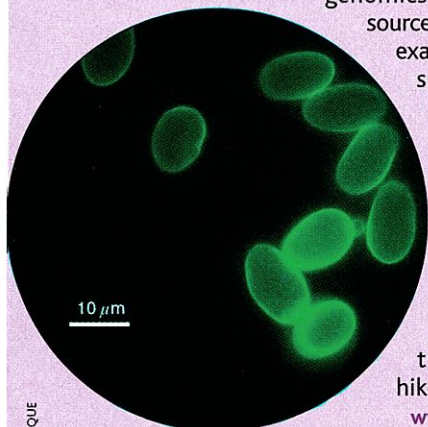


LINKS

The Lowdown on Microbes

Whether you're after a source of oceanic plankton samples or a primer on the acid-fast smear technique for spotting tuberculosis infection, you'll find it at Microbiology Direct. This compendium offers hundreds of microbiology links in 11 categories, from genomics to methods to teaching resources. Click on Research Topics, for example, to summon 46 links on subjects such as astrobiology, life in extreme environments, and quorum sensing (the ability of bacteria to assess the number of other bugs in their neighborhood). The Images section offers a look at the good, the bad, and the ugly, including *Giardia lamblia* (left), the intestinal invader that causes hiker's diarrhea.

www.microbiology-direct.com



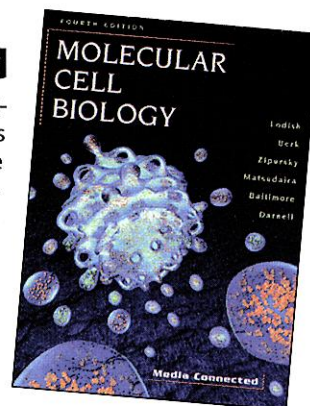
CREDITS: (TOP TO BOTTOM) J. D. A. LINDQUIST/EPA; NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION; (PAINTING) SHERYL TODD; (PHOTO) DENISE LAQUETTE; MANUEL JOFFRE/ÉCOLE POLYTECHNIQUE

WEB TEXTS

No Library Card Needed

Looking for textbooks on cell biology, molecular biology, or genetics? Check the shelves at this digital biomedical library from the National Center for Biotechnology Information, the same people who bring you the PubMed abstracts database. Full-text versions of six classroom staples are available, including the third edition of *Molecular Biology of the Cell*, *Molecular Cell Biology*, and *C. elegans II*. The most recent addition is a timely chapter on smallpox and the vaccinia virus (the source of smallpox vaccine) from a textbook on vaccination; upcoming titles include *Developmental Biology* by Scott Gilbert and *Cancer Medicine*. You can search the texts for a specific subject or just browse, and all have been hyperlinked to relevant abstracts in PubMed.

www.ncbi.nlm.nih.gov:80/entrez/query.fcgi?db=Books



RESOURCES

In the Tapir's Lair

Theodore Roosevelt was so keen on tapirs that he absolutely had to shoot one, and director Stanley Kubrick used them to impart a prehistoric ambience to the early scenes of *2001: A Space Odyssey*. The Tapir Gallery is a lively source of information on the biology, lore, and especially conservation of these water-loving, prehensile-nosed cousins of horses and rhinos.

Get oriented with species accounts that cover the range, habits, and distinguishing marks of the four living species, which inhabit tropical areas of Asia and Central and South America. The well-stocked pictures section contains snapshots along with artwork and other images. Site creator Sheryl Todd, president of the Tapir Preservation Fund, painted this pair of lowland tapirs at Amsterdam's Artis Zoo (right). There's also a growing bibliography listing more than 500 references as well as links to some recent papers. All tapir species are in trouble, jeopardized by dwindling habitat and hunting. To learn what's being done to prevent their extinction, read the World Conservation Union's 1997 tapir status report and action plan.

www.tapirback.com/tapirgal



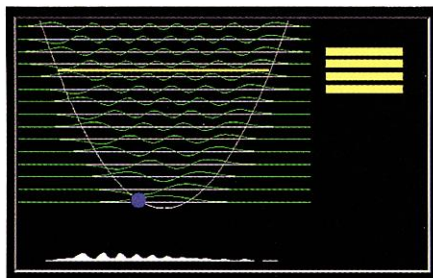
ANIMATIONS

Quantum Film Fest

The quirky rules of quantum mechanics state that particles are also waves, you can't know how fast you're moving if you know exactly where you are, and sometimes you have to turn things around 720 degrees to make them look the same again. If your reaction to all this is "I just can't see it," check out Quantum Physics Online, a Web site offering dozens of interactive animations that illustrate quantum-mechanical basics covered in college physics classes.

Developed by Manuel Joffre of the École Polytechnique in Palaiseau, France, the site opens with wave mechanics in one dimension (left, a harmonic oscillator). It then steps through quantization in 2D and 3D, and touches on the basics of spin, including magnetic resonance. The Java applets provide just enough buttons and adjustable parameters to engage users without overwhelming them with choices. The scant text may leave the individual student befuddled. However, the well-crafted animations could prove valuable lecture aids for physics pros.

www.quantum-physics.polytechnique.fr



DICTIONARY

Get the Meaning

Are you confused by the difference between lecithins and lectins? Can't tell your alkanes from your alkenes? Flip open this hefty Web dictionary from the International Union of Pure and Applied Chemistry (IUPAC). The site offers the 1997 edition of the popular "Gold Book," a compendium of the latest approved terms. The nearly 7000 definitions, crafted by expert committees of the IUPAC, run from alpha-addition reaction (a reaction in which two or three reactants combine to form a single product) to zygote (a fertilized egg).

www.chemsoc.org/chembytes/goldbook

Send great Web site suggestions to netwatch@aaas.org