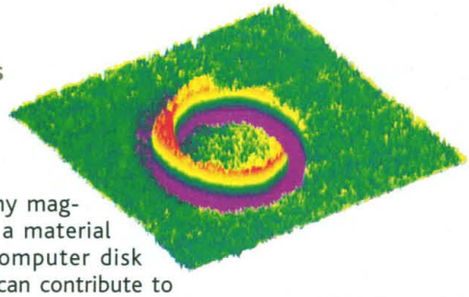
NETWATCH
edited by JOCELYN KAISER

COOL IMAGES

Feeling The Way



This loop is a tiny magnetic feature in a material used to make computer disk read heads that can contribute to magnetic noise. A mere 5 micrometers across—1/20 the width of a hair—the defect formed when tantalum, nickel-iron, and iron-manganese were sputtered in layers onto glass. Researchers at the University of Alabama, Tuscaloosa, probed the structure with a magnetic force microscope, which drags a minuscule tip over a surface to sense its contours and magnetic charge. The red and orange areas are, respectively, positive and negative surfaces.

The picture appears in the "NanoTheater" at the Web site of Digital Instruments, which sells scanning probe microscopes. Contributed by scientists at companies and in academia, the dazzling collection ranges from channel gates on a silicon chip to strands of DNA.

www.di.com/Theater/Main.html

HOT PICKS

Journals watch. No time to swing by the library to scan the latest biology journals? This Web portal posts the current covers of *The New England Journal of Medicine*, *Development*, and other publications, plus links to over 100 journal home pages (where you can usually see the table of contents and sometimes abstracts). The site also highlights hot papers and connects to MEDLINE. www.cshl.org/medline

Teaching assistant. Need a diagram of a codon or the citric acid cycle, or a schematic showing how DNA is inserted into a plasmid (a loop of DNA found in bacteria) so it can be copied? You can download for free dozens of molecular biology visuals, some with definitions and explanations, at www.accessexcellence.org/AB/GG

Martian chronicler. Red Planet buffs can stay informed at this site with links to news articles and its own features, covering topics like possible martian fossils and the launch of Mars Express in 2003. The site is sponsored in part by a year-old outfit, the Mars Society, which advocates human travel to the planet. www.marsnews.com

NET NEWS

Ethics of Studying Cybernauts

About your e-mail to an Internet discussion group griping how you were unjustly denied tenure: Well, it could wind up in some sociologist's dissertation. Just how freely researchers can make use of Web postings is one of a thicket of cyberspace issues that a group of federal officials, scientists, and ethicists is now trying to hammer out.

From educators using the Net for teaching to clinicians recruiting subjects for trials, scholarship involving the Internet is exploding. And this boom, in turn, is raising serious questions. "It gets very easy to be voyeuristic," notes Stephen Sherblom, a psychologist at Washington University in St. Louis. For instance, should a researcher have to get informed consent to use material posted to a Usenet group, or to eavesdrop on a chat room? Questions such as these from university research oversight committees "are starting to balloon," says Jeffrey Cohen of the federal Office for Protection from Research Risks (OPRR).

To gather input on what to do, AAAS (*Science*'s publisher) and OPRR invited two dozen experts to a workshop in Washington, D.C., earlier this month. "In my opinion, we don't need new ethical principles," says Sherblom, a participant. However, he says, rules must be worked out to determine whether, for example, it's fair to take clandestine notes during an online discussion, or to quote from a posting word for word. Amy Bruckman, a computer scientist at the Georgia Institute of Technology in Atlanta, thinks it would make sense to craft guidelines "for each genre"—anonymity might be more important for a private e-mail list than for a public chat room, she says.

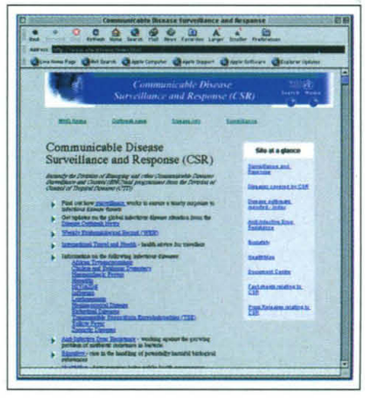
AAAS has set up a Web site featuring a discussion paper* on "human subjects research in cyberspace"; it plans to issue a longer report this fall. Cohen says OPRR hopes to have guidelines ready for research review boards by the end of the year.

*www.aaas.org/spp/dspp/sfrl/projects/intres/main.htm

SITE VISIT

Tracking Killer Microbes

www.who.int/emc/index.html



What should you do if you think you have cholera? What's the latest on the recent outbreak of deadly Marburg virus in the Congo? The answer to these and a slew of other questions pertaining to infectious diseases can be found at the World Health Organization's (WHO's) Communicable Disease Surveillance and Response Web site.

This information-rich site aims to inform health experts and the public about diseases such as leishmaniasis, AIDS, yellow fever, and hepatitis. The main page greets surfers with links to health advice for international travelers, fact sheets on specific diseases, and the WHO's *Weekly Epidemiological Record*, a summary of disease reports issued every Friday. Most useful to researchers, perhaps, are the outbreak updates. For example, since April WHO has posted eight updates on a Marburg resurgence in the Congo that as of late May was suspected of sickening 72 people and had been confirmed as causing five deaths.

Another interesting section is HealthMap, a joint United Nations Children's Fund and WHO program that's teaching public health officials in developing countries how to use Geographic Information Systems to monitor diseases and manage prevention programs. You can click to produce maps from regional to village level—so far, for guinea worm infections and treatments in 17 African countries.

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

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