continue support of new talent and innovation in biomedical research.

Even with the recent investment in NIH, nearly 4 of every 5 research ideas that are proposed to NIH every year cannot be funded. Additional funding is needed if we are to strengthen our nation's research capacity, ensure a medical research workforce that reflects the racial and gender

diversity of our citizenry, and inspire a passion for science in current and future generations of researchers.

NIH is Critical to U.S. Competitiveness. Our country still has the most robust medical research capacity in the world; however, other countries have significantly increased their investment in biomedical science, which leaves us vulnerable to the risk that talented medical researchers from all over the world may return to better opportunities in their home countries. We cannot afford to lose that intellectual capacity, much less the jobs and industries fueled by medical research. The U.S. has been the global leader in medical research because of Congress's bipartisan recognition of NIH's critical role. To continue our dominance, we must reaffirm this commitment to provide NIH the funds needed to maintain our competitive edge.

NIH: An Answer to Challenging Times. Research supported by NIH drives local and national economic activity, creating skilled, high-paying jobs and fostering new products and industries, and catalyzes increases in private sector investment. A $1 increase in public *basic* research stimulates an additional $8.38 investment from the private sector after eight years. A $1 increase in public *clinical* research stimulates an additional $2.35 in private sector investments after three years. According to a United for Medical Research report, in 2019, NIH-funded research supported more than 476,000 jobs across the U.S. and generated more than $81 billion in new economic activity.

The Ad Hoc Group's members recognize the tremendous challenges facing our nation and acknowledge the difficult decisions that must be made to restore our country's fiscal health. Strengthening our commitment to medical research, through robust funding of the NIH, is a critical element in ensuring the health and well-being of the American people and our economy. Therefore, for FY 2021, the Ad Hoc Group for Medical Research recommends that NIH receive $44.7 billion to continue the momentum in our nation's investment in medical research.