



COOL IMAGES

Aliens From Inner Space

This mug is the business end of a tapeworm, a parasite that infects millions of people and countless animals worldwide. Up to 100 millimeters long, this species (*Hymenolepis microstoma*) uses its four suckers and hook-packed snout (called a rostellum) to latch onto the bile ducts of rodents, where it subsists by absorbing intestinal fluids. The image comes from Parasites and Parasitological Resources, one of several Web sites offering science educators an abundance of images, from malaria-carrying mosquitoes engorged with blood to human limbs swollen with elephantiasis. Check this page[†] for more sites, including over 2300 slides collected by a medical professor during a long career fighting these critters.

www.biosci.ohio-state.edu/~parasite/home.html

[†] bornova.ege.edu.tr/~mkorkmaz/images.htm

NET NEWS

Facelift for Grassroots Libraries

One of the Web's oldest catalogs of sites is now undergoing an overhaul, thanks to participants who want to show that a 7-year-old volunteer effort can still rival commercial sites such as Yahoo.

The WWW Virtual Library, as it's called, is the stuff of Internet legend, having sprung from the brow of World Wide Web pioneer Tim Berners-Lee. Like Yahoo, the library is a directory of Web sites compiled by subject area—but unlike Yahoo, it's a collection of separate sites kept by more than 200 volunteers around the world. The science libraries (vlib.org/Science.html), which cover everything from genetics to whale watching, are in many cases among the most authoritative directories in their fields. For instance, the beam physics site, housed at the Stanford Linear Accelerator Center, lists facilities, conferences, and online courses. And the cell biology site offers scores of annotated links, such as online biology texts, labs studying apoptosis, and backgrounders on angiogenesis.

But a few years is an eternity on the Web, allowing some neglected Virtual Libraries to decay into collections of dead links. That's why the virtual librarians this month plan to elect a new council to set standards and recruit more sites. Gerard Manning, who curates the library, thinks it still serves a useful purpose. When it comes to esoteric topics like free electron lasers, he says, commercial directories are "probably not going to do a very good job."

NETWATCH

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HOT PICKS

Pebbles going bam-bam. Surprised by the weak gravity exerted by some seemingly hefty asteroids, astronomers have come to suspect that these are not solid chunks but piles of little rocks that whiz through space en masse. But how might these clumps crash together to form large bodies—or collide and spin off smaller assemblages of rocks? Find out at this site featuring cool movies of rubble pile collisions.

www-hpcc.astro.washington.edu/faculty/dcr/Research/rubble.html

Microbe tacticians. Infectious disease experts will swap war stories during the Howard Hughes Medical Institute's holiday lectures, "2000 and Beyond: Confronting the Microbe Menace," to be broadcast on the Web on 6 and 7 December. Don't miss the site's nifty graphics: You can dissect a leech in a virtual lab, for instance, or see animations of *Salmonella* and *Escherichia coli* bacteria invading the cells lining the gut.

www.holidaylectures.org

Protein web. Pour yourself a little Java with your proteins using WebMol, a free program for online viewing of macromolecular structures in the Protein Data Bank. Includes many options for analyzing structure.

www.cmpharm.ucsf.edu/~walther/webmol.html

SITE VISIT

Tuning In to the Keenest of Ears

Only one in 1200 people have perfect pitch, the ability to identify exactly what a particular note should sound like without reference to any other notes. Not surprisingly, a disproportionate share of sharp ears belong to those who make music for a living: About 15% of musicians have the ability, also known as absolute pitch. Are you one of the lucky few? A dead giveaway is whether you know right away that your fluorescent light is buzzing along at a steady B flat.

www.provide.net/~bfield/abs_pitch.html

More perfect pitch lore awaits at sites listed at Perfect Pitch on the Internet. By searching a bibliographic database called the Music and Science Information Archive, for example, you can learn about a 1995 German study showing that the ability may reside in the planum temporale, a brain region that processes sound signals. That brain area is far larger on the left side than on the right in professional musicians—especially in those with perfect pitch. Another link takes you to a study by a University of California, San Francisco, team that's collecting blood from hundreds of people with absolute pitch in hope of finding the genetic basis for the ability. There you can take a sound test to see if you've got a Mozartian ear. Or to find out whether a favorite musician has the gift, check out Famous People With Perfect Pitch, which lists 65-and-counting musicians ranging from Beethoven to Yanni.

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

