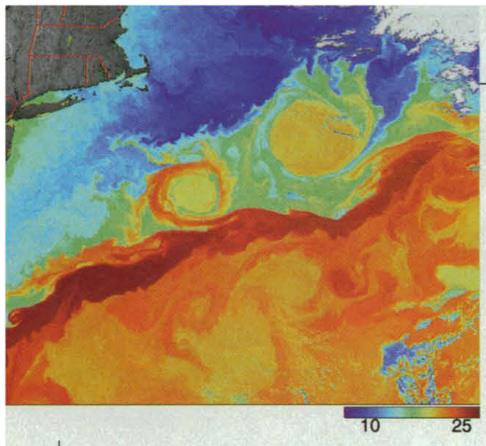


COOL IMAGES

Warming Trend

Looking a bit like an abstract painting is this image of the northern Gulf Stream (the deep orange ribbon) in June 1997. The two circles of pinched-off water to the north, called "warm core rings," support different species than the surrounding water does. You can learn more at the Web site of The Johns Hopkins University Applied Physics Laboratory Ocean Remote Sensing Group. Each day, the group collects high-resolution visible and infrared radiance data from three satellites crossing the United States and pulls out snapshots (or converts the data to temperatures), producing images used by everyone from researchers to hurricane forecasters. In the group's image gallery,* kept by Ray Sterner, views range from the folds of mountain ranges to forest fires and snowstorms. Also check out the link to Sterner's popular landform atlas of the United States.

* fermi.jhuapl.edu/avhrr/gallery

HOT PICKS

Chem history. You can read Benjamin Franklin's musings on the flammability of marsh gas, a 1921 Neils Bohr paper on electronic configurations, and much more at this cache of classic chemistry papers. The linked home page, Classic Chemistry, also serves up weekly history highlights and a dictionary of archaic chemistry terms.
maple.lemoyne.edu/~giunta/papers.html

Surfing lessons. Newcomers to the Web in neurosciences or biomedicine in general might want to check out this online article, "Neurology in the Information Age." It covers everything from Web jargon and how to get online, to brain imaging sites and electronic medical records security.
venus.lrponline.com/journals/ejn/texts/neur-rev.htm

NET NEWS

Protein Database Settles In New Digs

The new curators of a major database for protein structural data and images officially opened their virtual doors last week. Biologists who protested against the move, from a team based at Brookhaven National Lab in New York to one led by Rutgers University in New Jersey, admit they've noticed no glitches, and others are praising the new Protein Data Bank (PDB).

Some scientists were up in arms last fall when the National Science Foundation announced the change, saying that the PDB was working well and questioning why it should be moved (*Science*, 11 September 1998, p. 1584). But the transfer went ahead, and as of 1 July, visitors to the PDB Web site at Brookhaven are automatically routed to a new site (www.rcsb.org). Helen Berman, head of the PDB "collaboratory"—Rutgers, the San Diego Supercomputer Center, and the National Institute of Standards and Technology—says her group has already made clear improvements, for example, by developing software that speeds up the process of checking and annotating newly deposited data. That's helped trim the average time needed to post fully verified new data from 90 days or more to 9 days, she says.

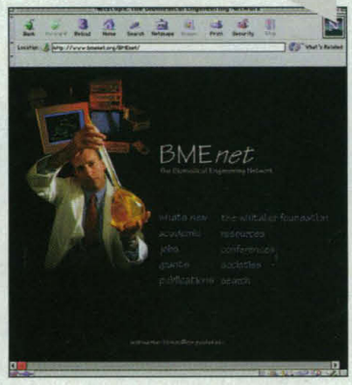
Some of last fall's critics are reserving judgment. Berman's plans "seem very sensible," says Yale University crystallographer Paul Sigler, but "the jury is still out." But biomolecular modeler Tamar Schlick of New York University says she's impressed by the new tools for comparing structures developed by the Rutgers-led group. Schlick says her graduate students tried them out this spring and "were very, very enthusiastic ... they especially loved the 3D visualization." Adds Schlick, "I think Helen and her talented team will prove themselves."

SITE VISIT

Home Base for Biomedical Engineers

Want to bone up on the latest research on artificial limbs? Or find out which researchers are developing biocompatible polymers? Whether you're a student, faculty member, or researcher in biomedical engineering (BME for short), you'll want to explore BMEnet.

www.bmenet.org



Launched in 1994 by the Whitaker Foundation, a nonprofit that funds BME research, BMEnet aims to "cover the waterfront in terms of information for biomedical engineers," says Frank Blanchard of the foundation. (The site is now managed by Purdue University.) One unique feature is a search engine that trolls through hundreds of sites compiled by the Whitaker Foundation, the American Institute of Biological and Medical Engineers, and BMEnet. Typing in "artificial skin," for instance, brings up 229 items ranked by relevance, ranging from research groups studying tissue engineering to an abstract on cryopreserving skin cells.

Other popular sections are the job page and a series of one-page summaries of some 70 biomedical engineering programs in the United States. There are also lists of journals, societies, grants, resources, and conferences. The link to Whitaker's own home page is a useful place to keep up on BME news. Right now, for example, the home page links to a Senate bill that would create a biomedical engineering institute at the National Institutes of Health.

Science ONLINE

Like nerve cells, researchers are learning, the immune system relays information via synapses—junctions where two cells hook up, triggering a cascade of reactions. In an article on p. 221, researchers train a video camera on fluorescence-labeled proteins to reveal how antigen-presenting cells hook up with T cells (a kind of immune cell) and tell them to proliferate. See the action by clicking on 15 movies posted on *Science* Online. www.sciencemag.org

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