THE AMERICAN SOCIETY OF NEPHROLOGY

WRITTEN TESTIMONY IN SUPPORT OF INCREASED FUNDING FOR THE NATIONAL INSTITUTES OF HEALTH (NIH) AND THE NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES (NIDDK)

LABOR, HEALTH AND HUMAN SERVICES, EDUCATION AND RELATED

AGENCIES SUBCOMMITTEE OF THE U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS

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EXECUTIVE SUMMARY

The American Society of Nephrology (ASN) is dedicated to the study, prevention, and treatment of kidney disease, and the society's 14,000 plus members greatly respect your leadership and commitment to preventing illness, treating disease, and maintaining fiscal responsibility. Chronic kidney disease (CKD) currently affects up to 26 million, or 1 in 9, Americans, and more than 550,000 of them have irreversible kidney failure requiring life-sustaining treatment with regular dialysis therapies.

The vast majority of research leading to advances in the care and treatment of adults and children afflicted with kidney disease is funded by the National Institutes of Health (NIH) broadly and the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) specifically. Any reduction in this funding would seriously reduce our ability to contain and reverse this disease, which costs Americans enormous suffering, lost productivity, and foreshortened spans of life.

Examples of critical discoveries arising from NIH-funded research are numerous. For instance, investigative studies supported by NIH and NIDDK led to a groundbreaking discovery that helps explain racial/ethnic disparities that increase risks for kidney disease, which can lead to earlier detection and treatment. The recent finding that African Americans with two variants of the APOL1 gene are likely to experience faster decline in kidney function, and earlier initiation of hemodialysis than their peers without the gene, is a crucial step in understanding differences in kidney disease progression across different populations and how early interventions may improve their outcomes.

Scientists supported by NIH and NIDDK also identified mutations in two genes that help regulate blood pressure and salt balance in a rare, heritable disease that causes high blood pressure, or hypertension. Hypertension is a leading contributor to the development of kidney failure, so this finding may improve hypertension management in patients with kidney disease—possibly preventing kidney failure—and could lead to better therapies for controlling high blood pressure in the general patient population.

Moreover, funding from NIH and NIDDK enabled research that found that people with antibodies that target a protein [the phospholipase A2 receptor called PLAR2] on a specific kidney cell develop a kidney disorder, known as nephrotic syndrome that results in a harmful excess protein in urine. Future therapies that reduce PLAR2 antibody levels may help prevent people with nephrotic syndrome from progressing to kidney failure.

Dialysis is covered by Medicare regardless of a patient's age or disability status.

Consequently, preventing kidney disease and advancing the effectiveness of therapies for kidney failure—starting with innovative research at NIDDK—would have a great impact at the highest level of costs within the Centers for Medicare and Medicaid Services. Perhaps most important, in human terms, the applied research will help prevent greater suffering among those who would otherwise progress to an even greater level of illness.

Sustained, predictable investment in research is the only way that scientific investigations can be effective and lead to new discoveries. With funding from NIH and NIDDK, scientists have been able to pursue cutting-edge basic, clinical, and translational research. While ASN fully understands the difficult economic environment and the intense pressure you are under as an elected official to guide America forward during these tough times, the society firmly believes that funding NIH and NIDDK is a

good investment to create jobs, support the next generation of investigators, and ultimately improve the public health of Americans.

Several recent studies have concluded that federal support for medical research is a major force in the economic health of communities across the nation.

It is critically important that the nation continue to capitalize on previous investments to drive research progress, train the next generation of scientists, create new jobs, promote economic growth, and maintain leadership in the global innovation economy—particularly as other countries increase their investments in scientific research. Most important, a failure to maintain and strengthen NIH and NIDDK's ability to support the groundbreaking work of researchers across the country carries a palpable human toll, denying hope to the millions of patients awaiting the possibility of a healthier tomorrow.

ASN strongly recommends that the Fiscal Year 2014 Labor-HHS-Education

Appropriations bill uphold its longstanding legacy of bipartisan support for biomedical research.

Should you have any questions or wish to discuss NIH, NIDDK, or kidney disease research in more detail, please contact ASN Manager of Policy and Government Affairs Rachel Shaffer at (202) 640-4659 or rhaffer@asn-online.org.

ABOUT ASN

The American Society of Nephrology (ASN) is a 501(c)(3) non-profit, tax-exempt organization that leads the fight against kidney disease by educating the society's more than 14,000 physicians, scientists, and other healthcare professionals, sharing new knowledge, advancing research, and advocating the highest quality care for patients. For more information, visit ASN's website at www.asn-online.org.