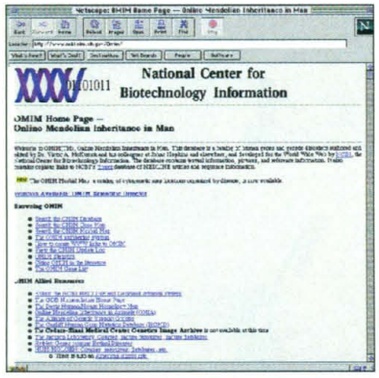
# NETWATCH

edited by JOCELYN KAISER

## Window on Disease Genes

**SITE VISIT**

The Web holds lots of human gene databases, but few put the information in context for researchers, doctors, and students alike. That's the premise behind Online Mendelian Inheritance in Man (OMIM), a Web site maintained by the National Center for Biotechnology Information. Senior researcher and site programmer Brandon Brylawski describes it as a "curated database," in which experts summarize the literature on all known human genes and genetic disorders.




**www.ncbi.nlm.nih.gov/omim**

OMIM is an outgrowth of a hard-copy catalog begun in 1966 by Victor McKusick of The Johns Hopkins University, who now edits the Web version along with about 25 colleagues. The site can be searched using key words such as gene name, author, or disease. A query for "cystic fibrosis," for instance, results in a list of 82 genes. Clicking on a gene brings up the disease's history, the gene's function and location, references, and links to MEDLINE abstracts. McKusick's team adds roughly 50 new genes each month to OMIM, now at over 9300 entries for genes and disorders.

Moyra Smith, a geneticist at the University of California, Irvine, says she uses the site almost daily. Recently, she saw a patient diagnosed with cerebral palsy who had two cousins with palsy—not normally an inherited disease. Using OMIM, Smith found that the boy's symptoms fit Pelizaeus-Merzbacher disease, a genetic syndrome. A MEDLINE link led her to an expert on the disease, and she sent blood samples to him. "I won't say I couldn't have gotten the information without OMIM," Smith says, "but I got it much more quickly with it."

**NET PICS**

**Mars scar.** This portrait of Mars made from 102 Viking Orbiter images comes from a gallery of stars and planets posted by NASA's data archive, the National Space Science Data Center (NSSDC). Edwin Bell, who helps maintain two collections that include some 800 images,* says NSSDC created the sites in response to a barrage of public requests for the art. The most popular image, he says, is the "face" on Mars, an eerie Viking 1 shot of a bumpy region called Cydonia Mensae that gets about 2500 hits a week; runner-up is a photo of Earth from the Apollo 17 mission that's widely used in advertisements. Also included on the sites are interesting, unsung landscape features, Bell says. The 4000-kilometer-long Valles Marineris canyon system shown above, for example, is the largest known chasm in the solar system and would stretch from Washington, D.C., to San Francisco.

* **nssdc.gsfc.nasa.gov/photo_gallery/** and **nssdc.gsfc.nasa.gov/imgcat/**

**HOT PICKS**

**Bomb signatures.** Seismic signals provide clues to the punch packed by nuclear devices recently tested in Pakistan and India. To see the seismograms for yourself, start at a site operated by the Incorporated Research Institutions for Seismology (**www.iris.washington.edu**). For news, analysis, and policy background about the tests, try the Coalition on the Comprehensive Test Ban Treaty site, **www.clw.org/pub/clw/coalition/ctbindex.htm**

**Outsmarting HIV.** To design better AIDS drugs, researchers need to know how HIV mutates in response to various drug treatments. Now they can turn to a new public site linking HIV gene sequences to info on treatment history. The site, launched by a Stanford University researcher in conjunction with an article on HIV resistance appearing this week in *Annals of Internal Medicine*, contains some 4500 HIV sequences. **hivdb.stanford.edu**

## Database Bill Worries Scientists

**NEWS**

A hotly contested bill that would grant sweeping new protections to private databases passed the House last month after drawing protest from academic and scientific groups, which claim the measure could impede research. Although Senate action is considered unlikely this year, opponents are continuing to lobby hard against the bill.

H.R. 2652, the Collections of Information Anti-Piracy Act, would give compilations of facts and figures a form of protection analogous to what copyright law provides to creative works. Such protections have long been sought by the $28 billion database industry, which says that information compiled at great expense is otherwise left open to freeloaders and piracy. The issue last came up (and died) 2 years ago during international treaty talks (*Science*, 25 October 1996, p. 494).

Arrayed against H.R. 2652 are electronic freedom, library, and scientific organizations, which argue that greater protections could block public and scientific access to published data—long enjoyed under "fair use" doctrines. Lawmakers included an exemption for researchers and educators whose analyses don't "harm the actual or potential market" of a database. But American University law professor Peter Jaszi, a member of the Digital Future Coalition, says the bill "leaves it entirely to the proprietor of the information how the market is defined." Because of the murky wording, says Mark Frankel of AAAS (*Science*'s publisher), scientists may "be reluctant to pursue" research that relies on private databases—from geological to genomic. "They may not be able to afford it monetarily or be able to abide by the agreements that database providers want to impose on them," Frankel says.

No Senate champion for the bill has emerged, and both sides say its outlook is dim for this year. "But I would hope at least to get a hearing in the Senate" before year's end, says Dan Duncan of the Information Industry Association. That, he hopes, would force critics to stop rejecting "the entire concept" and instead offer "good, solid suggestions for how to protect databases."

## SCIENCE ONLINE

For scientists who think they might have a head for business, *Science*'s Next Wave today explores careers in market research in the pharmaceutical and biotech industries. Next Wave essayists discuss how they built on their scientific training and made the transition from the lab bench to thinking about how to move a product into the market. **www.nextwave.org**

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