



DATABASE

Coral Case Files

The world's reefs are taking a beating from silt buildup, explosives used for fishing, the coral-munching crown-of-thorns starfish, and other threats. Consult this database to find out the condition of individual reefs—some 70% of which are ruined or in jeopardy. Reef Check, a nonprofit based in Pacific Palisades, California, collates reports from volunteers who collect standard data on coral health (*Science*, 6 September 2002, p. 1622). Click on the barometer at the bottom of the Reef Check home page to search more than 3400 surveys from 1800-plus locales around the world. The records provide information such as ratings of natural and human-caused damage and counts for fishes, invertebrates, and other residents. Tools let you compare reefs and contrast measures of the same site from different times. Above, a moray eel gapes from the safety of a crevice.

www.reefcheck.org

EDUCATION

Oyez, Oyez

Whether you're curious about why music sounds better in some rooms than in others or you want to learn how to derive the equations for the Doppler shift, tune in to this site from retired engineer Art Ludwig of Santa Barbara, California. Although short on graphics, the site is well stocked with informative text explaining the physics of sound for beginners and experts. The mathematically adept can learn how to work out the sound equations from a model of molecular motion. Or delve into image analysis, which is useful for evaluating the acoustics of a room. Math-free sections explore topics such as the fundamentals of sound and how we hear music.

www.thesoundpage.com

EXHIBITS

Anatomy Through the Ages

If not for its jaunty pose, this muscular figure (right) would look at home in a modern anatomy textbook. But the drawing comes from a series of plates commissioned by the Italian physician Bartolomeo Eustachi in the mid-1500s and published some 150 years later. Readers can see

these and more lush medical illustrations at Historical Anatomies from the U.S. National Library of Medicine. The continuing exhibit showcases selected diagrams from 28 anatomical atlases, spanning a 14th century Persian treatise to a 19th century German book on frozen cross sections. Brief backgrounders highlight the innovations in each work and describe the authors. For example, Eustachi (circa 1500–1574) was a traditionalist and opposed the upstarts who were challenging the ancient Roman anatomist Galen, then considered the ultimate authority on the body's structure.

www.nlm.nih.gov/exhibition/historicalanatomies/home.html

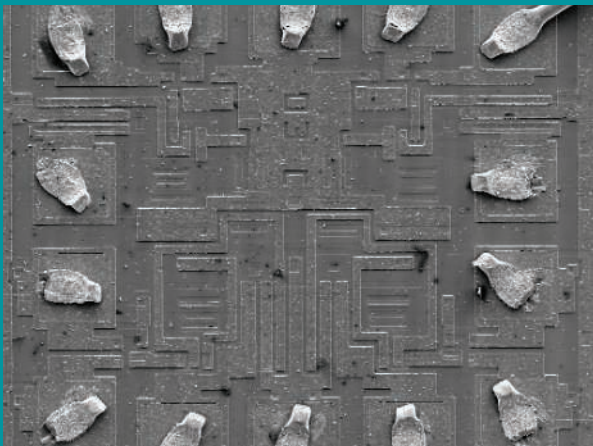


IMAGES

Scope This Out

Many beginning students never get closer to an electron microscope than the photos in their textbooks. But anyone can get a sense of what the instrument can do by downloading this simulator from NASA's Kennedy Space Center. The free Java program allows users to pan, zoom, and use the built-in ruler to measure a beetle's leg, crystals from a human kidney stone, and other objects. Below, an integrated circuit. The virtual lab plans to add more images and instruments, such as a light microscope, says project leader Berta Alfonso.

learn.arc.nasa.gov/vlab/index.html



RESOURCES

Bug Basics

Looking for a clearer description of the structure of the cell skeleton? Need a simple procedure students can use to isolate *Streptococcus* bacteria? Click over to the Grapes of Staph, a combination Web text and lab manual from microbiologist Gary Kaiser of the Community College of Baltimore County in Maryland. Although tailored for Kaiser's classes, the site offers plenty of material that other teachers can adopt. The tutorial includes more than 50 sections on basic microbiology, covering everything from bacterial anatomy to viral life cycles to the human body's defenses against invading microbes. Readers will also find illustrations and animations, a glossary, and self-quizzes. The 22 lab exercises teach students techniques for culturing and isolating bacteria, testing for pathogens, and more.

www.cat.cc.md.us/~gkaiser/goshp.html

Send site suggestions to netwatch@aaas.org. Archive: www.sciencemag.org/netwatch