

NATIONAL HUMAN GENOME RESEARCH INSTITUTE

FUNDING POLICY FOR FISCAL YEAR 2013

INTRODUCTION

The National Human Genome Research Institute's (NHGRI) strategic plan – [*Charting a course for genomic medicine from base pairs to bedside*](#) (*Nature* **470**: 204 – 213; <http://www.genome.gov/27543215>) – articulates a new vision for the future of genomics research and describes the path toward an era of genomic medicine. To implement this vision, NHGRI will support the development of resources, methods and technologies that will accelerate research in understanding the structure of genomes; understanding the biology of genomes; understanding the biology of disease; advancing the science of medicine; and improving the effectiveness of health care. NHGRI will also support research in several cross-cutting areas, including the effect of genomics research on society, research training of investigators, the dissemination of genome information to the public and to health professionals, and bioinformatics and computational biology to advance all areas of the strategic plan.

EXTRAMURAL FUNDING STRATEGY

The extramural research program of the National Human Genome Research Institute (NHGRI) is developed and guided by periodic planning processes, as reflected in the new strategic plan for the field of genomics, referred to above, as well as earlier, similar documents. NHGRI's development of a strategic plan involves participation by many scientists in the extramural community, as well as other scholars and members of the public, and is overseen and approved by the National Advisory Council for Human Genome Research (NACHGR). With guidance from the NACHGR, the program staff develops research initiatives to carry out the Institute's mission. Many of the NHGRI programs, such as the Encyclopedia of DNA Elements (ENCODE), Large-scale Sequencing, Electronic Medical Records and Genomics (eMERGE), Population Architecture using Genomics and Epidemiology (PAGE), Centers of Excellence in ELSI Research (CEER) and several others are regularly assessed and periodically reviewed by the Council and its working groups to ensure that they remain at the leading edge of biomedical research and technology and so that the Institute has a means for expanding into new areas of opportunity as they arise.

Within the scope of this overall guidance, a plan for funding NHGRI's research and training and career development programs is developed each fiscal year. Some factors that affect this funding plan include commitments from prior years, special initiatives that implement objectives described in the strategic plan through Requests for Applications and other solicitations, emerging scientific opportunities, and available funds. The NHGRI strongly encourages prospective applicants and grantees to discuss their research ideas with the appropriate staff as soon as possible during the consideration

and preparation of an application, to ensure that any submitted application is responsive to the NHGRI's dynamic research mission.

Guidelines

Research Project and Center Grants

The Consolidated and Further Continuing Appropriations Act, 2013 (P.L. 113-6), provides NIH with a decrease of about 5 percent below the FY 2012 NIH budget, see NOT-OD-13-064 at <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-13-064.html>. Accordingly, the NHGRI will make efforts to keep the average size of awards constant at FY 2012 levels or lower, but is likely to make fewer competing awards in FY 2013. Consistent with NIH-wide policies, no inflationary increases will be allowed for future years. Additionally, commitments on non-competing grants for FY 2014 and beyond will not be changed at this time. Other select budgetary considerations are noted below.

Non-Competing Grants:

- Generally, non-competing grants will receive a 4.5 percent reduction of the FY 2013 committed level. As noted above, out-year commitments will not be reduced.
- No reductions will be applied to “small grants” with FY13 commitments of \$250,000 total costs or less (typically under R03 and R21 mechanisms).
- Other select programs may be exempt from these reductions, or receive further reductions, based on program priority.

Competing Applications:

- Applications that address issues relevant to the strategic plan will be strongly favored. The strategic plan identifies the following criteria for high priority: technology development, methods development, comprehensiveness, and ability to scale.
- The budgets of new competing applications will be evaluated to assess the appropriateness of the budget to the timeliness of the research goals.
- In general, most projects will be funded for three years; exceptions will be made based on factors such as career stage of the principal investigator, program priorities, needs of the specific research project, how fast the field is changing, and the level of risk.
- Institute-negotiated cost reductions for new and competing RPG and Center applications, beyond those recommended by peer review, will be handled on a case-by-case basis.
- Competing continuation applications that request significant increases over the previous year's budget will be evaluated for the appropriateness of the increases.
- No escalation will be granted for inflationary increases in future years.

- Requests for future year budget increases due to programmatic needs, e.g., equipment, additional personnel, etc. will be considered only if well justified.
- Innovation, impact score, timeliness of the project, program priorities, and whether the applicant is an early stage investigator or a first-time competing renewal principal investigator will be major considerations in funding applications that are taken out of priority score order.
- NHGRI will facilitate early stage investigators to become established investigators by providing them support for four or five years when feasible and appropriate, and by ensuring that budgets are sufficient to support the proposed research.
- NHGRI is aware that principal investigators who submit their first renewal applications may be at risk for a gap in funding, so special consideration will be given to such applications during the development of funding plans.
- NHGRI has always encouraged and supported innovative research, and may increase these efforts by supporting applications that receive highly meritorious scores for innovation, but with overall impact scores that would otherwise preclude them as candidates for funding.

Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs

Non-competing Applications:

SBIR and STTR grants will generally be issued at the FY 2013 committed level.

Competing Applications:

- Funding levels will be awarded in accordance with the NIH implementation of the SBIR/STTR Reauthorization Act of 2011 (P.L. 112-81).
- Applications that address issues relevant to the strategic plan will be strongly favored. The strategic plan identifies the following criteria for high priority: technology development; methods development; comprehensiveness; and ability to scale.
- The impact score, timeliness of the project, and program priorities will be major considerations in funding applications that may be taken out of priority order.
- Institute-negotiated cost reductions for new and competing awards, beyond those recommended by peer review, will be handled on a case-by-case basis.
- No escalation will be granted for inflationary increases.

Research Career and Research Training Awards

The stipend levels established in FY2012 will be continued in FY 2013. Information about NIH's policy on Ruth L. Kirschstein National Research Service Award (NRSA) Stipends, Tuition/Fees and Other Budgetary Levels are at:

<http://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-033.html>

Non-competing Grants:

- Ruth L. Kirschstein National Research Service Awards (NRSA) for fellowships (Fs), training (Ts), and Career Development (Ks) will generally be issued at the FY 2013 committed level.

Competing Applications:

Research Career Development Awards

- Funding priority will be given to the following individuals: (1) those with degrees in the non-biological sciences such as chemistry, computer science, engineering, math, physics and other quantitative sciences who wish to pursue multi-disciplinary approaches to problems relevant to the strategic plan and (2) those with degrees in the medical, clinical or genomic sciences who wish to be cross-trained in genomic medicine.
- Innovation, impact/priority score, timeliness of the project, mentor and research resources, and the program priorities will be major considerations in funding applications that are taken out of priority order.
- No escalation will be granted for inflationary increases.

Research Training (Ts and Fs)

- Priority will be given to institutional training grants that propose to develop scientists who can work as intellectual contributors to interdisciplinary teams developing technologies for genomics.
- Priority for funding of individual fellowships will be given to individuals: (1) wishing to address issues relevant to the strategic plan and (2) whose mentors have NHGRI funding.
- The impact score, timeliness of the project, and the program priorities will be major considerations in funding applications that may be taken out of priority order.
- Institute-negotiated cost reductions for new and competing awards, beyond those recommended by peer review, will be handled on a case-by-case basis.
- No escalation will be granted for inflationary increases.

Conferences and Courses

The National Human Genome Research Institute is committed to disseminating the latest information and technologies through courses and conference grants. However, our investment in this type of research will be limited (in research areas and dollars) and will be targeted to areas that seek to increase the capabilities of US scientists, especially those who are seeking to significantly enhance their skills in research areas relevant to addressing the research issues in the strategic plan.

COMMITMENT TO EARLY STAGE AND NEW INVESTIGATORS

NHGRI is highly supportive of NIH's efforts to encourage the support of new investigators in the early stages of their careers. These policies are described at <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-013.html> and at http://grants.nih.gov/grants/new_investigators/index.htm. To facilitate the implementation of this NIH-wide policy, NHGRI is very flexible in the support of early stage investigators (ESIs) when feasible and appropriate by: (1) funding applications that might have an impact score beyond the range of applications from established investigators; (2) not reducing council-recommended budgets beyond what is required by the NIH fiscal year grants policy; (3) supporting new investigators for four or five years, if requested, unless specific circumstances require otherwise; (4) supporting early stage investigators who are applying for their first competitive renewal; and (5) encouraging postdoctoral fellows to accelerate their independence in academia through the use of the Pathway to Independence Awards. By contrast, most grants to established investigators awarded by NHGRI are for three years to give NHGRI the flexibility to fund unanticipated and new ideas in the rapidly evolving field of genomics.

Beyond these policies, NHGRI staff is aware that the early career years and career transitions are fraught with uncertainties, so we make special efforts to work with trainees and young investigators. Our contact with potential new investigators begins with postdoctoral fellows and career development awardees. In the initial phases of the fellowship or career award, NHGRI staff discusses with fellows and awardees the importance of obtaining strong mentorship, learning from peer relationships and generating quality publications. During the last year of the award, staff counsels fellows and awardees about the various options for furthering their research careers, whether through a career development award or an investigator-initiated grant. In addition, staff is always available to answer their questions about program priorities, how to prepare a meritorious grant application, how the peer review process works, and how to work within the NIH system.

COMMITMENT TO INVESTIGATORS FROM UNDERREPRESENTED GROUPS

NHGRI is highly supportive of investigators from underrepresented groups who apply for support in areas addressed by NHGRI's strategic plan. This support encompasses applications for Ph.D. and M.D./Ph.D. support and applications in response to all of NHGRI's funding opportunity announcements (FOAs) and NIH parent FOAs in which NHGRI participates.

ADHERENCE TO NIH POLICY

Applications Requesting \$500,000 or More in Direct Cost for Any One Year

- NIH requires pre-approval for single applications or for multi-site collaborative studies requesting \$500,000 or more in annual direct costs in any year. Applicants are encouraged to interact with NHGRI staff during the concept development of applications that request \$500,000 or more in direct cost. Applicants planning large grants should request approval from NIH staff at least

six weeks in advance of the planned receipt date. The NIH “Revised Policy On The Acceptance For Review of Unsolicited Applications That Request \$500,000 Or More In Direct Costs” (NOT-OD-02-004) may be found at:

<http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-004.html>.

- The NIH expects and supports the timely release and sharing of final research data from NIH-supported studies for use by other researchers. All investigator-initiated applications with direct costs greater than \$500,000 in any single year will be expected to address data sharing. Applicants are encouraged to discuss their data sharing plan with their program contact at the time they negotiate an agreement with the Institute/Center (IC) staff to accept assignment of their application as described above.