

**Positioning Your Research and Education Activities to Take Advantage of the
Programs in the American Recovery and Reinvestment Act
Updated February 27, 2009**

On February 17, President Barack Obama signed into law the American Recovery and Reinvestment Act (the economic stimulus package). This legislation includes significant investment in research and education programs at multiple agencies. In some cases, Congressional direction and agency preparations provide good information on how the federal government is likely to implement the bill; in other cases, the agencies are still absorbing the details or waiting on the arrival of new leadership. In general, all agency plans are provisional, until approved by the Office of Management and Budget.

Below is guidance on what campus leadership and individual faculty can do to position your activities to take advantage of planned or potential programs at agencies that are receiving stimulus funding.

There is also some information on the government-wide processes and reporting that will be required from recipients of funds appropriated in the stimulus legislation. Additional reporting conditions may also be imposed by individual agencies and programs.

RESEARCH

National Institutes of Health—Research

The stimulus legislation provides a total of \$10.4 billion to the National Institutes of Health (NIH) of which \$8.2 billion is available for research projects. Of that amount, the Office of the Director will retain \$800 million, within which Congress directs priority to be placed on short-term grants that focus on specific scientific challenges, new research that expands the scope of ongoing projects, and research on public and international health priorities. The remaining \$7.4 billion will be distributed among the Institutes and Centers of NIH and the Common Fund (NIH Roadmap and other trans-NIH activities) in proportion to the usual appropriation allocations for Fiscal Year (FY) 2009. The funding is available through September 30, 2010.

NIH officials are concerned about the out-year ramifications associated with being asked to spend this amount of funding on research over such a short period of time. If NIH funded new four or five-year research project grants with stimulus dollars, the concern is that the agency would not have the resources to continue these proposals beginning in the third year of the grant without adversely affecting the entire grant portfolio. As a result, NIH is considering numerous options to lessen the likelihood of out-year impacts, while ensuring that the funding is invested in

ways consistent with the goals of the stimulus to create or preserve jobs. (Programs like Pathways for Independence may be a resource for distributing the funding, and NIH is thinking about targeting supplemental funding to new investigators.)

Mechanisms that NIH has stated will be used to distribute the stimulus funds include:

- “Challenge Grants” – Challenge Grants would support investigators working on new ways to attack seemingly intractable problems and/or jump-start a particular area of research. Funding would be \$500,000 per year for two years. Research areas would be identified and prioritized by the individual NIH Institutes and Centers, but are likely to focus on multi-discipline or cross-institute problems. (For example, getting medicines across the blood-brain barrier is a major impediment to effective therapy.) Due to the time constraint of the stimulus, solicitations are expected to be released before May 2009, followed by a shortened application and peer review process.
- R01s and Related Research Mechanisms to Support Scientifically Meritorious Projects – There are currently 14,000 R01 proposals that have been approved through the peer review process, but have never been funded. In general, the Institutes and Centers will be looking to fund the proposals that lend themselves well to two year goals, are in line with the Institutes and Centers’ priorities (as laid out in their strategic plans), and have been deemed scientifically meritorious by the peer review process. They may also look for some geographic distribution of the awards. As peer review is a lengthy process, the focus will be on previously reviewed proposals; grant renewals may also be eligible for stimulus funding. However, NIH has not ruled-out the possibility of accepting *some* new grant proposals with 2-year goals. Projects that cannot be completed in two years will not be considered.
- Supplemental Funding to Existing Grants – This supplemental funding will go to already funded science projects to expand research related to a project’s original goals. For example, this funding could go towards creating training positions or purchasing equipment. Though most of these awards will be administrative, some will be competitive. (Normal procedures will be followed.) The funds are not to restore cuts made in original proposals or awards.

Campus Actions: Individual researchers should use their existing relationships with NIH program officers to suggest possible research areas to highlight and specific research topics that could be supported through the Challenge Grant mechanism. For the Challenge Grant, individual researchers and campus leaders should begin identifying and assembling potential multidisciplinary collaborations.

Researchers can also contact NIH to find out the processes for revising the scope and budget of highly-rated grant proposals to two year projects, as the timeline for revisions is likely to be very short. Program officers might also be able to provide information on what processes might be used to request supplemental funding support.

In all cases, researchers should keep in mind that, while follow-up funding can be applied for, the focus must be on projects that will be completed in two years.

National Science Foundation—Research

The stimulus legislation provides \$2 billion for the National Science Foundation (NSF) research directorates and offices. NSF is directed to use this funding to support all research divisions, although it is not obligated to distribute the funds evenly or proportionally among divisions. While the funding is available through September 30, 2010, NSF is under Congressional pressure to obligate as much of it as possible to multi-year grants by September 30, 2009.

Mechanisms that NSF has stated could be used to distribute the stimulus funds include:

- **Increasing Success Rates:** This funding will primarily go to increasing success rates in planned fiscal year (FY) 2009 competitions. Many of those competitions are already underway, with due dates past, although some core programs have upcoming due dates. Because NSF is able to forward fund grants (unlike NIH), they can provide funding for an array of grants two, three, four, and five years in duration to spread out the proposal pressure on NSF when the grants conclude. (Whether this approach will be approved by the Office of Management and Budget is not yet clear.)
- **Focus on the Pipeline:** As part of the effort to raise success rates, NSF will be focusing particularly on early career researchers. They are also concerned about support for undergraduates, graduate students, and post-docs. This emphasis reflects Congressional concern about the pipeline for the science, technology, engineering, and mathematics workforce, as well as jobs in general.
- **No Supplements with Stimulus Funding:** NSF will not be using the stimulus money to make supplemental awards to current grants. This decision reflects the intensive tracking and reporting requirements that agencies and stimulus funding recipients will have to meet (quarterly reports on progress, spend rate, jobs created, etc.). However, the stimulus funding will take some of the pressure off of the FY 2009 funds, and program officers will be able to use those funds for supplements, if they so desire.
- **Small and Medium Infrastructure Projects:** Some of the funding in individual programs and divisions is likely to be used to support already-planned small and medium-sized infrastructure projects (such as research vessel upgrades, supercomputing hardware purchases, seismic network improvements, and upgrades to the Antarctica research stations). Funding may also be directed to ongoing discipline-specific instrumentation programs.
- **Distribution of Funds Among Programs:** The distribution of NSF's \$2 billion among NSF's research directorates, divisions, and programs is being set internally, with Program Officers hopefully getting information about their allocations this week. The additional funding may be distributed proportional to the FY 2009 request levels, but that has not been confirmed.

Campus Actions: Individual researchers with existing relationships with NSF program officers should check in on which mechanisms their programs are considering using to distribute funds, whether additional information is needed on past highly-rated but not funded proposals, and what future submission opportunities may exist.

Healthcare Comparative Effectiveness—Research

Comparative effectiveness research compares clinical outcomes, or the “clinical effectiveness,” of alternative therapies for the same condition. The stimulus legislation provides \$1.1 billion for comparative effectiveness research and recommends that the money be spread among three entities: the Agency for Healthcare Research and Quality (AHRQ) would receive \$700 million, of which \$400 million would be transferred to the National Institutes of Health (NIH); and the Office of the Secretary at the Department of Health and Human Services (HHS) would receive \$400 million, which is made available for the Secretary to allocate at his discretion. It is highly likely that much of this HHS money will be transferred to NIH to perform additional comparative effectiveness studies. The mechanism for distributing these monies has not yet been determined.

Campus Actions: In light of the planned healthcare reform efforts, comparative effectiveness research is likely to be a long-term and growing area of emphasis for the new Administration and Congress. Campus leadership and individual researchers should begin to assess the institution’s strengths and past experiences and relevant relationships with AHRQ and NIH (the National Institute of Mental Health has ongoing work in this area). It is important to start building the teams and partnerships with other organizations needed to conduct projects in this area.

Department of Education—Research

The stimulus package provides \$250 million for the Institute of Education Sciences (IES) within the Department of Education. Language directs that the funds be used for competitive grants to State educational agencies to enable them to design and develop State-wide, longitudinal data systems to track individual student progress based on a unique student identifier. Out of the \$250 million, \$5 million may be used for awards to public or private organizations to improve data coordination.

Campus Actions: Individual researchers who are interested in longitudinal data systems should contact the State education agencies regarding possible partnerships to apply for this funding.

EDUCATION AND TRAINING

National Science Foundation—Education

The final bill provides \$100 million for three education programs at NSF. There are funds for two existing programs: the Robert Noyce Teacher Scholarship program (\$60 million) and the Math and Science Partnerships program (\$25 million). For these programs, the funding is likely to go to increase the success rate in the FY 2009 competitions and to supplements for existing awards.

Campus Actions: Individual researchers currently funded by or applying to the Robert Noyce Teacher Scholarship program or the Math and Science Partnerships program should contact the program officers for information about opportunities for supplements or expanded proposals.

The stimulus package also contains \$15 million for NSF to establish a new program to facilitate the creation or improvement of Professional Science Master's degree programs. This program was authorized in 2007 but never funded, so NSF will have to develop and issue a new solicitation in order to distribute the funds. The purpose of the grants is to facilitate universities' creation or improvement of professional science master's degree programs, with an emphasis on practical training and preparation for the workforce in high-need fields. Programs may include linkages between universities and industries that employ science-trained personnel. In making awards, NSF is directed to give preference to those applicants located in States with low percentages of citizens with graduate or professional degrees or to applicants that secure more than two-thirds of the funding for the programs from sources other than the Federal Government.

Campus Actions: Campus leadership should identify existing and planned Professional Science Master's degree programs that focus on workforce training in high-need fields and have partnerships, particularly internships, with industry or other employers in the State so that the units with relevant programs can begin preparing to apply to NSF.

Department of Labor—Training

Within the Department of Labor, the stimulus bill provides \$2.95 billion for formula grants to the States for training and employment services. To facilitate increased training of individuals for high-demand occupations, the bill provides the authority for local workforce investment boards to contract with institutions of higher education and other eligible training providers.

The bill also includes \$750 million for a program of competitive grants for worker training and placement in high growth and emerging industry sectors. Within the amount provided, \$500 million is designated for projects that prepare workers for careers in energy efficiency and renewable energy. Grants are to non-profit partnerships that include industry and labor and may include educational institutions. (This is a program that was authorized in 2007 but never funded.) Priority within the remainder of the funds is directed to training in health care; training for wireless and broadband deployment, advanced manufacturing and other high demand industry sectors identified by local workforce areas are also allowable uses of funds.

Campus Actions: Campus leadership should identify existing training programs and ongoing partnerships with local workforce investment boards, industry, and other relevant groups to prepare for potential opportunities from the Department of Labor.

GOVERNMENT-WIDE PROCESSES AND REPORTING

Additional Reporting Requirements

The stimulus bill has general reporting provisions to ensure transparency and accountability in how the funds are spent and that projects are consistent with the legislation's goals, including job creation and preservation. Therefore, funds received from the programs described above will have reporting requirements above and beyond the reports usually provided to these agencies and

the awards will have rigorous tracking requirements. (Funding added to existing grants and projects will have to be tracked and reported on separate from the base grant).

Quarterly reports will be required from the recipients of the funds to the granting agency. These reports will require a variety of information, including data on the amount of recovery funds expended or obligated, a description and an evaluation of the completion status of all projects supported, information on any subcontracts or subgrants, and an estimate of the number of jobs created and the number of jobs retained. Additional reporting for infrastructure investments made by State and local governments is also required.

It is likely that most information provided by awardees to funding agencies will be made publicly available in some form; materials should be prepared with this in mind.

Information about the implementation of the stimulus bill will be posted at <http://www.recovery.gov>.

Government-Wide Timeline

All agencies are under significant pressure to begin distributing the funding in the stimulus bill to States, organizations, and individuals as quickly as possible. The overall timeline announced by the Administration for the next few months is:

- February 19, 2009: Federal Agencies to begin reporting their formula block grant awards.
- March 3, 2009: Federal Agencies to begin reporting uses of funds.
- May 3, 2009: Federal agencies to make performance plans publically available; to begin reporting on their allocations for entitlement programs.
- May 15, 2009: Detailed agency financial reports to become available.
- May 20, 2009: Federal agencies to begin reporting their competitive grants and contracts.
- July 15, 2009: Recipients of Federal funding to begin reporting on their use of funds.