NETWATCH

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DIRECTORIES

Genome Hubs

If you are looking for an up-to-date list of genome sites, try this jump page compiled by the International Human Genome Sequencing Consortium.* GenomeWeb is another good general directory and includes a paragraph or two describing each site (not just links). The collection ranges from protein sequencing tools to a biocomputing glossary.†

* www.ensembl.org/genome/central
† www.hgmp.mrc.ac.uk/GenomeWeb

DIVERSIONS

Funny Genes

Bogged down in a blizzard of genome papers? For a dose of comic relief—and great door-decoration potential—check out *Slate*'s online trove of genome-related cartoons. Political cartoonists from around the world poke fun at the commercialization of genes, Al Gore's genome, and the potential to finally unravel the genetic basis of puzzling personality traits.

cagle.slate.msn.com/news/gene

EDUCATION

Genomes for All

To someone who's not a biologist, the human genome can seem both simple (it's just a string of four letters, right?) and dizzyingly complicated (what's a single-nucleotide polymorphism?). Fortunately, the Web is packed with good sites that explain the genome to the ignorant and informed alike.

The National Human Genome Research Institute (NHGRI), for instance, has just released a multimedia-packed Web site called Exploring Our Molecular Selves.* It includes a video documentary about the Human Genome Project, animated molecules and cells, an interactive timeline, and a new edition of NHGRI's "talking" genomics glossary (video clips of scientists explaining terms). It's also available as a free kit with a CD-ROM, poster, and video. And the Department of Energy's genome site recently unveiled an online poster where visitors can click on each of the 22 chromosomes (plus X and Y) and see the names of genetic diseases neatly lined up where they're located.†

For genome news, check out the Genome News Network, billed as "an editorially independent publication" of Celera Genomics Inc.‡ It offers genome tutorials plus articles about new human and plant genome research. There is also "SNP Shots," which highlights those single-nucleotide polymorphisms—variations in a single letter of a sequence—that can serve as markers for disease.

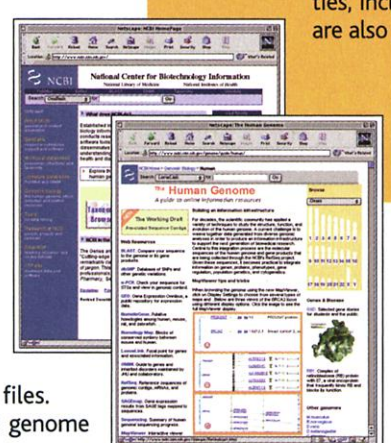
For students who really want to get their hands dirty, check out the Cold Spring Harbor Laboratory's DNA Learning Center,§ which has a slew of sophisticated online genetics activities, including BioServers, which allow visitors to analyze sequence data. There are also animations explaining techniques such as PCR and DNA fingerprinting.

* www.nhgri.nih.gov/educationkit
† www.ornl.gov/hgmis/posters/chromosome
‡ celera.com/genomics/genomics.cfm
§ vector.cshl.org/resources/resources.html

RESOURCES

The DNA Vault

GenBank, the central database for gene sequence data, isn't the only place to browse the human genome, but it's the best known. Folks at the National Center for Biotechnology Information (NCBI), which tends GenBank and other workhorse databases such as PubMed, also churn out a slew of related resources for genome fans.



NCBI's human genome splash page,* freshened up for the genome's publication, now includes a revamped map viewer—a tool for viewing the genome sequence and annotation data—that's faster and more flexible, says NCBI's Kim Pruitt. One improvement: Users can now comb through a true database, rather than use a search engine to flip through individual files.

Not to be forgotten in the genome hoopla are the many handy features on NCBI's home page.† They range from a database of macromolecular 3D structures to refreshingly accessible tutorials on bioinformatics.

* www.ncbi.nlm.nih.gov/genome/guide/human
† www.ncbi.nlm.nih.gov

Science ONLINE

The *Science* Functional Genomics Web site, *Science* Online's new feature in the fields of genomics and postgenomics, now includes a special section on the human genome. Among the offerings: links to articles and Web resources on the human genome's scientific, medical, and ethical dimensions; reviews of some online glossaries in genomics and biotechnology; and a selection of classic articles, reviews, and news coverage from *Science* related to key events in the genome timeline that appears in this issue.

www.sciencegenomics.org

Send great Web site suggestions to netwatch@aaas.org

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