NETWATCH

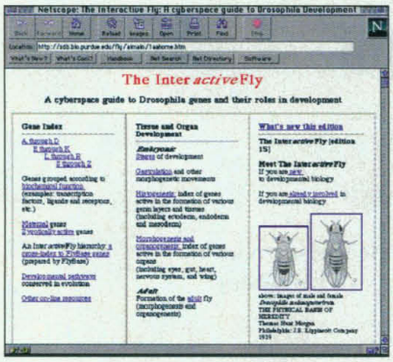
edited by JOCELYN KAISER

Delving Into *Drosophila*

Pioneering studies in the 1930s of where genes lay along chromosomes are one reason the fruit fly remains a favorite research model. Cottoning on to the critter's value, the Web now holds a wealth of information on *Drosophila melanogaster*, from encyclopedias of genes to neuroscience primers.

Students might start with The Interactive Fly, a Web guide created by Thomas Brody, an immunologist who wanted to teach himself developmental biology after several years away from science. So 2 years ago he and his wife Judy created a site that links 350-and-counting *Drosophila* genes to their roles in development—from those that shape the early embryo on up to genes for memory **(sdb.bio.purdue.edu/fly/aimain/1aahome.htm)**. Loaded with information on protein function, mutation effects, homologous genes in other organisms, and links to Medline abstracts, the site is "the only place where you can go up and down the hierarchy" of development, says Brody, adding, "it explains what the [Human] Genome Project is about."

SITE VISIT



Brody's site also connects with FlyBase, the central storehouse for *Drosophila* info (funded mainly by the National Institutes of Health) with chromosome maps, genetic and protein data, researchers' addresses, and references (**flybase.bio.indiana.edu**). For easier access to the latest genomic data, FlyBase soon plans to merge with fruit fly genome sequencing Web sites at Berkeley and in Europe. Other sites specializing in images, gene interactions, the nervous system, and more are listed in the handy *Drosophila* Virtual Library, **ceolas.org/fly/**.

Early stargazing. Find lessons on the universe and space travel, puzzles, biographies of scientists, and more on Starchild, an award-winning NASA site for teaching elementary and middle school children about astronomy. **starchild.gsfc.nasa.gov**

American ingenuity? Check out the Pat-on-the-Back Apparatus, a recipe for egg jerky, the Sanitary Appliance for Birds, and other bizarre inventions at the Wacky Patent of the Month. **colitz.com/site/wacky.htm**

HOT PICKS

Numbers game. How many stable towers can you build from n Lego bricks? The answers for n = 1, 2, 3 ... are given by the series: 1, 3, 7, 19, 53, 149, 419, ... Intrigued? Peruse the On-Line Encyclopedia of Integer Sequences, useful for crystallographers, physicists, mathematicians, and any numbers fan. **www.research.att.com/~njas/sequences/index.html**

NSF Offers Online Progress Reports

After asking more than 100 scientists to try out a new online system for reporting progress on research grants, the National Science Foundation (NSF) is preparing to offer the system to everyone as early as this summer.

The electronic reporting is part of FastLane, NSF's larger online effort to improve the grants process by making it faster, more efficient, and more useful to a wider community **(www.fldev.nsf.gov)**. Although a few programs have already shifted to all-electronic submissions, the Reports Redesign Project takes the process a step further. Next year's goal is to have 70% of grantees' annual and final reports come in over the Internet, says NSF's Nat Pitts. The shift to electronic processing, he says, should make information now stored in paper files more accessible—not just searchable, but also available to reviewers of future proposals and to NSF officials speaking to politicians and the public.

NEWS

The online reports project is not without bugs, however. Some principal investigators have complained about formatting limitations, and others are unhappy with having to answer a new set of specific questions rather than simply responding to an open-ended query about what they have accomplished. "It's a definite improvement, but ... I'll probably submit my next [grant] proposal the old-fashioned way," says Yale neuroscientist Ted Carnevale, "and let somebody else be the guinea pig."

Earth album. An astronaut peering out of a Space Shuttle window in 1988 took this photo of desert winds sweeping southwest across Chad in northern Africa. The image comes from a Web site called Earth from Space: An Astronaut's Views of the Home Planet, based at NASA's Johnson Space Center in Houston (**earth.jsc.nasa.gov**). Staffers there have culled and added descriptions to more than 450 shots from 300,000 taken during the 90 shuttle missions since 1981. The collection can be browsed by categories such as city or geological feature, turning up everything from Japan's smoking Sakura-Jima volcano to an erosion-streaked delta in deforested Madagascar. Although satellite images may be more detailed, they're generally false-color, and robotic picture-taking often misses interesting features, says NASA's Kamlesh Lulla. The astronauts, however, used ordinary handheld cameras and color film and could snap whatever caught their trained eye.

NET PICS

SCIENCE ONLINE

Just as rising air currents form tornadoes, underwater plumes of hot water produce ocean "anticyclones" observable in satellite images. The Enhanced Research Commentary by Speer (p. 1034) on hydrothermal plumes accompanies new results reported by Lupton *et al.* (p.1052) using drifting buoys. The online version links to an array of Web resources in marine geology, underwater rift studies, and plume research. **www.sciencemag.org/cgi/content/full/280/5366/1034**

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