

DATABASE

Uncover Shy Bugs ...

Much of the world's microbial biodiversity remains unknown to science because the persnickety bugs refuse to grow in the lab. A valuable tool for stymied microbiologists is probeBase, a collection of DNA probes compiled by the microbial ecology group at the Technical University in Munich, Germany. Researchers can use the short sequences, which target microbes' ribosomal RNA, to identify what bugs are present in particular communities and to wrinkle out furtive species that have evaded the taxonomists.

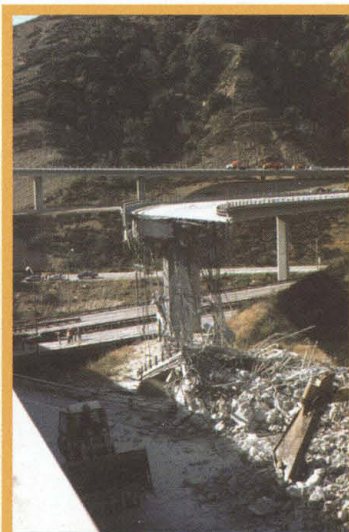
www.microbial-ecology.de/probebase

COMMUNITY SITE

... Or Eavesdrop on Their Chitchat

Recent research has demolished the popular image of bacteria as silent loners slithering across a microscope slide. In fact, the garrulous cells bombard each other with chemical messages that allow them to coordinate their behavior and metabolism. Created by microbiologists at the University of Nottingham, U.K., this site explores "quorum sensing," a bacterium's ability to estimate the number of neighboring cells from chemicals they emit. Much of the content focuses on the researchers' work to decode the signals dispatched by an assortment of species, from *Escherichia coli* to a cousin of the cholera bacterium. The site also offers an international directory of quorum-sensing researchers and a roundup of useful microbiology links.

www.nottingham.ac.uk/quorum



RESOURCES

Whole Lotta Shakin'

Few earthquakes pack the destructive power of the 1994 Northridge quake, which amputated this freeway overpass in Southern California (left). But smaller temblors rattle parts of the globe every day. Find out where the ground is rumbling with near-real-time reports from the National Earthquake Information Center, sponsored by the U.S. Geological Survey.

Updated every few hours, the site receives data from hundreds of seismological stations around the world. You can nab the location, magnitude, and depth of each day's quakes as well as other technical data, such as moment tensor solutions. Maps pinpoint where the earth moved that day and in the last week and month. Visitors will also find plenty of information on historical quakes, including lists of the most deadly and strongest ever recorded. Reaching 9.5, number one on the magnitude list jarred southern Chile in May of 1960, killing 2000 people and stirring a tsunami that swamped parts of Hawaii and Japan.

neic.usgs.gov

EXHIBITS

Cooking Lab

All chefs are chemists, even if they don't realize it. Frying an egg sets off a chemical reaction in which individual proteins in the white uncoil and interlock, making the cooked white firm. That tidbit comes from the Science of Cooking, a savory educational Web site from the Exploratorium in San Francisco that mixes cooking tips with scientific insights. The site's activities—making pickles, growing giant marshmallows—are geared mainly for children, but adults might relish recipes that also serve up fun facts. For example, sourdough bread would be bland without the right proportions of yeast and acid-producing bacteria. Check back at 7 p.m. Pacific Time on Wednesday, 20 November, for a live broadcast on cooking the perfect turkey.

www.exploratorium.edu/cooking



IMAGES

Out in All Weather

Neither rain, nor sleet, nor hair-raisingly close lightning seems to have persuaded Harald Edens to put down his camera and run for it. A Holland native now in graduate school in atmospheric physics at the New Mexico Institute of Mining and Technology in Socorro, Edens has trained his lens on all sorts of photogenic weather and striking atmospheric effects. His online gallery Weather Photography showcases hundreds of his photos, from a cloud menagerie to shots of the green flash, a rare burst of color on the setting sun caused by refraction. Captions explain what you're seeing, and Edens offers tips on technique. Here, lightning leaps from the top of a roiling thunderhead in Louisiana. Known as a bolt from the blue, this rare type of lightning is particularly dangerous because it hits the ground away from the cloud and can zap people who thought they were at a safe distance.

www.weather-photography.com



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