

3 Netscape: Human Genome Project Information

Location: <http://www.ornl.gov/hgmis/>

Human Genome Project Information

Welcome! Explore this site for information about Human Genome Project. Officially begun in 1990, multidisciplinary U.S. effort has among its primary estimated 80,000 human genes.

- Scientists and researchers: Explore our technical
- All other visitors: Begin your search below.

Both *technical* and *nontechnical* sites are funded by *Human Genome Program*. (DOE HGP).

- Students! Quick answers here - [Human Genome Project History, Goals, and Progress](#)
- [Understanding the Basics: The Science Behind it](#)
- [Teachers: Resources and Funded Education Projects](#)
- [Genetic Support Groups](#)
- [How the New Genetics May Affect You](#)
- [What's New In the Project?](#) ([September 11](#))
- Publications
 - [Primer on Molecular Genetics](#): Basic Guide
 - [To Know Ourselves](#): A Review of Genetics Project
 - [Your Genes, Your Choices](#), a book describing science behind it, and the ethical, legal, and project. Also [mirrored](#) on this site.
 - [Human Genome News](#) Newsletter
 - [Other Publications](#): DOE Program Reports and
 - [Gateways To Other Resources](#): HGP and Geneti

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3 Netscape: DOE Human Genome Program Home Page

Location: http://www.er.doe.gov/production/ober/hug_top.html

U.S. Department of Energy
Office of Energy Research
Office of Biological and Environmental Research

Human Genome Program

The Human Genome Program of the Department of Energy is focused on reaching the goals of the U.S. Human Genome Project in cooperation with the extramural division of the National Human Genome Research Institute of the National Institutes of Health. The U.S. project is part of a larger international endeavor to characterize the genomes of humans and several model organisms. Other genome programs include the DOE microbial genome program, a project to characterize microbes of environmental or industrial interest.

The DOE Human Genome Program includes research projects at universities, DOE genome centers, DOE-owned national laboratories, and other research organizations.

An Introduction

The U.S. Human Genome Project (HGP) is the national coordinated 15-year effort to characterize all the human genetic material—the genome—by improving existing human genetic maps, constructing physical maps of entire chromosomes, and ultimately determining the complete sequence of the deoxyribonucleic acid (DNA) subunits in the human genome. Parallel studies are being carried out on selected model organisms to facilitate the interpretation of human gene function. The ultimate goal of the U.S. project is to discover all of the more than 50,000 human genes and render them accessible for further biological study.

Vital and very active genome research is also being pursued by researchers and science funding agencies outside the United States. In addition to the NIH National Human Genome Research Institute, there are other genome programs in the United States, including a genome program of the Department of Agriculture. A directed microbial genome program is also supported by the DOE Office of Biological and Environmental Research to create an infrastructure for characterizing microbes of industrial or environmental interest.

Current technology could be used to attain the objectives of the HGP, but the cost and time required would be unacceptable. For this reason, a major feature of the first 10 years of the project is to optimize existing methods and develop new technologies to increase efficiency in DNA mapping and sequencing 10 to 20-fold. The genome will eventually be sequenced using continually evolving technologies and revolutionary methods.

Information obtained as part of the HGP will dramatically change almost all biological and medical research and dwarf the catalog of current genetic knowledge. In addition, both the methods and the data developed as part of the project are likely to benefit investigations of many other genomes, including a large number of commercially important plants and animals. In a departure from most scientific programs, research is also funded on the ethical, legal, and social implications (ELSI) of the data produced by the HGP.

3 Netscape: Human Genome Project Information: Research

Location: <http://www.ornl.gov/hgmis/research.html>

Human Genome Project Research

Welcome! Explore this site for U.S. Human Genome Project progress, research, and resources. Visit our [less technical](#) site for history of the project, education materials, and ethical, legal, and social issues. Both web sites are funded by the U.S. Department of Energy [Human Genome Program](#) (DOE HGP).

Latest News

- [News](#) ([October 8, 1997](#))
 - Information on the 1997 DOE Human Genome Program Contractor-Grantee workshop [available](#).
- [Funding and Training](#) ([September 11, 1997](#))

Publications

- [Calendars](#)
 - [Meeting Calendar](#)
 - [Training Calendar](#)
 - [Meetings Web Site](#)
- [Human Genome News](#) newsletter
- [U.S. DOE Program Reports and Workshop Abstracts](#)

Research Topics

- [Sequencing Research](#)
- [Mapping Research](#)
- [Instrumentation Research](#)
- [Informatics Research](#)
- [Ethical, Legal, and Social Issues \(ELSI\) Research](#)
- [U.S. Research Centers](#)
- [Goals for Human Genome Project Research](#) (revised 5 Year Plan)

Finding More Info

- [Links to the Genetic World: Links World-Wide](#) ([July 1997](#))
- [Contacts for the Human Genome Project](#)
- [Contacts for this web site](#)

[Search this web site](#)

[Understanding the Internet and Web](#): a brief tutorial for new web users.
[Site Stats and Credits](#): Disclaimers, links to clip-art sources, web awards, and statistics about this web site.

This Web site is maintained by the [Human Genome Management Information System \(HGMIS\)](#) for the U.S. Department of Energy [Human Genome Program](#). HGMIS is an information resource at [Oak Ridge National Laboratory](#). The site is being continuously updated and HGMIS appreciates your input. Send questions or comments to caseydk@ornl.gov and URL updates or Web questions to martinsa@ornl.gov.

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The DOE Human Genome Program and Human Genome Project Information Web sites offer both general and scientific audiences thousands of text files and links for comprehensive coverage of all aspects of genome research worldwide. See text (pp. 63 and 65) for further details.

