

NHGRI Grant Funding, Review and Award

The Path from NHGRI Appropriations to Scientific Discovery

The National Institutes of Health (NIH) is the largest public funder of biomedical research in the world. NIH provides funding through its 27 institutes and centers, each with unique research missions, priorities, budgets, and funding strategies. The National Human Genome Research Institute (NHGRI) builds on its leadership role in sequencing and understanding the human genome to advance genomics research at NIH and the scientific and medical community at-large.

As one of the smaller institutes at NIH, NHGRI works to make every dollar we spend as impactful as possible by using innovative, team-based methods. We assemble interdisciplinary research teams made up of scientists, clinicians, ethicists and other experts, and we ensure they have the funding and resources to advance genomics research. NHGRI funded \$430 million in extramural research at 184 institutions in 2020. Stewardship of this investment involves a rigorous application and review process.

Activity Types



	Activity	Information	Timeframe
Scientific Program Development	Strategic Planning of NHGRI Research Priorities	NHGRI sets the big picture for the research projects it will fund through strategic planning. The 2020 NHGRI Strategic Vision (<i>Nature</i> 586, 683–692) articulates a vision for genomics research at The Forefront of Genomics that outlines the most compelling opportunities for human genomics research, informed by a multi-year planning process that involved over 50 events nationally and internationally with a wide and diverse range of stakeholders.	Ongoing process
	Congressional Justification	The annual NHGRI Congressional Justification provides the Senate and House Appropriations Committees detailed estimates and justifications for research and research support activities (e.g., infrastructure and administrative).	-
Budget Allocation	Appropriation of Funds	The federal appropriations process provides NHGRI with budget authority each fiscal year. Budget authority is given to carry out Section 301 and Title IV of the Public Health Service Act with respect to human genome research. Authority provided by appropriations is not immediately available for obligation or expenditure.	Before Oct. 1 or Variable
	Apportionment by the Office of Management and Budget	The Office of Management and Budget (OMB) distributes funding available for obligation to NIH. NIH must receive the funds from OMB no later than 30 days after the start of the new fiscal year or 30 days after enactment of the appropriations act.	Before Nov. 1 or ≤ 30 days after appropriation
	Allotment by NIH Office of Budget	Allotment by the NIH Office of Budget (OB) transfers authority over the funds as allowances from the director of NIH to directors of institutes and centers, such as the NHGRI director, to incur obligations within a specified amount, within a specified period.	-
	Sub-Allotment by NHGRI Budget Office	The NHGRI Budget Office further divides these funds within the operating budget for the Institute, following NHGRI's policies and priorities. First, NHGRI funds projects and centers that have commitments from previous years. NHGRI funds each grant for about 3 years, on average. The Institute uses the remainder of the funds on operations, new strategic scientific funding, small business grants, and ethical, legal and social implications (ELSI) research.	-

Scientific Program Development

Budget Allocation

Grantee Research

Activity	Information	Timeframe
Preparation of Funding Opportunity Announcements	For new strategic scientific funding, NHGRI solicits applications from researchers across the U.S. with projects aligned with the Institute's mission and priorities. Grant support availability is typically advertised through funding opportunity announcements (FOAs). Some FOAs are broad and allow the scientific community to make creative and impactful proposals. Others are large initiatives that NHGRI conceptualizes, with the help of the NHGRI Advisory Council, and funds go to the best candidate(s). FOAs are approved by the National Advisory Council for Human Genome Research (NACHGR) and undergo policy review.	8-11 months
NHGRI Issues Funding Opportunity Announcements	Researchers can search for active FOAs in the NIH Guide for Grants and Contracts or grants.gov . Researchers prepare to apply by ensuring all registrations are in place and becoming familiar with specific requirements.	2 months before open date
Open Date	The open date is the earliest submission date for an application to a particular FOA.	-
Application Period	Researchers can contact NIH and NHGRI staff listed in the FOA to discuss their application. NIH encourages applicants to apply early to allow adequate time to make potential corrections to errors found in the application during the submission process before the due date.	60-90 days after open date
Letter of Intent Due	Allotment by the NIH OB transfers authority over the funds as allowances from the director of NIH to directors of institutes and centers, such as the NHGRI director, to incur obligations within a specified amount within a specified period. Letters of Intent from applicants allow NHGRI to estimate and plan the review process. NIH policy requires projects with budgets at or exceeding \$500,000 in direct costs for any single year to obtain prior approval from NHGRI at least six weeks prior to the expected submission date.	30-60 days before due date
Application Due Date(s)	After a researcher submits an application, it can take about 10 months or longer until an award is made.	-
Scientific Merit Review	Applications undergo a rigorous two-stage review. Applications compliant with NIH policies are assigned to a scientific review group composed of specialists to evaluate scientific and technical merit.	Month 1 after submission
Advisory Council Review	NACHGR, which is comprised of external subject matter experts, provides a second level of review. NACHGR meets three times per year, typically in February, May and September.	Months 2-8 after submission
Award	After NACHGR approves an application, the NHGRI Grants Administration Branch conducts final administrative reviews, verifying details such as salaries, cost rates, and personnel commitments before finalizing the award. The award system then holds the award for six days to notify Congress and allow offices to request information (Appropriations Act, Section 526). Researchers receive a Notice of Award with appropriate terms and conditions on or before the start date of the project, usually three to seven days prior.	Months 7-10 after submission
Funding Start Date and Post-Award	Researchers have many post-award responsibilities to be a successful steward of NIH funds, such as such as reporting on expenditures, scientific progress, and research outcomes. On average, NHGRI grants are funded for three to five years. Awards can range from one to five years in length.	Duration of award
Scientific Progress	Investment in quality research projects at The Forefront of Genomics has produced immense returns in the form of scientific advances, increased economic activity and improved health for millions.	-



For more information
genome.gov/research-funding

