

Policy Perspectives from Members of the Scientific Community
Q & A
Richard B. Marchase, Ph.D.

DR. WILLARD: First I'd call to see if there are questions specifically for Dr. Marchase before we open it up more broadly.

Emily?

DR. WINN-DEEN: So I guess I'm a little confused. Who do you think is going to get the \$350 million a year if it's not people in the science community?

DR. MARCHASE: Oh, there's no doubt that it will be people in the science community, but there's no doubt that this kind of a shift will cause a distinct difference in the funding that will be seen, for instance, in the physiology community or in the pharmacology community. We have many constituent societies in FASEB, and a shift of this magnitude could very definitely disenfranchise some investigators and empower what we hope would not be a small group of investigators within the genomics community, but there are concerns about the breadth of funding that would be taken away from other disciplines.

DR. WINN-DEEN: Okay. So it's not the overall magnitude. It's the shift from wherever it is today to a different group of people who would be receiving that money.

DR. MARCHASE: Exactly. There are cellular molecular studies that are very important to the way we understand diseases today. These are being carried forward by scientists who are not necessarily geneticists. We're just a bit concerned about a drop of the magnitude that might be seen if this were done out of an existing flat budget.

DR. WILLARD: Muin first, and then Francis.

DR. KHOURY: Thank you for your comments.

I kept hearing the word "study," and you mentioned that this is a study. I would like to react to this and get your thoughts on this idea, too. I've been interacting with a lot of the international biobanks and cohort studies, like the one in the U.K. and the Canadian and other places, and the way they sell their studies is that they don't call it a study. They call it a resource, because collecting information on a large number of people to be followed over time is not an individual study. It's a resource that could lead to thousands, if not millions, of studies that could be generated in the future.

So in that context, or prism at least, would you still have the same -- I realize all the comments you said are probably true in terms of shifting the funding in the short term. But in the long run, if you think about a national effort such as this that could be a resource for studies, how would that --

DR. MARCHASE: Yes, absolutely right. There's no doubt in my mind that in the long term, this is a very important resource that would be appropriately used by physiologists, anatomists, the whole spectrum of biomedical scientists. We would applaud, in fact, the fact that this resource should be made available. We're just very concerned that, as you say, in the short term it's not done in such a way that it jeopardizes the scientists who are currently working and who are going

to be entering the fields that are not necessarily going to be given the opportunity to do the short-term work.

We would hope that, as I said, this could be the visionary kind of link that would allow us to, in fact, increase funding for the biomedical sciences.

DR. WILLARD: Francis, and then Debra.

DR. COLLINS: So, Richard, I appreciate your thoughtful comments, and certainly all of us at NIH are deeply concerned about the trends in terms of support for R01 investigators. The curve that you showed is likely to get worse in the current circumstances.

Yet when I talk to leaders who are in a position of being able to try to turn that around, oftentimes what they ask for is what is there out there in the way of a signature initiative that would enable some increased enthusiasm for biomedical research at a time where, frankly, there is not as much as there was a few years ago. There's a sense we gave you your doubling. Okay, that should be good enough. As we all know, the benefits of the doubling have been substantial, but they're being eroded rather quickly as that very different kind of mindset has set in.

So I agree with you that it would be pretty nigh impossible to initiate a program of this magnitude in the current budget climate. The idea of actually losing 1,000 new grants on the basis of this kind of a project is just not tenable. But I do think, picking up on your remarks a minute or so ago, that there is a real opportunity here for the biomedical research community to identify one or two flagship initiatives that are compelling in terms of their benefit for public health. Whether this is one of them or not is something to be discussed and decided.

But I think the worst thing we could do right now would be to hunker down and say, well, you know, maybe we can just somehow get by with the current circumstances, and not take the opportunity here to try to identify some new things, which is the only way I think we're ever going to really generate that kind of enthusiasm and energy for getting back on a more progressive course.

So your points are very well taken. Again, I don't think anyone is proposing that a project of this sort could be initiated from existing funds. It would not be tenable.

DR. MARCHASE: Yes, I agree completely, and I do think that this is the kind of visionary project that might move us off the stagnant place where we are right now.

DR. WILLARD: Debra?

DR. LEONARD: An underlying theme that I'm hearing both from Dr. Kardia and Dr. Marchase that I don't think is being articulated is a strong holding to the current academic system as it exists. I think there's an impetus for change to that academic system from the NIH Roadmap valuing large group efforts, collaborative types of efforts, and there are certainly underlying gender issues and minority issues that are not -- at least the gender issues are not supported by the current academic tenure system and the tenure clock.

I'm wondering if some of the dis-ease with what we're talking about here and moving towards this initiative isn't shaking the underpinnings of the academic system of having to have two R01s and a project on a P01 or a score in order to get tenure within the designated six to nine years. Does

that system need to be reevaluated by the academic community in light of the funding and the research initiatives that are currently being valued by the NIH and other organizations?

DR. MARCHASE: Absolutely, and I think that our institution is one example, but you'd find institutions across the country that are trying to grapple with these issues, especially in these departments and programs that are very highly leveraged because of their involvement with extramural funding sources such as NIH.

We appreciate many of the things that NIH is doing; for instance, the idea of recognizing multiple principal investigators is certainly a step in the right direction to allow us to rethink what it is we should do to ensure that our academic enterprise is able to go forward in a productive manner, and with an appreciation for the fact that things are different now and big science is going to be a very important part of how we go forward.

On the other hand, even if big science becomes an increasingly large part of the NIH budget, I believe that it is not just a parochial interest for us to maintain an emphasis on the kind of research grants that have given us so much in the way of advancements and disease-curing power. We have very bright people out there, both men, women, young and old, and we want to assure that the individuality of the way they think doesn't come asunder because we go too far to the big science point of view.

DR. WILLARD: Steve Kaminsky?

DR. KAMINSKY: I had one question. Since you had the clinical group associated in one room, did they articulate whether they thought that if this were to go forward it would be better as a trans-NIH effort, or would it be best to actually place the project in one institute or one center from the standpoint of really maintaining a real focus on getting the resource out there and managing the resource, much like the Human Genome Project was back in the early '90s?

DR. MARCHASE: We didn't address that at all. I mean, I think that certainly this is an initiative that is going to benefit all of the NIH institutes if it goes forward. Obviously, everyone would favor a system where the management was as efficient as possible.