

National Human Genome Research Institute

NHGRI conducts and funds world-class genomics research, trains the next generation of genomics experts, and collaborates with diverse communities to improve human health.



Empowering the Biomedical Community

Building on our leadership role in sequencing the human genome, NHGRI uses a “team science” approach to tackle increasingly complex biological problems. As one of the smaller institutes at the National Institutes of Health (NIH), we make every dollar we spend many times more impactful than using more traditional methods alone. We assemble interdisciplinary research teams, consisting of scientists, clinicians, ethicists, and other experts, and ensure they have the funding and resources to advance genomics. This approach has stimulated a cultural change across biomedical research toward enhanced data sharing, increased collaboration in the scientific and medical communities, and a heightened appreciation for the impact of genomics on society.

Research Funding Areas:

- Structure and Biology of the Genome
- Biology of Disease
- Genomic Medicine
- Data Science
- Early Career Training
- Ethical, Legal, and Social Implications of Genomics
- Small Business Innovation

Our Institute



1 of **27** institutes and centers at the NIH



500+ staff



\$556,881,000 (FY18) budget
(1.5% of the total NIH budget)



5% of NHGRI's research budget is dedicated to the ethical, legal, and social implications of genomics



Transforming Patient Care

NHGRI is enabling healthcare professionals to use their patients' genomic information for personalized care. By catalyzing new technologies and building translational programs, our experts are helping understand, diagnose, and treat both rare and common diseases in increasingly sophisticated ways.

Rare Diseases

Our network of medical experts and scientists bring hope to patients and families by using genome sequencing to make difficult diagnoses of rare diseases. We study the genetic underpinnings of disease and use this information to identify previously undiagnosed diseases.

Genomic Medicine

The research we fund paves the way for precision medicine by creating tools to analyze genomic data and electronic medical records of individuals to study common diseases. This enables us to pilot new approaches for personalized drug treatments that someday will be available to everyone.



Driving Responsible Use of Genomics

NHGRI is committed to driving the responsible use of genomics in society in order to advance knowledge and ensure genomics benefits the health of all humans. To do this, we consider the ethical, legal, and social implications of genomics in all aspects of our work.

Our teams are:

- Exploring privacy concerns and how to communicate genomics research results to research participants and their providers.
- Increasing participation of underrepresented populations in our research with a goal of equitable access to genomic advances.
- Engaging with diverse communities to increase genomic literacy.
- Working with policymakers to inform policy decisions and help prepare for a future in which genomic information is part of everyday life.



A 2020 Vision for Genomics

NHGRI launched a new round of strategic planning to establish a “2020 Vision for Genomics” that will expand the field into new frontiers and enable novel applications to human health and disease. To ensure the widespread relevance of the new strategic plan, we are seeking input from scientific, medical, and diverse public communities to help guide our planning process. Everyone is invited to submit ideas on our website, social media, or via email, or visit with us in person at one of our public town halls taking place across the United States.

 genome.gov/genomics2020

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