



IMAGES

Mouse Brain Bank

Lost in the maze of a mouse's brain? That's an occupational hazard for neuroscientists peering at slices of brain for signs of drug effects, disease, or how genes shape the normal brain. Making their work a bit easier—and hopefully sparing a few mice lives—is the Mouse Brain Library, an online database of "many, many brains," says Rob Williams, a neurogeneticist at the University of Tennessee, Memphis. The site serves up brain sections, some detailed enough to reveal individual cells, for 120 mouse strains. (Above is C57BL/GJ, the strain being sequenced as part of the Human Genome Project.) Some scientists and students use the images as references for experiments, Williams says, while others may need help figuring out which specks of gray matter are caudate or cortex. Williams and collaborator Glenn Rosen are also working on iScope, a microscope trained on mouse brain slices that anyone can control via the Web. www.mbl.org

HOT PICKS

Book of plants. Botanists on three continents have just unveiled the International Plant Names Index, "the most comprehensive listing of seed plant names available to date." The database of bibliographic citations for a staggering 1.3 million species should prove useful for everyone from ethnobotanists to weekend gardeners. www.ipni.org

Next best thing to being there. Tour Greenland's glaciers, fly through a model of Death Valley, check out plate tectonics in the Himalayas, drop by the prehistoric Bering land bridge, and more at this long list of virtual geology field trips.

homepage.smc.edu/robinson_richard/geologycentral.htm

Virus toolkit. Whether it's poliovirus or tobacco mosaic virus, biologists can quickly get a handle on viral shapes at the Virus Particle Explorer. The site offers structures oriented in a consistent way for the 60 or so icosahedral viruses archived in the Protein Data Bank, along with other info such as surface properties. mmtsb.scripps.edu/viper/viper.html



NET NEWS

A Censor-Proof Internet?

For civil libertarians, the promise of the Internet as a forum for free expression remains unfulfilled. Not only have China and other countries cracked down on content on their governmentcontrolled networks, but even in the free world, Internet service providers have agreed to yank Web pages that certain groups found offensive. Now volunteers are gearing up to test a scheme that may foil censors' plans.

It's not hard to track down the computer hosting a Web page; the domain name can be enough. But computer scientists at AT&T and New York University have now devised a way to blur a document's origin (www.cs.nyu.edu/~waldman/publius). Called Publius after the pen name of the authors of the Federalist Papers, the system works by encrypting a document a number of different ways that can't be decoded individually. Instead, the meaning becomes clear only after several versions are combined. Publius will send coded copies of a sensitive document to a large number of different servers. Each copy looks like nonsense, even to the person who runs the server. To read a Publius-encrypted file, a computer combs the Web for a few encrypted copies and combines them to reconstruct the original. "There's no central place where everything is stored," says co-inventor Avi Rubin of AT&T.

edited by JOCELYN KAISER

A 2-month test of the service will be conducted beginning 28 July, and the community seems eager to help. "We've got a lot more volunteers than we can use," says Rubin.

SITE VISIT

All of Astronomy

Physicists and astronomers were among the first to weave the World Wide Web in the early 1990s. As the number of astronomy sites soared, several astronomers gathered the random patterns of pages into an organized constellation. Today, their 6-year-old consortium, called AstroWeb, maintains a database of nearly 3000 astronomical resources—a Yahoo of sorts. There are links to about 500 astrono-

my departments, more than 300 observatories and satel-

lites, dozens of newsgroups and mailing lists, and almost 800 researchers' Web pages. A robot checks each link daily "to ensure aliveness," says one of AstroWeb's curators, Daniel Egret of the Strasbourg Astronomical Observatory in France. Those that fail to respond are banished to the dreaded "dead URLs" bin.

Strasbourg houses the main site, with mirror sites (featuring different sorting schemes) in Australia, England, Spain, and the United States. AstroWeb's primary users are professionals who need quick access to colleagues, institutions, and data (see p. 238), Egret says. Still, the site is a treasure trove for those who simply wish to wander the virtual

universe. A large directory of "pretty picture" sites leads to dazzling astronomical images, while a history category opens portals to such intriguing topics as Chilean archaeoastronomy and astronomical links "with an Islamic flavour."

Science ONLINE

Science Online now has a new, cleaner site design that should be easier to navigate (www.scienceonline.org). While you're there, check out our daily online news service, *Science*NOW, to which we've added more graphics and hyperlinks (www.sciencenow.org).

Send Internet news and great Web site suggestions to netwatch@aaas.org

cdsweb.u-strasbg.fr/astroweb.html

