

# NETWATCH

edited by JOCELYN KAISER

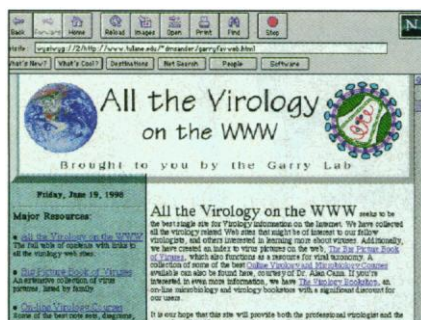
## Viral Motherlode

### SITE VISIT

Need the scoop on a virus? Whether it's tobacco mosaic virus or dreaded Ebola, a good place to start is All the Virology on the WWW, a catalog bursting with links and information on viruses and the diseases they cause. Among the site's features is The Big Picture Book of Viruses—a table packed with virus micrographs and info searchable by name, host, structure, or disease. The site also holds online courses and instructional videos, and it provides more than 1000 links to other virology resources. Webmaster David Sander, who started All the Virology as a grad student at Tulane University Medical School, concisely describes

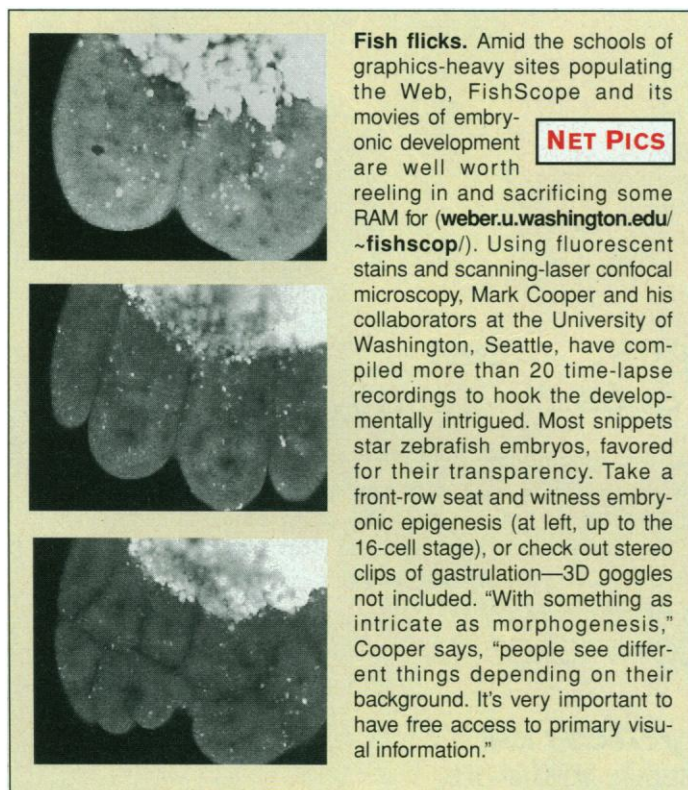
linked sites, which cover everything from AIDS health information to the biological weapons treaty. Visitors can also browse a virology bookshop linked to online bookseller Amazon.com.

Sander, now a congressional aide in Washington, D.C., says he hopes to redesign the site so a user can click on a virus name and get



[www.tulane.edu/~dmsander/garryfavweb.html](http://www.tulane.edu/~dmsander/garryfavweb.html)

pictures, course notes, and related books all on a single page. As it is, All the Virology appears to have plenty of fans: Sander says he gets feedback from researchers, patients, and even grade-school students.



**Fish flicks.** Amid the schools of graphics-heavy sites populating the Web, FishScope and its movies of embryonic development are well worth reeling in and sacrificing some RAM for ([weber.u.washington.edu/~fishscope/](http://weber.u.washington.edu/~fishscope/)). Using fluorescent stains and scanning-laser confocal microscopy, Mark Cooper and his collaborators at the University of Washington, Seattle, have compiled more than 20 time-lapse recordings to hook the developmentally intrigued. Most snippets star zebrafish embryos, favored for their transparency. Take a front-row seat and witness embryonic epigenesis (at left, up to the 16-cell stage), or check out stereo clips of gastrulation—3D goggles not included. “With something as intricate as morphogenesis,” Cooper says, “people see different things depending on their background. It’s very important to have free access to primary visual information.”

**Folded and filed.** Results are just in from a quest launched last month to use a supercomputer to predict protein structures from all 200,000 publicly available protein sequences (*Science*, 29 May, p. 1353).

Compare the 64,561 three-dimensional structures with your experimental data at [www.expasy.ch/swissmod/SM\\_3DCrunch.html](http://www.expasy.ch/swissmod/SM_3DCrunch.html)

**HOT PICKS**

**Satellite rendezvous.** See where the Mir space station is at this very moment and find out when satellites like the Hubble Space Telescope and COBE will cross your patch of sky at [liffoff.msfc.nasa.gov/academy/rocket\\_sci/satellites/](http://liffoff.msfc.nasa.gov/academy/rocket_sci/satellites/)

**Mad cow paddock.** Read the latest news about bovine spongiform encephalopathy and related diseases, learn in grisly detail how beef is made, and view stereo images of prions (the misshapen proteins thought to cause these maladies) at this home page of 4000-plus articles. [www.cyber-dyne.com/~tom/mad\\_cow\\_disease.html](http://www.cyber-dyne.com/~tom/mad_cow_disease.html)

## Virtual U. Talk Worries Faculty

Many University of Washington (UW) faculty members are protesting hints that their state may try to save money

by replacing flesh-and-blood professors with “techno-substitutes,” such as classes held totally on the Internet—a prospect they call “nothing short of disastrous.” Echoing their concerns are predictions that digital teaching will soon lead to a radical restructuring of universities.

The worries stem from starry-eyed comments this spring by Washington Governor Gary Locke and his higher education adviser Wallace Loh about “virtual universities,” in which students would learn from home by CD-ROM and the Internet. That thinking, says a letter signed by close to 900 faculty members, clinicians, and a few grad students, suggests that a blue-ribbon panel advising Locke on the future of public higher education is “bent on replacing face-to-face classroom teaching with ... the ‘brave new world of digital education.’”

The letter also says some policy-makers want to supplant universities “by a profit-driven, digitalized ‘knowledge industry,’” just as health maintenance organizations have changed the playing field in medicine—a scenario not unlike one predicted last month in

a report from financial analysts Coopers & Lybrand. The faculty planned to deliver the letter to Locke and the panel this week.

Faculty members don’t oppose technology “per se,” which “we all use” in teaching, says history professor James Gregory, who helped draft the letter for UW’s American Association of University Professors chapter. Nor do they reject the idea of electronic courses for, say, continuing education. What’s worrisome is the notion that the state can save money by digitally educating future undergraduates, Gregory says: “Virtual universities would rob [students] of many parts of the college experience. ... They seem to have missed the point. They are additions and not necessarily cheap additions.” According to Gregory, a faculty group hoped to meet with Locke to discuss the matter as soon as this week.

## SCIENCE ONLINE

With Congress kicking into high gear on the 1999 budget, now’s a good time to check how the agency that funds your research is faring. Starting today, *ScienceNOW*, *Science*’s daily news source on the Web, will feature a regularly updated table tracking the latest numbers. [www.sciencenow.org](http://www.sciencenow.org)

Send Internet news and great Web site suggestions to [netwatch@aaas.org](mailto:netwatch@aaas.org)