

NIGMS Feedback Loop

A catalyst for interaction with the scientific community



IN THIS ISSUE . . .

November 19, 2007

Director's Message

Funding Opportunities

- [NIH Director's Pioneer \(DP1\) and New Innovator Awards \(DP2\)](#)
- [Chemical Methodologies and Library Development Centers \(P50\)](#)
- [Development of High Resolution Probes for Cellular Imaging \(R01\)](#)
- [Developmental Pharmacology \(R01\)](#)
- [Postbaccalaureate Research Education Program \(PREP\) \(R25\)](#)
- [Bridges Programs \(R25\)](#)

NIGMS-Sponsored Events

- [Protein Structure Initiative Meetings](#)

Research Administration Notes

- [Minority Program Changes](#)

Resources

- [NIH Roadmap Resources](#)
- [Frontiers in Glycomics](#)
- [Computational Biology Research](#)

Job Announcement

- [Program Director, NIGMS Division of Pharmacology, Physiology, and Biological Chemistry](#)

The *NIGMS Feedback Loop* e-mail newsletter alerts researchers to NIGMS [funding opportunities](#), trends, and plans. NIGMS grantees are automatically subscribed; we encourage other interested individuals to subscribe themselves. To subscribe, change your subscription options, or unsubscribe, visit the *NIGMS Feedback Loop* [subscription page](#) on the NIH LISTSERV Web site.

What information would you like to see in future issues? Send your ideas to *NIGMS Feedback Loop* coordinator James Deatherage (deatherj@nigms.nih.gov, 301-594-0828).

Director's Message

It is hard to believe that 4 years have passed since I became Director of NIGMS. Each year has had its own opportunities and challenges, and the past year is no exception.

Fiscal Year 2007 ended on September 30. As I noted in the previous issue of the [NIGMS Feedback Loop](#), NIH received its appropriation from Congress through the Joint Budget Resolution in February. This resolution provided some funds above what were in the President's budget request. Some of these funds went to start new programs, such as the [NIH Director's New Innovator Awards](#) and the [NIH Director's Bridge Awards](#) through the NIH Common Fund. Other funds effectively flowed to the institutes and centers. NIGMS used the great majority of the additional funds it received to support more research project grants. The net result is shown in Figures 1 and 2.

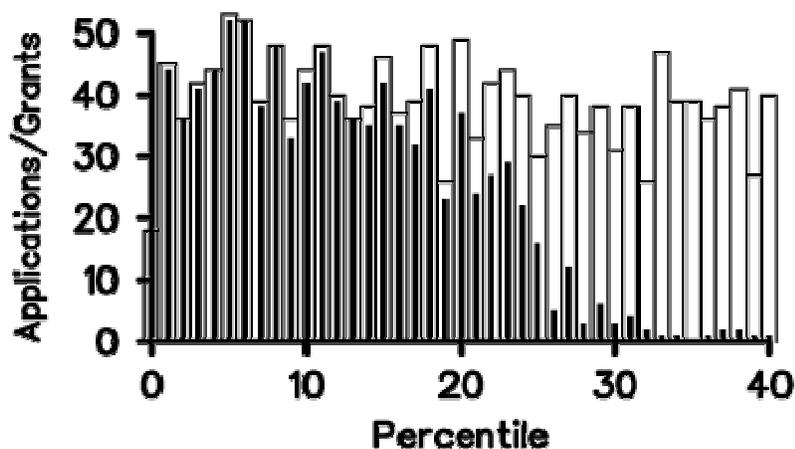


Figure 1. NIGMS R01 applications reviewed (white rectangles) and funded (black bars) for Fiscal Year 2007. All competing applications are included.

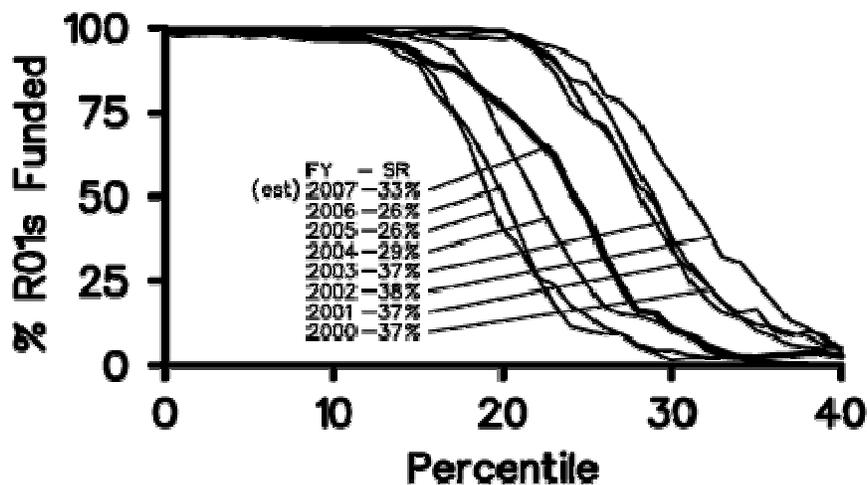


Figure 2. NIGMS funding curves for Fiscal Years 2000-2007, including all competing R01 grant applications.

Due to the combined effect of an increase in the number of grants awarded and the decrease in the number of applications received, the overall success rate for R01s rose to approximately 33%, well above our [previous projection](#) of 29%. In addition, the ratio of awards to applications for unamended, new R01 grants increased to approximately 14.5%, compared to approximately 11.5% for Fiscal Year 2006.

The appropriation process for the current fiscal year is proceeding. Congress passed the Conference Report on H.R. 3043 appropriating \$30 billion for NIH. This corresponds to a 3.1% increase for NIH overall (correcting for a transfer of \$300 million for the global AIDS fund), with an increase of 2.5% for NIGMS. This bill also addresses a number of important policy issues, including requiring the submission of manuscripts generated with NIH support to PubMed Central within 1 year of publication (assuming that this policy can be implemented consistent with copyright law). In addition, the bill calls for an increase of 2.5% in the average cost of new research project grants as well as the funding of existing grants at committed levels. On November 12, the President vetoed this bill and sent it back to Congress for reconsideration, so the process continues.

Appreciation

I want to thank those of you who provided comments regarding various NIGMS and NIH activities, including the NIGMS strategic planning process, the Protein Structure Initiative assessment, and the NIH-wide Enhancing Peer Review project. Your input is quite valuable to us, and NIGMS staff members and I read and consider each comment.

The assessment of the Protein Structure Initiative will be presented to the National Advisory General Medical Sciences Council in January 2008, and the NIGMS Strategic Plan for 2008-2012 will be released at approximately the same time. The status of the NIH Enhancing Peer Review project will be presented at a meeting of the Advisory

Committee to the Director, NIH in December, and project development will continue in 2008. There likely will be other opportunities to provide input as this important effort moves forward.

I would also like to take this opportunity to thank everyone who has served on NIH peer review committees. The entire NIH system depends on the willingness of so many scientists to contribute their time and expertise in this way.

Pre-Application Contact Welcome

If you are considering an application, particularly in response to a program announcement or request for applications, I encourage you to contact NIGMS staff members to discuss your plans. Such communications, preferably well prior to application submission, can avoid misunderstanding and increase the likelihood of satisfactory outcomes.

Nobel Prize to Grantees

NIGMS is proud that two longtime grantees, Mario Capecchi and Oliver Smithies, shared this year's Nobel Prize in physiology or medicine with Martin Evans for the development of "knockout mouse" technology. This brings the total number of NIGMS-supported Nobel Prize winners to 64. Interestingly, some press coverage of the prize indicated that NIH had "rejected" Dr. Capecchi's grant application that included his initial work on homologous recombination. While it is true that the study section members did express some skepticism about this element of his proposal, NIGMS funded the competing renewal application in 1981 for a period of 5 years, with a 19% budget increase over the previous year. I was pleased that *Time* magazine published a [letter](#) I sent clarifying the role of NIGMS in supporting this Nobel Prize-winning research and underscoring the link between taxpayer dollars, NIH funding, and medical advances.

Knockout mice are among the many powerful conceptual and technical tools developed by NIGMS-supported scientists. With these tools, and the abundant creativity and talent of the research community, we are well positioned to tackle the exciting scientific challenges that lie before us.

I wish you a happy and healthy holiday season and, as always, I welcome your comments.

Best,

Jeremy M. Berg
Director
National Institute of General Medical Sciences
bergj@mail.nih.gov

Funding Opportunities

NIH Director's Pioneer (DP1) and New Innovator Awards (DP2)

NIH is calling for applications for 2008 NIH Director's Pioneer and New Innovator Awards. Both programs support exceptionally creative scientists who take highly innovative—and often unconventional—approaches to major challenges in biomedical or behavioral research. [Pioneer Awards](#) are open to scientists at any career stage and provide \$2.5 million in direct costs over 5 years. [New Innovator Awards](#) are reserved for investigators who have not received an NIH regular research (R01) or similar grant and provide \$1.5 million in direct costs over 5 years. The Pioneer Award application period is December 16, 2007, to January 16, 2008 (see [RFA-RM-08-013](#)). The New Innovator Award application period is March 3 to 31, 2008 (see [RFA-RM-08-014](#)).

Chemical Methodologies and Library Development Centers (P50)

NIGMS re-announces the Centers of Excellence in Chemical Methodologies and Library Development program. The program stimulates the establishment and maintenance of multi-investigator research centers to develop efficient, general, state-of-the-art methodologies for the design, synthesis, analysis, and handling of chemical diversity libraries. We intend to make up to four awards totaling up to \$10 million in the first year. See [RFA-GM-08-007](#), and address questions to program director John Schwab at schwabj@nigms.nih.gov or 301-594-3827.

Development of High Resolution Probes for Cellular Imaging (R01)

NIGMS invites multi-investigator teams to develop new technologies for the high-sensitivity detection of molecules in living cells. NIGMS and the National Human Genome Research Institute plan to fund between six and eight awards of up to \$500,000 in direct costs per year. See [RFA-GM-08-009](#). For additional information, contact NIGMS program director Richard Rodewald at rodewalr@nigms.nih.gov or 301-594-0828.

Developmental Pharmacology (R01)

NIH seeks applications for R01 projects that bring together clinical, translational, and basic researchers working in complementary areas of developmental pharmacology. Applications should address the role of ontogeny on drug-metabolizing enzymes, transporters, receptors, signaling pathways, and the action of anesthetic agents on neuronal activity across developmental periods, from fetal life to adolescence. For details, see [PAR-07-416](#). The NIGMS contact is program director Richard Okita, reachable at okitar@nigms.nih.gov or 301-594-3827.

Postbaccalaureate Research Education Program (PREP) (R25)

The PREP program encourages the pursuit of a research doctorate in biomedically relevant sciences by individuals from underrepresented groups who hold a recent baccalaureate degree. We invite applications from domestic private and public institutions of higher learning with strong Ph.D. programs, demonstrated experience in training Ph.D. candidates, and a significant number of faculty members with NIH or other extramural research support in biomedical and behavioral science fields. For more information, see [PAR-07-432](#) or contact program director Jermelina Tupas at tupasjer@nigms.nih.gov or 301-594-3900.

Bridges Programs (R25)

The [Bridges to the Future](#) programs help students from underrepresented groups transition to and complete degree programs in the biomedical and behavioral sciences. The Bridges to the Baccalaureate program, [PAR-07-411](#), promotes partnerships between community colleges or other 2-year post-secondary educational institutions granting the associate degree and colleges or universities that offer the baccalaureate degree. The goal is to increase the overall institutional transfer rate of these students to baccalaureate degree programs. The Bridges to the Doctorate program, [PAR-07-410](#), promotes partnerships between institutions granting a terminal master's degree and institutions that grant Ph.D. degrees, with the aim of increasing the overall institutional transfer rate of students to such Ph.D. degree programs. Domestic educational institutions, both private and public, and state and local systems of higher education may apply. Direct questions to program director Shiva Singh at singhs@nigms.nih.gov or 301-594-3900.

NIGMS-Sponsored Events

Protein Structure Initiative Meetings

Scientists participating in the Protein Structure Initiative will share reports and progress updates at an [annual meeting](#) on December 5 and 6. A [“Bottlenecks” workshop](#), which offers a forum for discussing technical barriers to the high-throughput determination of protein structures, will be held April 14-16. Space is limited and advance registration is required for both meetings on the NIH Bethesda campus. For details, visit the meetings' Web sites or contact NIGMS program director Charles G. Edmonds at edmondsc@nigms.nih.gov or 301-594-0828.

Research Administration Notes

Minority Program Changes

Applications for Minority Biomedical Research Support (MBRS) Support of Competitive Research (SCORE) awards (SC1, SC2, and SC3) must now be submitted electronically through Grants.gov using standard “S” mechanism submission dates. See [NOT-OD-08-115](#) for details. Additionally, NIGMS is discontinuing the SCORE Institutional Development Award ([NOT-GM-08-114](#)).

Current grantees of the MBRS Research Initiative for Scientific Enhancement and Initiative for Maximizing Student Diversity programs may apply for administrative supplements for equipment replacement or updating as well as for program evaluation activities. For details, see [NOT-GM-08-116](#).

More information about MBRS programs is available at the [MBRS Web site](#).

Resources

NIH Roadmap Resources

Find out about recently announced NIH Roadmap for Medical Research funding opportunities at <http://nihroadmap.nih.gov> or by subscribing to the [NIH Roadmap listserv](#).

Frontiers in Glycomics

An upcoming issue of [Proteomics](#) will include a summary of key conclusions from the September 2006 NIGMS-sponsored workshop, “Frontiers in Glycomics: Bioinformatics and Biomarkers in Disease.”

Computational Biology Research

[Karin Remington](#) joined NIGMS in July as director of the Center for Bioinformatics and Computational Biology. She welcomes your input or questions at remingka@nigms.nih.gov or 301-451-6446.

We focus on the diverse field of computational biology in our latest science education booklet. [Computing Life](#) is geared toward high school and early college students and teachers. You can [order](#) free copies of this or our other publications.

Job Announcement

Program Director, NIGMS Division of Pharmacology, Physiology, and Biological Chemistry

The [NIGMS Division of Pharmacology, Physiology, and Biological Chemistry \(PPBC\)](#) seeks a scientist-administrator to manage grants in the areas of biochemistry and biorelated chemistry, particularly redox biochemistry, bioenergetics, and metallobiochemistry. See the USAJOBS Web site for the [full job announcement](#) (NIGMS-08-229223). The application period ends on Tuesday, December 18. If you are interested in this position or know of others who might be strong candidates, please contact Warren Jones, chief of the PPBC Biochemistry and Biorelated Chemistry Branch, at jonesw@nigms.nih.gov or 301-594-3827.

The NIGMS Feedback Loop is produced by the National Institute of General Medical Sciences, 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. For more information about the Institute, visit <http://www.nigms.nih.gov>. The material in this newsletter is not copyrighted and we encourage its use or reprinting.

RSS [News Feed](#) | [Help](#)

Subscribe to the RSS version of the NIGMS Feedback Loop by selecting [this XML link](#) and following your news reader's instructions for adding a feed.