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Responding to Stimuli

n February, the United States Congress passed the American Recovery and Reinvestment Act of 2009, which President Barack Obama signed into law. As part of this Act, the National Institutes of Health (NIH) has been provided with supplemental funds in order to stimulate the economy. This, of course, promises to translate to increased funding of biomedical research.

From its budget, the NIH has already decided to set aside at least \$200 million for 200 or more research grants in specific challenge areas of science and medicine. The goal of this particular initiative, called the NIH Challenge Grants in Health and Science Research, is to allocate resources to "challenge topics" that were identified as high-priority by the constituents of the NIH (1). In addition to these funds, the NIH will provide extra resources for research that compares the effectiveness of different treatment options for various medical conditions.

Forget "shovel-ready". Pipette-ready seems to be the new mantra. The idea is to jumpstart research in 15 broad challenge areas that include diverse topics such as genomics, regenerative medicine, biomarker discovery and validation, biomaterials, and translational science. Recipients of grants will receive a maximum of \$500,000 per year for up to two years to tackle a project within a chosen area of research. Because of the unique nature and time scale of the initiative, the NIH has set specific guidelines lessening the burden on applicants: scientists will not be required to submit preliminary data; the proposed Research Plan is limited to about half the page-length of a proposal for a Basic Research Grant (R01); and scientists can apply for as many grants as they want to, provided each proposal is scientifically distinct.

Very few of us with a direct stake in science will argue that increased funding of research is a negative proposition. Yet, there are many unanswered questions worth considering about the details behind the NIH Challenge Grants. Is two years enough time to complete a project and publish the necessary papers to get the word out about its success? How will the outcomes of the challenge grants be assessed after two years? What criteria will be used to declare a project successful? What happens to funding levels after this time frame for successful projects? Assuming there are no renewals of grants, how will principal investigators be held accountable? And, on a philosophical level, is it at all advisible to direct research into prescribed focus areas? Does this stifle innovation or merely channel it?

These are all noteworthy questions worth following but are probably not enough to discourage researchers scrambling to get their grant proposals in before the deadline. And in case you are not convinced that these grants are the way to fund your research, you may still be heartened by the fact that the NIH received approximately \$10 billion in federal funds, much of which will be allocated to more traditional grants.

One thing is for certain: no matter how you slice it, this is a good time to be a scientist.

Anirban Mahapatra Assistant Managing Editor, ACS Chemical Biology

REFERENCE

1. NIH Challenge Grants in Health and Science Research (RC1) [cited Apr 2, 2009]. Available from http://grants.nih.gov/ grants/funding/challenge_award/.

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