

Interview With Dr. Elizabeth G. Nabel, Director, National Heart, Lung, and Blood Institute

EDITOR'S FORWARD

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On January 26, 2005, Elias Zerhouni, M.D., director of the National Institutes of Health (NIH), announced the appointment of Elizabeth G. Nabel, M.D., as director of the National Heart, Lung, and Blood Institute (NHLBI) beginning on February 1, 2005. As most of us in the sleep research community know, the National Center on Sleep Disorders Research is housed within the NHLBI. In addition, the NHLBI sponsors a

significant proportion of the NIH's sleep research portfolio, including 2 large multi-center studies, the Sleep Heart Health Study (SHHS) and the Applied Positive Pressure Long-term Efficacy Study (APPLES). The following is the text of an interview conducted with Dr. Nabel on February 24, 2005, during which she outlines her goals, priorities and themes for research, and sleep research in particularly, at the NHLBI.

INTERVIEW WITH DR. NABEL

Dr. Quan: As Editor of the *Journal of Clinical Sleep Medicine* and a current grantee of the National Heart, Lung, and Blood Institute (NHLBI), I want to thank you for agreeing to spend some time with me today. Perhaps we can start by describing your background and experience.

Dr. Nabel: Sure. It's a pleasure to visit with you, Stuart, and I'll look forward to having an opportunity to meet you in person. I'm a cardiologist by training. Like you, I had been a faculty member at a medical school, in my case, the University of Michigan for 12 years. While at Michigan, I had been a grantee of the Institute for many years and one of its strong supporters. In 1999, my husband and I moved from the University of Michigan to the National Institutes of Health (NIH), where I assumed the position of Scientific Director for Clinical Research in the intramural program of the NHLBI, and my husband became Director of the Vaccine Research Center in the National Institute of Allergy and Infectious Diseases. That experience, as Scientific Director in the intramural program, certainly gave me the opportunity to learn much more about the Institute from an insider's perspective. I certainly already knew much about the Institute as a member of the extramural community. When Dr. Lenfant's position became available, I was interested and applied. I then had the good fortune of being asked to take on the job by Dr. Zerhouni, which I am very honored to do.

Dr. Quan: Well, you have my congratulations. I know you have both an interesting and a challenging job ahead of you. As you assume this position as the Director of the NHLBI, what do you see as your major goals?

Dr. Nabel: I've been in the position now for 23 days. But looking forward, there really are four themes that I want to emphasize. And these themes really do go across heart, lung, blood and sleep

disorders.

First of all, I want to stimulate the discovery of the causes of disease because we know those discoveries will lead to critically needed new treatments. I believe very strongly that basic discoveries are the foundation of our research portfolio in this Institute. ROI-funded research and investigators must be protected and nurtured, and I will do all I can to support ROI-funded research in this Institute. At the same time, I want to ensure that we support innovation, creativity and the most advanced biomedical technologies. I hope that I can encourage our investigators to take risks, and I hope that I can encourage our study sections to support and encourage that risk taking because I think we could all stand to do a little bit more of that in our research. Therefore, basic research has to remain the jewel of the crown of our portfolio.

Second, I want to speed translation to clinical applications--quite simply so people can benefit as quickly as possible. Clinical research is vital to our mission. I think we are very fortunate in the NHLBI to have a very rich history of very strong clinical research. I want to work to help our Institute develop the infrastructure that's required for clinical research as it is conducted today so that it provides a foundation for evidence-based clinical decision making. I certainly want to support translational research efforts. We will go forward with clinical trials. Clinical networks have been very effective for us, and I expect that we will be using the clinical trial networks more in the future. Going forward, we will need, in a time of a very tight budget, to leverage our resources so that may mean that we conduct our clinical trials in partnership with or in collaboration among various groups, be they academic physicians, community-based physicians or the private sector. I think there are real opportunities there and, certainly, because of my past interest in translational medicine, it is something that I want to encourage.

The third theme is facilitating communication between scientists and physicians so that we all can generate, share and advance new

ideas. While I said earlier that I certainly support single investigator RO1 research, I think we all realize that science and biology have gotten much more complex. In order to make more scientific discoveries, we need to work collectively and in teams where each scientist brings his or her own skill set and expertise to the table, ideas are shared and research proceeds. Again, this is another opportunity for us to partner with the academic and private sectors in order to advance these research collaborations.

The fourth theme is that, as scientists, we need to effectively communicate our advances to the public in order to improve their understanding of promising new science. I certainly want to communicate all of the fantastic research advances that go on in this Institute. I want the public to have a very strong understanding of those advances and of medical research in heart, lung, blood and sleep disorders so that they, in turn, can articulate their support for the work that we're doing to their elected representative. I think that that's the avenue that we should take in order to build public and congressional support for our work. But I also am going to encourage our scientists to be advocates for their work as well, and not to hesitate to communicate the importance of their research to the public.

So those are the general things. Excellence has to drive all that we do and we have to be very cognizant that our goal is to improve the health of the public.

Dr. Quan: Well certainly, with those sorts of themes, it would seem that in the next several years we should make some progress in advancing our understanding of heart, lung, blood and sleep disorders. How do you plan to interact with constituent organizations, such as the American Academy of Sleep Medicine, as you move forward with trying to achieve these goals and themes?

Dr. Nabel: As you know, we have many constituent groups that are part of our Institute and I look forward to partnering with all of them. We had a very important public interest organization meeting held here, in Bethesda, in early February. It was a great opportunity for me to begin to meet many members of our constituency. For starters, I look forward to working and meeting with our Sleep Disorders Research Advisory Board. I know that the Board has played a critically important role in providing guidance and leadership to identify major priorities and directions for the NIH National Center on Sleep Disorders Research in general. I think that this Board will be critical, in terms of continuing to prioritize directions for research and training based on our 2003 National Sleep Disorders Research Plan. In addition, it's critical that I work with each of the national organizations related to sleep and sleep disorders, including the AASM, as well as others that you're already familiar with -- the American Insomnia Association, the American Sleep Apnea Association, the National Sleep Foundation, the Narcolepsy Network, the Restless Legs Syndrome Foundation and the Sleep Research Society. I would hope that all of these organizations, together with the Sleep Disorders Research Advisory Board, will guide me and the Institute in terms of priority setting for research on sleep disorders.

Dr. Quan: Perhaps you've answered most of this in my previous question, but do you have any other thoughts on the role of the National Center on Sleep Disorders Research in fostering research in sleep?

Dr. Nabel: I think that it's critical that the National Center play a central role in the research agenda of our Institute. I know that this is very consistent with the decisions that were made by Dr. Lenfant over 10 years ago. As you're aware, because you are helping to generate this data, there is important new data suggesting links between lack of sleep and risk for obesity, diabetes, and other components of metabolic syndrome, as well as [safety concerns for] people engaged in important tasks of everyday life, such as medical interns and residents, teenaged drivers, etc. So sleep disorders play an extraordinary role in influencing how many of us conduct our daily lives. I think that it's vital that the National Center on Sleep Disorders Research really link its research agenda to many of the initiatives that are going on within the Institute with regard to obesity, metabolic syndrome and other disorders.

Dr. Quan: Do you think that, as a corollary to that, perhaps the sleep research that the Center tries to emphasize should be, basically, those areas in which the NHLBI already has a current interest?

Dr. Nabel: Yes and no. I think when there are research priorities that overlap with other areas of our mission, we need to have those collaborative links. At other times, I'm sure that there are going to be sleep research priorities that perhaps [are not directly related to the] mission of the NHLBI. But, there again, it's important to work with the Trans-NIH Sleep Research Coordinating Committee and with other institutes. We need to be nimble and flexible and really look for those areas of most promising research that are going to bring the greatest benefit to the public.

Dr. Quan: Shifting gears a little bit, what do you think the role of NHLBI and the National Center should be in educating people, the public, about sleep and sleep disorders?

Dr. Nabel: I think the NHLBI and the National Center on Sleep Disorders Research really do have a shared mission to provide timely and cost-effective information and dissemination about sleep needs and sleep disorders, not only to researchers and practitioners, but also to the public and to advocacy organizations. As you know, in March 2004, the National Center, along with the Trans-NIH Sleep Research Coordinating Committee, the NIH Office of Rare Diseases and various other non-Federal co-sponsors conducted a two-day conference entitled, "Frontiers of Knowledge In Sleep and Sleep Disorders." This was a very important meeting because more than 400 clinicians, public health and education expert policy makers and patient advocacy organizations, as well as sleep researchers and other key stakeholders, met and identified strategies to improve knowledge and attitudes about sleep-related behaviors. I think it's through these sorts of vehicles that we can get the word out, so to speak, and help you in your work to increase the rates of diagnosis and treatment of sleep disorders, as well as to reduce healthcare costs due to untreated sleep disorders and, ultimately, to improve public health and the quality of life. I'm delighted to learn that the Senate Appropriation Bill Report for FY 2005 includes a commendation to the National Center on Sleep Disorders Research for supporting this conference and urges the Center to partner with other Federal agencies, as well as with voluntary health organizations, to develop a sleep education and public awareness initiative. This initiative will put into action the recommendations of the Sleep Translational Conference,

as well as serve as an ongoing and inclusive mechanism for professional and public awareness on sleep and sleep disorders. I think that this was a great step forward. I'm also delighted to learn that the *Journal of Clinical Sleep Medicine* published a conference summary and the excellent remarks made by the Surgeon General in your maiden issue last month.

Dr. Quan: Yes, we were pleased to be able to do that. And, hopefully, we'll publish similar proceedings as the opportunities arise. On the topic of research and clinical trials, a very sensitive issue is funding. Where do you see the funding for basic scientific and clinical research going in the next couple of years?

Dr. Nabel: Based on existing budget projections, we don't anticipate any substantial budget increases in the foreseeable future. Fortunately, this Institute has been very well managed in the past, so we anticipate being able to continue funding about the same number of new investigator-initiated grants in the immediate future as we have been doing in the past several years. Now, NIH funding for sleep research has been increasing by 10 percent to 20 percent each year for the past several years, and we project that it will increase by about 10 percent per year in FY 05 and 06. I think that's very good news for your community. Again, we want to support excellence in research in all areas and we want to support the most promising science. I do think that your community has a number of issues that are rising to the forefront as being very important to public health, and we'll continue to support them.

Dr. Quan: In one of your themes, you mentioned that clinical networks have been quite effective. Do you think the field of sleep is sufficiently mature for the NIH to sponsor a clinical network in sleep research?

Dr. Nabel: I think that's an excellent question to ask, Stuart. I, personally, don't know the answer to that question. I would need to be educated by members of your community as to whether it's time for that type of a network to go forward. In the Institute, we've had enormous success in our lung community with a very successful clinical trial network that's been in existence for the past decade. That has turned to really be a model, not just for the NHLBI, but for many programs at the NIH in general, and I suspect that there are many investigators with interests in both sleep and pulmonary disorders who may have participated in that clinical trial network. I think this is an area that we will continue to look at over the ensuing years, and I certainly value the input and advice from the sleep community in this regard.

Dr. Quan: As you know, the Institute of Medicine is conducting a project in relationship to sleep and sleep medicine. One of the issues in this project is trying to address is whether it is important and feasible to increase academic departments of sleep medicine. What do you feel the role of the NHLBI and the National Center might be in facilitating this, if any?

Dr. Nabel: I look forward to reading the report when it comes out and I think, until I have a chance to read it and digest it, it's a bit tough for me to comment. I think that if academic centers go forward with departments in this area, we certainly will have funding mechanisms available to support research conducted by these units.

Dr. Quan: I have another hard question for you. When President Bush addressed health care on the NIH campus, he indicated an increase in funding for NIH. What impact do you believe that his administration will have on funding and what do you think of his proposed budget?

Dr. Nabel: We'll have to wait and see. As you know, we are in very tight times right now. We're looking at a very sizable Federal deficit. We're looking at a very tight budget with cuts in many domestic programs and so, relatively speaking, the NIH is not faring too badly. I think that we all are simply going to have to hunker down a bit, as they say, put on our thinking caps and really think about creative ways in which we can stretch our research dollars. At the same time, as I said earlier, I think it's absolutely critical that we, as scientists, articulate the importance of biomedical research in the country, to our patients, to our constituents, and to the general public, in a way that our public then advocates to their elected representatives to continue to support biomedical research in this country. So we're all in this together and we all have to work together, collectively, to really raise the level of funding for biomedical research.

Dr. Quan: I totally agree with you there. Final question: What general direction do you think the NIH will take during the remaining years of President Bush's administration?

Dr. Nabel: I think that, with the support of the current administration and under the direction of Dr. Zerhouni, the NIH Roadmap Initiative is a very ambitious vision for a more efficient and productive system of medical research. Even though the NIH Roadmap comprises less than 1 percent of the NIH research budget, this initiative will be important in addressing compelling research opportunities in these three areas: New Pathways to Discovery, Research Teams of the Future and Re-engineering the Clinical Research Enterprise.

Dr. Quan: Thank you very much for your time.