On 27 October 2010, the AJH Senior Editorial team met Susan Shurin, Acting Director of the National Heart, Lung and Blood Institute (NHLBI), and her associates Lawrence J. Fine and Michael Lauer. We had requested the meeting to gain their insights on issues of interest to our readers. The freewheeling discussion covered a wide range of topics. The meeting was recorded and this report has been reviewed by NHLBI.

Dr Shurin identified three near-term priorities related to hypertension. First was continued investment in genetic research, with emphasis on exploiting the results of studies that employ genome-wide analyses to elucidate biologic processes, understand differences in responses to therapy, and begin to develop more personalized approaches to both prevention and therapy. While conceding that previous studies had produced only modest practical health gains, she felt that the foundation had been built to further understand the etiologies of essential hypertension and identify new therapeutic targets.

The second, and unexpected, priority was to expand attention to the global burden of hypertension and cardiovascular disease. Cardiovascular disease is now the leading global cause of morbidity and mortality, and over two-thirds of deaths from cardiovascular disease occur in the developing world. A multinational "Global Alliance for Chronic Disease" (http://www.ga-cd.org/) is now being developed. A request for applications is to be issued jointly by its members. Initial efforts will focus on developing methods for epidemiological surveillance in low- and middle-income countries to provide a basis for interventions to address hypertension-related cardiovascular disease. Interactions with academic centers in the United States will be an essential element of this program. One approach that might jump-start this enterprise would be to expand the reach of existing international biomedical centers now addressing these issues. Hypertension is now a major focus of work in the nine centers supported by NHLBI studying noncommunicable diseases in low- and middle-income countries, all of which have US partners (http://www.nhlbi.nih.gov/about/global-health/centers/index.htm).

Although the emphasis placed on global health was unexpected, Dr Shurin took pains to point out that this commitment is an investment in science, not a charitable activity. Instead, it is based on the belief that knowledge gained abroad will have practical benefit at home. For example, efforts to reach disadvantaged populations tested in China might have application in disadvantaged communities in the United States. As Dr Shurin sees it, "Global health is not the opposite of domestic health." In particular, she emphasized a collaboration with the National Institute of Mental Health to better understand behavior in different groups to permit more targeted cardiovascular health protection. At the same time, Dr Shurin also reminded us that budget constraints currently limit global activity to planning and searching for partners.

Indeed, not surprisingly, budgetary constraints influence virtually every issue discussed. There has been essentially no growth in funding for the past 8 years, and none is expected soon. Nevertheless, because National Institutes of Health (NIH) budgets move in cycles, she felt it sound policy to plan now for an inevitable expansion of resources.

Her final priority was hypertension in the elderly. In view of demographic trends and the prevalence of hypertension, advances in understanding the biology of vascular disease and the potential for controlling blood pressure in the elderly may lead to important overall reductions in the nation's burden of morbidity.

There were also extended discussions of clinical issues in the broadest sense. At the policy level, Dr Shurin noted that JNC 8 (the Eighth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure), an update to JNC 7, was well underway with completion expected in the spring of 2011. In this context, the AJH editors questioned the implications and potential conflicts that may be a consequence of NHLBI's responsibility for both research support in hypertension and clinical practice guidelines.
AJH suggested that this dual responsibility could inadvertently limit innovation in both research and practice. The several large NIH-sponsored clinical trials (i.e., Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT), Action to Control Cardiovascular Risk in Diabetes Trial (ACCORD), and Systolic Blood Pressure Intervention Trial (SPRINT)) may have disproportionate influence both on guidelines and practice. In response, Dr Shurin described the process for developing JNC and how it differed sharply from previous editions. JNC 8 will be based on explicit evidentiary criteria. The working group includes hypertension experts, biometricians, and more general health-care specialists. Dr Shurin noted that sponsorship of studies is not a consideration in the assessment of evidence. Dr Fine added that any tendency for the institute to create self-fulfilling research paradigms was further limited by the fact that the vast majority of NHLBI-sponsored clinical research is investigator initiated.

The AJH editors questioned the assumption of homogeneity that underlies antihypertensive treatment guidelines. The NIH representatives responded that a more desirable personalized approach underlies the emphasis on follow-on studies to genome-wide association studies that should lead to a better understanding of the origins of hypertension and identify new therapeutic targets. The editors pointed to existing knowledge of pathophysiological heterogeneity as offering an opportunity for more targeted therapeutic approaches. NIH representatives felt that additional evidence was needed to support large-scale studies. This can be the first step in a process to ultimately test strategies that may advance antihypertensive therapy beyond traditional "stepped care."

The emerging role of the Clinical Translational Science Awards (CTSA) in the architecture of the research establishment was also discussed at some length. Dr Shurin expressed undiminished commitment to this strategy and expects the network will grow in importance over time. Five centers to be selected this summer will bring the total to 60. Individually, these centers are designed to encourage cross-pollination and integrated research to speed the transfer of new knowledge from bench to bedside. The CTSA program was designed to develop generic multidisciplinary infrastructure to support research driven by scientific goals supported by categorical NIH institutes and other sources of funding. She emphasized that work performed within the CTSAs therefore reflects the priorities of individual investigators at the institutions, not the priorities of the principal investigators of the CTSAs. Thematic special interest groups have formed within the CTSA network, and are pursuing collaborative projects (http://www.ctsaweb.org/index.cfm?fuseaction=quicklink.showTSIGs). Ultimately, NIH hopes that this collection of institutions will become an interactive network capable of multicenter activity as well as network-wide collaboration to sustain complex studies that require large and diverse populations. This should short-circuit the need to develop new collaborations and cohorts from scratch for each study, and make more efficient use of resources by minimizing duplication of rare and/or costly capabilities and enabling greater flexibility in conduct of multisite research.

In this context, the issue of training programs for hypertension investigators was raised. Dr Shurin recognized the need for training and pointed out that NHLBI currently invests about $2 million through individual career development awards and institutional training grants. Nevertheless, by virtue of hypertension not being a recognized medical specialty, but having roots in several specialties, training programs specifically dedicated to hypertension are relatively rare. She pointed out that the structure of the CTSA was designed to encourage novel approaches to training programs that draw from several related disciplines—which could meet the needs of training in hypertension.

We touched upon many other topics. Dr Shurin expressed strong support for open-access publication of papers as a means of communicating the fruits of medical research. She recognized the challenge this poses to all medical journals—and specialty journals like AJH in particular. However, the value of unfiltered access trumped other concerns and the economic model of journals must adjust to the new reality.

Our hosts made a special effort to highlight the commitment by NHLBI to interact with the research community. While opportunities for new investments may be constrained, NIH scientists remain receptive to investigator inquiries. The institute has a variety of means available to explore new ideas. Dr Shurin specifically expressed willingness to convene working and/or study groups to address, at varying levels of formality, proposals for new projects or programs. Our hosts repeatedly emphasized that the commitment to listen and respond to their constituency was central to the mission of NHLBI. As one participant quipped, "We can only give you what you ask for.” In short, NHLBI is anxious to be asked—although, at present, their responses may be constrained by resource limitations.