

NIGMS Feedback Loop

A catalyst for interaction with the scientific community



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The National Institute of General Medical Sciences (NIGMS) is one of the National Institutes of Health in the U.S. Department of Health and Human Services. By supporting basic biomedical research and training nationwide, NIGMS lays the foundation for advances in disease diagnosis, treatment, and prevention.

The *NIGMS Feedback Loop* is an e-mail newsletter alerting researchers to NIGMS [funding opportunities](#), trends, and plans. We encourage your [input and feedback](#) on Institute activities.

All NIGMS grantees are automatically subscribed to the *NIGMS Feedback Loop*; other interested individuals are encouraged to subscribe themselves. To subscribe, change your subscription options, or unsubscribe, visit the *NIGMS Feedback Loop* [subscription page](#) on the NIH LISTSERV Web site.

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Director's Message

The past few months have been very busy in terms of NIH-related Congressional activities. I would like to use my Director's message to bring you up to date in this area, report to you about the electronic submission of R01 applications, and give you and your colleagues breaking news about a program directed toward new investigators that NIH is developing. Finally, I want to tell you about an opportunity to give us input during the next month as part of our strategic planning process.

NIH Authorization and Appropriation Status

As you may recall from your high school government class, Executive Branch activities must be authorized by Congress if they are not authorized in the Constitution. Many of the authorizations for NIH stem from the 1944 Public Health Service Act and expansions to this act made in the 1940s. Prior to this year, the last comprehensive reauthorization of NIH was the NIH Revitalization Act of 1993.

A new NIH authorization, the [NIH Reform Act of 2006](#), was signed by the President on January 15, 2007. This act represents a significant endorsement of biomedical research and the NIH role in supporting it. The act includes a number of provisions, and NIH is now in the process of developing plans to [implement](#) them. One provision establishes a Division of Program Coordination, Planning, and Strategic Initiatives in the Office of the NIH Director, in part to house the Common Fund, which is the new term for the fund that supports the NIH Roadmap for Medical Research. Another provision authorizes appropriations for NIH of \$30,331,309,000 for Fiscal Year 2007, \$32,831,309,000 for Fiscal Year 2008, and "such sums as may be necessary" for Fiscal Year 2009. Authorization levels can be thought of as targets for consideration in the appropriation process.

Appropriation is the annual provision of funding authority to government agencies. In the absence of an appropriation bill, agencies typically operate under a continuing resolution, often at the same funding level as in the previous fiscal year. This was the case in Fiscal Year 2007 until recently, when the House and Senate passed a joint resolution appropriating funds for the remainder of the fiscal year. The resolution provides about \$620 million more for NIH than was expected based on the continuing resolution. This represents an increase of

2.2% over Fiscal Year 2006. While the resolution appropriates some funds directly to the Common Fund, it is important to note that Common Fund activities have been supported by NIH institutes and centers, meaning that most of the new funds effectively flow back to the institutes and centers. The result for NIGMS is a 1.2% increase over the previously anticipated level. The resolution also includes substantial increases for the National Science Foundation, the National Institute of Standards and Technology, and the Office of Science in the Department of Energy.

These increases in the context of a highly constrained budget environment are another strong endorsement of the role of science in maintaining the competitiveness of the Nation and the importance of supporting productive research programs and new investigators. We project that the additional funds, together with other steps that NIH has taken, will enable NIGMS to award 100 or more competing research grants than we had anticipated based on the President's budget for Fiscal Year 2007.

While this process was unfolding, the President released his budget for Fiscal Year 2008 in early February. This budget calls for an increase of 1.5% for NIH over the Fiscal Year 2007 President's budget. Compared to the increased amount appropriated for NIH by Congress for Fiscal Year 2007, the proposed Fiscal Year 2008 budget is approximately 1.3% less.

The release of the President's budget is the first step in the Fiscal Year 2008 appropriation process. The next step is hearings before the House and Senate appropriations subcommittees at which NIH Director Elias Zerhouni and the institute and center directors will present the budget and answer questions about NIH activities and plans.

Electronic Submission

For the February 5, 2007, receipt date for the electronic submission of R01 applications, NIH received and processed more than 4,000 individual submissions. Among the applications, 70 percent were successfully submitted on the first attempt and 94 percent were successfully submitted on the second attempt. I welcome your candid comments about your own experiences and suggestions about how to improve this process. This is still a work in progress and I will pass your comments along to appropriate NIH staff.

NIH Director's New Innovator Award

To provide another opportunity for new investigators to get their independent careers off to the best start possible, Dr. Zerhouni is launching the [NIH Director's New Innovator Award](#). This grant program will support new investigators who propose highly innovative research projects with the potential for exceptionally great impact on biomedical or behavioral science.

New investigators who have not yet obtained a traditional NIH R01 grant are eligible to apply. In addition, applicants must hold an independent research position at a domestic institution and be within 10 years of their terminal degree (1997 or later for the 2007 award cycle).

The proposed research may be in any scientific area relevant to the NIH mission. The project description in the grant application will be briefer than that required for R01s and will emphasize the significance of the research, what makes the approach exceptionally innovative, how the applicant will address challenges and risks, and the applicant's qualifications for the grant. The review criteria will emphasize the importance of the scientific problem, the potential impact of the project, the novelty and innovativeness of the approach, and evidence of the applicant's potential for innovative and creative research. Applicants are allowed, but not required, to present preliminary data relevant to the project. Letters of reference will not be accepted.

NIH anticipates making approximately 14 to 16 awards in September 2007. Each grant will be for 5 years and up to \$300,000 in direct costs plus applicable facilities and administrative costs.

Details about the NIH Director's New Innovator Award, including the application process and deadline, will be presented in a request for applications in the [NIH Guide for Grants and Contracts](#) in mid-March. Please let appropriate colleagues know about this upcoming funding opportunity and feel free to contact me with any questions about this new program.

NIGMS Strategic Planning

NIGMS is embarking on a strategic planning process to guide the Institute's decision-making over the next 5 years. Through this process, we hope to identify emerging research areas and technologies as well as articulate approaches for effectively encouraging highly innovative research, balancing support for training

programs between existing and new areas, promoting diversity in the biomedical workforce, and enhancing our communications with the scientific community and the public.

This strategic plan is not a call for change for change's sake. Rather, we view it as an opportunity to critically examine the approaches we have utilized over the years so that we can be sure we are in the best position to capitalize on the many significant advances that are impacting basic research.

A key part of the strategic planning process is getting the broadest possible input from the scientific community. To that end, we have established a [Web site for input](#) that will be open until March 20. I urge you to provide comments at this site. Please also tell your colleagues, graduate students, postdoctoral fellows, and other interested parties about this opportunity, as it is not necessary to be an NIGMS grant recipient to submit comments.

As always, I welcome your questions or comments.

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Advisory Council Concept Clearances

Proposed new NIGMS research and training programs are made public at the open session of National Advisory General Medical Sciences Council meetings. Council approval of new initiatives (and major changes to existing initiatives) is called "concept clearance." Concept clearance authorizes NIGMS staff to develop plans, publish announcements in the [NIH Guide for Grants and Contracts](#), and fund grants. During the initiative planning stages that follow concept clearance, NIGMS welcomes comments and suggestions from the community.

At its January 2007 meeting, the Council discussed the concept clearances summarized below. For additional details, see the [Council minutes](#) or contact the identified NIGMS staff members.

Collaborative Studies on Systems Biology of Complex Phenotypes

The Council approved an initiative to foster collaboration across the fields of genetics and systems biology to study the mechanisms that determine complex phenotypes in human and animal systems. The R01 projects will require the active participation of both a geneticist and a systems biologist. The request for applications is expected to be published in April. For more information, contact program directors Richard Anderson at andersri@nigms.nih.gov or 301-594-0943, or Matthew Portnoy at info@nigms.nih.gov or 301-594-0943.

Exceptionally Innovative Research Award

The Council gave concept clearance for the solicitation of R01 applications proposing research that tests novel, potentially paradigm-shifting hypotheses or uses exceptionally innovative approaches to solve difficult problems. The possible outcome of such work should have an unusually high impact on the scientific community. The request for applications is expected to be published in May. Address inquiries to program directors Laurie Tompkins at tompkinl@nigms.nih.gov or 301-594-0943, or Ravi Basavappa at basavapr@nigms.nih.gov or 301-594-0828.

Funding Opportunity

NIH Pathway to Independence Awards (K99/R00)

NIH has reissued the program announcement for these awards to highly promising postdoctoral scientists who are transitioning to becoming independent researchers. The awards offer up to 2 years of mentored support followed by up to 3 years of additional support contingent on securing an independent research position. For more information, see [PA-07-297](#). For institute- or center-specific information, including areas of emphasis and staff contacts, visit the accompanying [Web site](#). NIGMS [announced](#) its first awardees in November 2006.

NIGMS-Sponsored Events

Protein Structure Initiative “Bottlenecks” Workshop

The annual workshop will be held on March 19-20, 2007, on the NIH Bethesda campus. Participants will discuss technical barriers to the high-throughput determination of protein structures. Space is limited and advance registration is required. For details, visit the workshop's [Web site](#) or contact NIGMS program director Charles Edmonds at edmondsc@nigms.nih.gov or 301-594-0828.

Structures of AIDS-Related Systems and Application to Drug Design

The 21st annual meeting of the “Groups Studying the Structures of AIDS-Related Systems and Their Application to Drug Design” will be held June 28-29, 2007, on the NIH Bethesda campus. The meeting offers a forum for investigators supported by the NIGMS program projects in AIDS-related structural biology and drug design, as well as others, to present their findings. Advance [registration](#) is strongly encouraged. Contact Pamela Handon at pamelah@blseamon.com or 301-577-0244 (ext. 25) about meeting logistics and NIGMS program director Ravi Basavappa at basavapr@nigms.nih.gov or 301-594-0828 about the scientific program.

Systems Biology Centers Annual Meeting

NIGMS and the National Cancer Institute are sponsoring the annual meeting of the National Centers for Systems Biology on June 12-13, 2007, in Boston, MA. A meeting Web site has not yet been posted. Address any questions to NIGMS program director Peter Lyster at lysterp@nigms.nih.gov or 301-451-6446.

Research Administration Notes

Electronic Grant Application Reminder

Please note that renewal, revised, or resubmitted R01s due on March 5 have an additional required field of “Federal Identifier”; this is the NIH institute/center and grant number (e.g., GM12345). [Assistance](#) with the submission process is available.

Future changes include the conversion of existing forms to Adobe Acrobat® and the transition of training and career mechanisms (F, K, and T series) to electronic submission.

Changes to SCORE Program

The SCORE (Support of Competitive Research) program, designed to increase the research competitiveness of investigators at minority-serving institutions and the research capabilities of these institutions, has been revised (see [NOT-GM-07-100](#)). Separate funding opportunities now exist for individual, investigator-initiated research awards and for a stand-alone, institutional award. Applicants are strongly advised to review the SCORE [program announcements](#) and the frequently asked [questions](#) before applying. For more information, contact NIGMS program director Hinda Zlotnik at zlotnikh@nigms.nih.gov or 301-594-3900.

Resources

Congressional Budget Justification for Fiscal Year 2008

NIH components annually prepare documents that support the President's budget request to Congress. These reports, in conjunction with testimony from NIH and component leaders, are the foundation for the appropriations process. The current [NIGMS Congressional budget justification](#) is now available.

Fiscal Year 2006 Funding Trends

As mentioned in the [November 2006 issue](#) of the *Feedback Loop*, we have prepared NIGMS funding trends data for Fiscal Year 2006 and have [posted](#) the figures.

Working Group on Women in Biomedical Careers

NIH Director Elias Zerhouni has created and is co-chairing a working group to examine the barriers facing women scientists and to develop innovative strategies that can be implemented to promote the advancement of women throughout the research community. Details will be posted on the NIH Office of Research on Women's Health [Web site](#).

NIGMS Feedback Loop Wants Your Feedback

NIGMS has produced the *Feedback Loop* for 2 years. Do you find it useful and informative? How could it be improved? Please e-mail your comments and suggestions to editor Jim Deatherage at deatherj@nigms.nih.gov. You can read previous issues in the [archive](#).

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