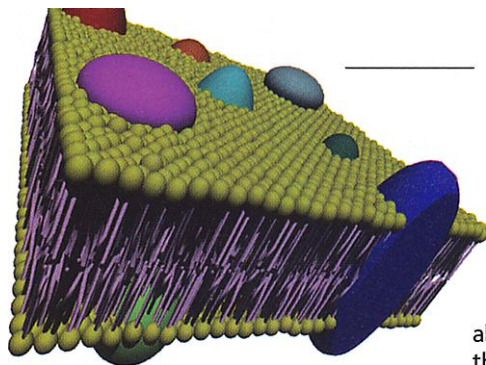


EDUCATION

Biophysics Profs Go Online



Biophysicists are the How Things Work experts of cell biology, figuring out matters such as how muscle fibers contract and how special proteins shunt ions and molecules across the cell membrane. Researchers in the field are now building the Biophysics Textbook OnLine, a free site that will eventually hold about 500 peer-reviewed chapters. Included is material for which no good teaching text now exists, says editor Lou DeFelice of Vanderbilt University in Nashville, Tennessee.

Over 100 chapters posted so far cover topics ranging from ion channels to intermolecular forces, mathematical models, membranes, and spectroscopy. Experiments and problem sets are also in the works. A current drawback to the site is that many chapters can be downloaded only in a single chunk as a PDF file. But the authors plan to add HTML versions stocked with hyperlinks.

www.biophysics.org/biophys/society/btol

EXHIBITS

Birth of Wireless

One hundred years ago on a windy December day in Newfoundland, Guglielmo Marconi flew a giant kite and picked up the first transatlantic, Morse code message beamed from Cornwall, England, launching the era of wireless communication. Marconi's work is commemorated in MarconiCalling, a new online Web site from Marconi Corp. plc, the U.K.-based company that the half-Italian, half-Irish physicist founded. (In the United States, it became RCA.)

The site holds a digital version of Marconi plc's vast Marconi archive, which includes hundreds of photos, documents, newspaper clippings, and even film and sound clips on the scientist's experiments. (In this photo, Marconi, at left, and others launch a kite in 1901.) The site is also packed with multimedia bells and whistles such as a 3D version of Marconi's early telegraphy apparatus, and an animation of the 1912 *Titanic* disaster and rescue with actual telegrams sent by the sinking vessel and other ships. A detailed timeline follows wireless discoveries by Marconi and other scientists from the 1890s through the first radio and TV broadcasts. When Marconi died in 1937, wireless transmissions were shut down worldwide for 2 minutes in tribute.

www.marconicalling.com



DICTIONARIES

Omics, Schmomics

Everybody's talking about proteomics and structural genomics these days, but have you heard of transcriptomics? How about cellomics? One site trying to track the dizzying evolution of the postgenomics lexicon is Genomics Glossaries, maintained by Mary Chitty, librarian at Cambridge Healthtech Institute, a biotech consulting company in Massachusetts.

Chitty wanted to smooth communication among the many disciplines in genomics, from analytical chemists to cell biologists and computer scientists. So 2 years ago, she began working on "a kind of guidebook for people who know about one or more of the disciplines, but who don't recognize all the acronyms and specialized vocabulary they encounter." The lists she's compiled, in categories such as microarrays and drug discovery, explain terms ranging from "combinatorial library" to "royalty stacking" to "zinc finger protein." You'll even find an -omes and -omics glossary.

www.genomicglossaries.com

RESOURCES

Foreigners Invade U.S. Waters

Like uninvited party guests, hundreds of foreign animals and plants have made themselves at home in U.S. waters, where they can wreak havoc on native ecosystems. To keep tabs on the party crashers, aquatic biologist Pam Fuller of the U.S. Geological Survey in Gainesville, Florida, launched the Nonindigenous Aquatic Species site in 1992. Now used by "everyone you can imagine," Fuller says, the site has become a hot stop for researchers and others needing detailed information on America's most unwanted aquatic species.

Most useful for scientists is the run-down of species habitat, impact, and taxonomy and references to voucher specimens in museums. The site's database can also be used to generate a U.S. map of an invader's range and list introduced species found in any state or watershed. The aliens run from high-profile nuisance species such as the zebra mussel, bighead carp, and green crab (above) to plants such as giant salvinia, a fern choking many Southeast ponds and streams. Fuller says the site receives tips from everyone from ichthyologists to regular folks "who catch some kind of weird fish."

nas.er.usgs.gov



Send great Web site suggestions to netwatch@aaas.org