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Chairwoman DeLauro, Ranking Member Cole, and Members of the Subcommittee:

My name is Dale Abel. As an endocrinologist and biomedical researcher myself, I am proud to represent the 35 patient, physician, and research organizations that are members of the Friends of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). We want first to thank you for your ongoing bipartisan investment in the National Institutes of Health (NIH). We are here today to ask you to support our **FY 2022 NIH funding recommendation of at least \$46.111 billion**, a \$3.177 billion increase over the comparable FY 2021 funding level for the NIH, which would allow for the NIH's base budget to keep pace with the biomedical research and development price index of 2.3 % and allow meaningful growth of 5%. We also request a **proportionate increase for the NIDDK of at least \$157 million for a total of \$2.289 billion in FY 2022**. This level of increase over its FY 2021 funding is necessary for NIDDK to fulfill its mission to conduct and support medical research, research training, and to disseminate science-based information on diabetes and other endocrine and metabolic diseases; digestive diseases, nutritional disorders, and obesity; and kidney, urologic, and hematologic diseases and to support the Institute's multi-pronged efforts toward the goal of health equity. We also strongly encourage you to **provide supplemental emergency funding of \$10 billion for NIH, ensure dedicated support for the NIDDK to enable critical COVID-related research, and support research recovery from the impact of the pandemic**.

NIDDK supports and conducts research to combat a portfolio of diseases that encompass some of the most chronic, common, consequential, and costly diseases and conditions affecting

people in this country. Many of these diseases and disorders are also associated with health disparities. These disparities are exacerbated by the COVID-19 pandemic, with increased rates of infection and poor outcomes from COVID-19 seen in people with these same conditions.

I want to share just a few NIDDK-supported research highlights to demonstrate the great impact and promise of NIDDK research to improve people's health and quality of life (more thorough descriptions are in NIDDK's [Recent Advances & Emerging Opportunities](#)):

- Research on an immune-targeting drug has delayed type 1 diabetes progression in high-risk individuals for at least 3 years. This is the first time ever that early preventive therapy was found to delay onset of clinical type 1 diabetes.
- Research defining subgroups of people with chronic kidney disease is paving the way for kidney precision medicine.
- Adult and pediatric studies are testing potential therapies and uncovering genetic and racial/ethnic risk factors for nonalcoholic fatty liver disease and nonalcoholic steatohepatitis.
- The Intestinal Stem Cell Consortium is studying intestinal stem cells' roles in intestinal health and disease, aiming to identify and develop novel therapies to regenerate the human intestine.
- The NIDDK sponsored Symptoms of Lower Urinary Tract Dysfunction Research Network (LURN) is working to improve the lives of patients affected by lower urinary tract dysfunction (LUTD) through overcoming barriers to diagnosis and treatment.
- Innovative research by NIDDK scientists showed the potential importance of speech-generated droplets in SARS-CoV-2 transmission.

- NIDDK research has led to better treatments such as new drugs that can dramatically reduce disease burden for many with cystic fibrosis; increased understanding and treatment of inflammatory bowel diseases such as Crohn's disease and ulcerative colitis; and to new Type 2 diabetes drugs that provide cardiovascular health benefits in people with diabetes.

Our organizations are grateful for the funding that you have provided to the NIH and the NIDDK as part of the appropriations process and the support Congress has given to the NIH, including several of its institutes and centers, to respond to the public health emergency. However, **we note that NIDDK's FY 2021 appropriation was proportionally less than other Institutes and NIDDK and has not received any emergency funding despite researching diseases that are associated with increased risk of severe COVID-19 outcomes and are themselves public health crises.**

As health professionals and researchers respond to this pandemic, our understanding of COVID-19 continues to evolve. What we originally understood to be an infectious, respiratory virus, we now know disproportionately impacts individuals with diabetes, obesity, liver diseases and kidney diseases. COVID-19 infection damages a variety of organ systems, including the kidneys and it may even contribute to new onset of kidney failure and diabetes. Patients also are experiencing hematologic complications, including issues related to coagulation and blood cell production. Yet, without additional funding, NIDDK will be forced to continue to divert crucial funds from its existing priorities to better understand these characteristics of COVID-19, a loss to the patients who ultimately benefit from research funded by NIDDK.

With emergency supplemental funding, NIDDK will be able to support research on SARS-CoV-2/COVID-19 as it intersects with and affects people with or at risk for diabetes and other metabolic diseases, obesity, and endocrine, digestive, hepatobiliary, pancreas, kidney, urological and hematologic diseases. Specific areas of research include: determining the basis for the link between COVID-19 severity and diseases in the NIDDK's portfolio; identifying novel pathogenic pathways and potential translational targets for the treatment or prevention of kidney, gastrointestinal, and endocrine/metabolic diseases associated with SARS-CoV-2 infection; and understanding the roles of health disparities associated with SARS-CoV-2 infection, organ injury, and adverse disease outcomes.

Further, the occurrence of Post-Acute Sequelae of SARS-CoV-2 infection (PASC), in which individuals experience persistent symptoms involving multiple body systems after recovering from their initial illness, shows that while new infections with SARS-CoV-2 have decreased in the US, our understanding of the long-term consequences of COVID-19 is far from over and creates another important and emerging research opportunity.

In addition to new areas of research, the pandemic has created additional barriers and expenses that complicate restarting research. Supplemental funds are needed to:

- Restart research projects, programs, and clinical trials that were underway before the onset of the pandemic and were stopped or delayed for safety reasons, consequently stalling or delaying new discoveries.
- Support early-stage investigators as they face uncertainties and challenges in making progress in their careers, especially women investigators and others who are

disproportionately affected by caregiving roles during the pandemic and members of groups underrepresented in research.

- Provide financial support so that critical research support staff can be retained and to accelerate the eventual resumption of research activities post-pandemic.
- Address increasing research costs. The burden of restarting clinical trials, animal colonies, and other programs and resources has made conducting research more challenging and expensive during the pandemic. Costs for personal protective equipment (PPE), comprehensive cleaning, and “time sharing” in laboratories are a few examples.

All of this leads to a simply put yet challenging goal: While addressing the immediate challenges of COVID-19, we also need to continue to combat the diseases within NIDDK’s mission, which will continue to place an enormous personal and financial toll on this country long after the pandemic is over. Bolstering support for NIDDK will help ensure that critical research in these areas continues and will support the institute’s commitment to understanding the roles of social determinants of health and health disparities with the goal of improving health for all. Our nation’s progress against COVID-19 – and every other health threat – is built on the longstanding bipartisan commitment to medical research. Preserving that investment will be key to continued advances. **We urge you to support the NIH with a \$3.1 billion increase for FY 2022 with a proportionate increase of \$157 million for NIDDK and provide emergency supplemental funds for NIH, including dedicated support for the NIDDK,** to ensure we lead the world in providing new and better cures, diagnostics, and treatments while protecting all patients and the research enterprise.