



Rescuing the NIH: the response

The feedback received regarding my recent editorial “Rescuing the NIH before it is too late” has been fascinating to read. The opinions expressed illustrate a huge divide between those in charge of the NIH and those who rely on extramural funding to support their research.

In the editorial (1), I expressed concerns about the decreased funding of investigator-initiated research as a consequence, in part, of new policies at the NIH. I then made four suggestions: (a) Congress should increase the NIH budget; (b) the Roadmap should be shelved and funds restored to support investigator-initiated individual R01 grants; (c) more clinical studies should be supported by pharmaceutical companies; and (d) the process for funding established investigators should be streamlined.

Almost all the responses I received from scientists who depend on extramural NIH funding were in agreement with the ideas I expressed about the current directions and practices of the NIH. In contrast, nearly all the responses from current and former NIH employees took issue with my critique of NIH Director Elias Zerhouni and the NIH. In fact, we received a letter (which follows this editorial) signed by all 27 NIH institute and center directors.

In their letter, the directors write, “The personal attack on Dr. Elias Zerhouni is unfair, inappropriate, and obscures discussion of the real issues of concern to the entire NIH research community.” My comments about the NIH director were not intended to be a personal attack; my concern is with Zerhouni’s current policies. As a presidential appointee at the helm of a large and critically important public institution, Zerhouni makes decisions that affect thousands of scientists — and, indirectly, millions of US citizens. I have only briefly met Zerhouni once, when we were loading our PowerPoint presentations on a shared computer. I obviously do not know him well enough to comment on him personally. I am sure he is trying his best to make the NIH work. Moreover, the loyalty and devotion of the NIH leadership, evidenced by their letter of support for current NIH practices and policies, reflects well on their personal commitment to public service and to Zerhouni.

In contrast to the letter from the NIH directors, the overwhelming response I have received has been supportive. The following is a nonscientific sampling of the

many responses from assistant professors, professors, deans, members of the National Academy of Sciences, and a Nobel laureate (none of whom are NIH employees) that continue to come in on a daily basis. Since these e-mails were sent to my personal address, I consider them confidential and reproduce them here without attribution.

“a wonderful editorial. It perfectly echoes the feelings and frustrations [of] many of us (young investigators) who look for the support of NIH. I hope this editorial will provoke a healthy debate among the scientists and probably reach the persons who sit high up there. Many of my bright colleagues are considering leaving science forever.”

“Your editorial . . . is correct in every way — and so important that you and the *JCI* honestly address the Roadmap and the crisis Zerhouni has created.”

“Have you ever been on an evaluation of NIH intramural programs? I recently did this for NINDS and was shocked at the funding/productivity ‘ratio.’ This is an area that could clearly be tightened up.”

“As a junior investigator struggling to get grants and finally getting one this last cycle . . . I hope that your editorial will spur more people in positions of power to speak out and bring about change.”

“outstanding editorial article in *JCI*. This is right on target. I hope that other journals and societies follow a similar approach in airing their voices without beating around the bushes. What we need is to have a ‘million scientists march’ involving scientists, educators, graduate students, postdoctoral fellows, research personnel, people from biotech and pharmaceutical companies, and citizens who care for scientific enterprises to Washington.”

“Zerhouni’s Roadmap and all this emphasis on translational research has gone too far. I do think your editorial is right on target, and we can’t worry too much about Congresspeople who will use it to zap the NIH budget.”

“Great editorial. Right on. It’s about time somebody said this. You are especially right about the grant review process, which is becoming a joke.”

“I hope that the ASCI [American Society for Clinical Investigation] leadership takes this up and works through FASEB to generate general support for changes.”

“You are RIGHT on the money. The incredibly successful NIH funding system is being dismantled, and we are going to lose a generation of young investigators due to the virtual absence of R01 funding . . . The Roadmap is going to kill the goose that laid the golden egg.”

“The editorial you wrote in the current *JCI* about the NIH budget and director was . . . right on target.”

“I could not agree more. We need more people in this country who are willing to say that the emperor is not wearing clothes.”

Based on this feedback, I conclude that there is a substantial divide between the views of the NIH leadership and those of the extramural community of biomedical scientists. The much ballyhooed switch to an electronic grant submission system provides another example of how the NIH could have benefited from more input from the extramural scientific community. Inexplicably, the NIH has apparently granted a contract to a little-known software company to develop a platform for electronic submission that does not run on Apple computers. This was done despite the fact that a rather large percentage of scientists use the Mac operating system. Perfectly suitable software, such as Adobe Acrobat, that works on both Mac and Windows operating systems already exists.

Not every response I received was glowingly positive. In one e-mail, a colleague voiced a very legitimate concern: “You made some good points, but I think you have missed the boat on clinical research and show a real lack of understanding of the role of this type of research. A wide variety of good, solid, peer-reviewed, hypothesis-driven research (basic and clinical) is critical to the health of the nation.” I could not agree more about the importance of good clinical research. My point about clinical research was intended to suggest that the NIH seek to partner more with industry to offset the costs of huge clinical trials in order to preserve more funds for hypothesis-driven, investigator-initiated research.

I received one e-mail from a former NIH employee who wrote, “You are doing our cause no favor by your inappropriate and, in my view, misguided attack on Elias



Zerhouni.” The idea that we should not be critical of NIH policies for fear that this will impair Congressional support is disturbing. We must be concerned with the NIH and its policies and priorities if we feel that they are not in the best interest of the country. Indeed, I believe it is our duty, and unless others express their concerns, mine will be a lonely voice, readily dismissed. The notion that we should hide our widely held concerns about the NIH lest Congress hear of them is wrong.

In their letter to the *JCI*, the NIH directors note, “The Roadmap budget represents 1.2% of the total FY06 NIH budget and incorporates built-in constraints on growth.” They certainly know better than I, but isn’t this number misleading? The way I see it, the total NIH budget is not available to fund investigator-initiated grants; if that pool were used as the denominator,

the percentage diverted to the Roadmap would be significantly higher.

The directors point out that the Roadmap’s commitment to innovation and interdisciplinary research has garnered considerable enthusiasm in Congress. Nevertheless, many of the working scientists who contacted me do not believe that the Roadmap is an effective use of precious NIH resources. If those in charge of the NIH disagree with these apparently widely held concerns, it would be useful to have more dialogue between intramural and extramural scientific communities. This could narrow the gap between the two groups and increase understanding of the current and future directions of the NIH. Until we narrow the apparent chasm that separates those in charge of the NIH from those scientists outside the NIH, the future effectiveness of this unique and remarkable institution will not be all that it can be.

Finally, Eric Fearon, president of the ASCI (the ASCI holds the rights to and publishes the *JCI*), has sent out an e-mail to all ASCI members reminding them that my signed editorials are solely my opinion and that the views expressed therein do not necessarily reflect the opinions of the Editorial Board, the ASCI council, or individual members. However, as long as only a few of us make our positions known to those who lead the NIH, there will be little hope for change. It is easy to dismiss a lonely voice; the message will be heard only if there are many voices.

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1. Marks, A.R. 2006. Rescuing the NIH before it is too late. *J. Clin. Invest.* **116**:844. doi:10.1172/JCI28364.