April 30, 2013

David M. Murray, PhD
Office of Disease Prevention
National Institutes of Health
6100 Executive Blvd., Room 2B03, MSC 7523
Bethesda, MD 20892-7523

Dear Dr. Murray:

On behalf of the American Society of Nephrology (ASN) and the more than 14,000 physicians, scientists, and other healthcare professionals the society represents, thank you for the opportunity to provide comments on the National Institutes of Health (NIH) Office of Disease Prevention’s (ODP) six draft priorities for its Fiscal Year 2013-2018 strategic plan and how the agency evaluates and funds prevention research applications. ASN solicited broad input from society leaders and leading voices in the kidney community, and submits the following recommendations for your consideration.

**Recommendation 1: Promote Kidney Disease Prevention Research**

ASN, which leads the fight against chronic kidney disease (CKD) through education, advocacy, and research, believes research on CKD prevention serves as an excellent example of the kind of prevention research exemplifying priority two of ODP’s strategic plan and recommends NIH invest more resources to the study of preventing kidney disease.

It is well-established that kidney disease affects an enormous number of people in the United States and is one of the costliest complications of chronic illness, including hypertension, diabetes, and peripheral vascular disease. Kidney disease strikes young and older Americans—kidney function declines with aging, increasing susceptibility—and also disproportionately affects individuals in racial and ethnic minority populations. It is associated with multiple co-morbidities and reductions in functional capacity that lead to lost productivity, greatly increasing the functional, social, and financial consequences of disease.

Conservative estimates indicate that more than 20 million Americans have kidney disease, which is often under-diagnosed and under-treated. This population develops a wide range of complications including not only acute kidney injury (AKI) and end-stage renal disease (ESRD), but disability and premature death from accelerated cardiovascular illness, infection, and metabolic bone disease. Every year, more than 300,000 Americans are diagnosed with AKI, which is associated with a mortality rate of 30-40 percent and more than 50 percent among Intensive Care Unit patients, as well as
high risk of progression to CKD and ESRD. The development of AKI incurs substantial additional healthcare costs for the affected patients and healthcare system.

Nearly 600,000 patients who have been “fortunate” enough to survive the oftentimes-devastating consequences of earlier forms of kidney disease currently have ESRD. Although these individuals comprise less than 1 percent of Medicare beneficiaries, they account for nearly 7 percent of Medicare’s budget. ESRD alone will cost Medicare an estimated $30 billion this year.

Consequently, advances in kidney research that can halt or slow progression to ESRD can yield significant savings to Medicare. Recent data in longitudinal studies of cohorts with both non-diabetic and diabetic kidney disease show that patients continue to progress to ESRD despite widespread adoption of renal protective therapies. Therefore, ASN believes CKD merits additional investment by NIH in the realm of prevention research.

**Recommendation 2: Support Kidney Disease Markers in Other Patient Cohorts**

Because many patients with CKD have multiple co-morbidities—diabetes and hypertension are the two leading causes of kidney disease, but cardiovascular disease and HIV are also common causes—ASN additionally recommends ODP encourage institutes to include markers of kidney disease in a variety of other patient cohorts.

For instance, we know that procedures for diagnosing cardiovascular disease and medications for treating diabetes, hypertension, HIV, and cancer often have deleterious effects on the kidney. Identification of the potential for kidney damage and prospectively studying the impact of these interventions should be studied so as to prevent future kidney disease.

Consequently, investigators should include investigation of kidney involvement when conducting other research at all NIH institutes. ODP could facilitate this by implementing the next recommendation.

**Recommendation 3: Collect, Catalog, and Communicate Prevention Research**

In accordance with the first and fourth priorities of ODP’s strategic plan, the society recommends ODP collect, catalog, and communicate all federal prevention research projects and successful translational research models to facilitate more research in this area.

ASN believes an important function of ODP in promoting prevention research is to serve as a nexus and resource for moving this kind of research forward. A repository of prevention research projects and successful translational research models across and beyond NIH—including the Agency for Healthcare Research and Quality, Centers for Disease Control and Prevention, Centers for Medicare and Medicaid, Department of Defense, Department of Veterans Affairs, and the Patient-Centered Outcomes
Research Institute—would encourage collaborative efforts in prevention research, maximize the scientific impact, and eliminate redundancy.

For instance, there may be opportunities for ancillary studies that could benefit patients with kidney disease when large trials are funded by NIH institutes or other federal agencies looking at an intervention for other patient cohorts. If the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and investigators the institute supports are unaware that trials exist, however, they have no opportunity to suggest and influence the collection of data on kidney disease during trial design.

Therefore, enhancing communication across and beyond NIH would allow investigators to capitalize on the work of others. ODP is the ideal agency to collect and catalog that information and create a communication plan that includes all NIH institutes and federal agencies.

**Recommendation 4: Provide Information for Interested Investigators**

ASN also recommends ODP provide a mechanism for investigators interested in learning about how to get involved with primary care clinical trial or implementation research networks in and out of NIH to increase the number of investigators conducting implementation research in various fields, including kidney disease. For example ODP could conduct workshops on implementation research for junior faculty.

**Recommendation 5: Form Task Forces to Review Four Important Issues**

To fulfill priorities three, five, and six of ODP’s strategic plan, ASN recommends ODP form four task forces to consider and explore the following issues:

1. **Guideline Development**

ASN believes there is an advantage to having NIH involved in the guideline-making process. The process for developing the Eighth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC-8) was rigorous and perceived by the medical community as free from special interests, thus strengthening its impact in clinical medicine.

It may be possible to leverage resources by partnering with the Agency for Healthcare Research and Quality evidence-based practice centers since the agency has funding to review and synthesize literature and often does so for organizations that want to create guidelines. That would eliminate for ODP a costly component of the guideline-making process.

ASN encourages ODP to develop standards for who participates in the guideline-making process. Conflicts of interest should be disclosed and managed. Moreover, the society encourages ODP to specify topic areas where guidelines are needed and to
identify effective ways of overcoming limitations to translating guidelines into policy and practice across government.

2. Social Science Research

Most prevention and translational research deals more with models and methods derived from social rather than biology sciences. However, it is not evident that research tools in this area, such as those on how to change opinion and behavior related to smoking and medication adherence at the individual and group level, is being promoted.

Those decisions at the individual and group level are based on models less familiar to biomedical researchers, and sometimes wrongly perceived as less rigorous.

ASN recommends ODP form a task force to determine how NIH can promote social science research methodology relevant to prevention, which may be just as and possibly more important to modifying patterns of risk than research on biomedical interventions.

3. System Models

Disseminating the most useful and cost-effective system models, or at least hypotheses of the most useful and cost-effective system models, would help institutes and investigators generate data for all kinds of interventions, including the effectiveness of smoking cessation interventions and interventions intended to improve medication adherence.

4. Public Outreach

ASN believes ODP should play a role in raising awareness about NIH and the agency’s interest in prevention research. Many people are unaware of what NIH is and does. Moreover, investigators, many of whom are not aware that NIH is interested in prevention research, should be reassured that NIH will fund high quality prevention research.

Moreover, ASN believes an educational initiative is needed to explain the difference between evidence, guidelines, and performance measures. Performance measures and guidelines should be based on the highest level of evidence.

**Recommendation 6: Form an Application Review Task Force**

Finally, ASN also recommends ODP form a fifth task force to evaluate reviewer expertise and review criteria for prevention research applications.

The society is concerned that prevention applications may not score well because reviewers may not have the proper expertise to appraise them and/or some of the
review criteria may not be as applicable as other grants. For instance, innovation may be less important than for basic science grants.

Consequently, a one size fits all approach to appraising prevention research applications may not work. ASN therefore believes ODP should form a task force to evaluate the expertise and criteria for reviewing prevention research applications, including the possible need for separate study sections.

Again, thank you for the opportunity to provide comments regarding ODP’s strategic plan draft priorities and how NIH evaluates and funds prevention research applications. We appreciate your consideration of these suggestions and welcome the opportunity to discuss them further if it would be helpful. Please contact ASN Policy Associate Grant Olan at (202) 640-4657 with any questions.

Sincerely,

Bruce A. Molitoris, MD, FASN
President