NIH 101: Challenges of Research Funding

By William G. Wierda, MD, PhD

During the ASH™/EHA Plenary Policy Forum yesterday, Dr. Colin Blakemore, CEO of the Medical Research Council (MRC), and Dr. Elias Zerhouni, Director of the National Institutes of Health (NIH), spoke about the challenges facing medical research and government's role in addressing some of the pressing issues faced in the U.K. and U.S. today.

Dr. Blakemore began by describing the mission of the MRC, which includes funding of research, dissemination of knowledge among the scientific community, and public education and dialogue. He emphasized the importance of linking clinical research and clinical trials with basic science research and making this a bi-directional interaction. His discussion concluded with several examples of the importance of providing accurate information to the public in order to avoid misconceptions, unjustified conclusions, and emotional reactions that may hinder progress of biomedical research.

Dr. Zerhouni had the tough task of addressing what is heavy on the minds of biomedical researchers in the U.S., the current research funding crisis and NIH budget constraints. He compared the current funding environment to a "perfect storm," a volatile collision of increased research costs and needs. Although the overall amount of funds for research in the U.S. has doubled since 1998, the current funding rate for grants is at a low of 19 percent. He explained that this is due to the construction of additional research facilities and medical schools since 2003. Furthermore, there has been an average 40 percent increase in the amount of funds requested per grant. This has been compounded by the fact that there has been no federal budgetary increase for NIH since 2003.

When he spoke to meeting attendees yesterday, Dr. Zerhouni outlined his plan for "weathering the storm," a collection of stop-gap measures designed to limit the damage caused by current funding shortfalls while pushing for increased funding in the future. One of his primary concerns is protecting researchers at the start of their careers, which Dr. Zerhouni calls "preserving future generations of scientists." He also presented steps to address the goal of limiting long-term damage to the research enterprise. He emphasized the new "Pathways to Independence" awards program.

Supporting younger researchers is an important step, but it is not the only one that NIH plans to take. Because of the lack of new funds, the Institute will have to look elsewhere to find the money needed to finance new science. With this goal in mind, NIH will reduce the committed budget of ongoing projects by 2.35 percent, a move designed to free up funds for new projects. These "recycled funds" will help offset some of the steadily increasing demand for federal funding.

All these measures are reflexive ones, designed to limit the effects of the recent dramatic growth in biomedical research and opportunities, which have outpaced the budget. However, Dr. Zerhouni also advocated more proactive steps to address the eye of the storm — which he perceives to be a lack of understanding on the part of the government and public about the rewards of increased investment in science. He points out that, "in a survey last year, 73 percent of Americans could not name NIH as the government agency that funds most of the medical research paid for by U.S. taxpayers," a statistic that lends new urgency for his call for more aggressive public education efforts. By convincing the public, as well as government officials, of the importance of new research, Dr. Zerhouni hopes to increase the NIH budget.