

COOL IMAGES

Lights, Camera, Infection

A herpes simplex virus particle, essentially DNA wrapped in a protein capsid cocoon, plunges through a target cell's nuclear membrane in this still frame from a movie on how the pathogen infiltrates its victims. In a herpes filmfest created by

scientific illustrator Karin Christensen for virologist Ed Wagner's classes at the University of California, Irvine,* five animations depict a typical virus lifestyle: locking onto cell receptor proteins, inserting DNA into a cell's genome, then hijacking the cell's protein machinery to replicate and crank out new viral particles. Follow the link to Wagner's home page for a tutorial on the wily herpes simplex, which can surreptitiously entwine its genome with that of neural cells, lie low, then break out again months or years later.

*darwin.bio.uci.edu/~faculty/wagner/movieindex.html

HOT PICKS

Statistically significant. Looking for software to do Bayesian calculations, or simply want to fit data to a curve? This site has over 300 links to free Web programs and calculators that can generate random numbers, do Chi-square analysis, or even plot three-dimensional data in virtual reality. members.aol.com/johnp71/javastat.html

Sunset strip. If you're lucky, you might have glimpsed an eerie burst of green light as the setting sun dips out of view. An astronomer created this site of photos, movies, and links exploring the so-called "green flash," which happens before sunrise and after sunset when light is separated into colors by the thickness of the atmosphere at a distant horizon. mintaka.sdsu.edu/GF/index.html

Egyptian skylights? In the early 1990s, a German engineer sent two robots into the pyramid of Cheops in Egypt to explore its airshafts, built perhaps to release the souls of the pharaohs. This site (sponsored by a perfume company) documents the intriguing expedition—it even found a mysterious, still-unopened door—with great graphics, including computer aided design (CAD) drawings of the pyramids. www.cheops.org

NET NEWS

Hold the Clicks, They May Be Addictive

Internet rehab? Surfers Anonymous? Don't be surprised if Internet addiction becomes the next fashionable disorder of impulse control. With 83-million-and-climbing Americans online, a new survey suggests that obsessive Net use is right up there with compulsions such as gambling.

Psychologist David Greenfield of West Hartford, Connecticut, reported last week in Boston at the American Psychological Association meeting on a poll he conducted with ABC on its site (abcnews.com).

NETWATCH

edited by JOCELYN KAISER

He asked visitors to answer 10 questions adapted from those for assessing pathological gambling, probing such matters as whether the individual had tried to quit but couldn't, whether they used the Net to "escape," and whether it disrupted their personal or financial lives. Five "yes" answers indicated a problem. Of the 17,251 respondents—a self-selected group, so they are unlikely to be representative of the user population—Greenfield reported that 990, or 5.7%, qualified as Internet-dependent. He suggested that cyber-addictions could be broken down into sex, gambling, trading, shopping, and Net surfing.

The poll "add[s] to the validity of earlier work [showing that] Internet addiction is a serious problem," says psychologist Kimberly Young of the University of Pittsburgh. It also may be a serious new source of business for psychologists: Young herself runs a Center for On-Line Addiction (www.netaddiction.com).

Internet addiction hasn't yet made it into psychiatry's bible, the Diagnostic and Statistical Manual. But it could end up in a catch-all category of "impulse control disorders" along with gambling and kleptomania, suggests Yale psychiatrist Bruce Rounsaville. But Washington, D.C., psychologist Lester Turner is skeptical. "The Net is more the vehicle to get you to what you get addicted to," he says.

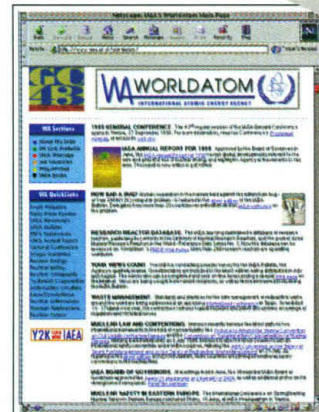
SITE VISIT

A World of Nuclear Data

From the production of medical isotopes to the theft of weapons-grade uranium, the leader in guiding and policing the nuclear world is the International Atomic Energy Agency (IAEA) in Vienna, Austria. The agency's Web site, Worldatom, offers an array of reports, data, and other resources, some of which are brand-new.

www.iaea.or.at/worldatom

In response to mandates from its 128 member countries and the United Nations, the IAEA compiles a wealth of nuclear information, including specs on 280 research reactors worldwide (data that just went online last month) and some 2 million abstracts, from 1970 on, "on the peaceful uses of nuclear energy," such as fusion power and the use of radioisotopes in agriculture. Other items include Aladdin, which serves up fusion research data (such as collision energies); a newsletter that follows the many incarnations of the proposed International Thermonuclear Experimental Reactor; a section on the Y2K problem facing reactors; a daily media digest (example: three people in Kazakhstan arrested with 5 kilos of enriched uranium); and proceedings of a 1996 conference on the Chernobyl accident.



ScienceONLINE

What issues do postdocs face? Today in conjunction with *Science's* special issue on postdocs, Next Wave begins an online discussion exploring such questions as: Should there be a limit on how long a scientist can work as a postdoctoral fellow, and should federal funding agencies set minimum postdoc salaries and benefits? nextwave.org/feature/postdocforum.shtml

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