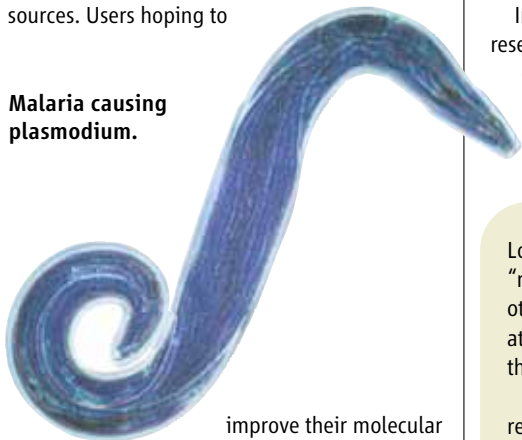


Taking Aim at Little-Studied Diseases

Is the Achilles' heel of the malaria parasite one of the proteins that enable it to proliferate prodigiously in human liver cells? Or maybe one of the genes that activate when it takes up residence in a female mosquito's salivary glands? This new database, launched by an international team of scientists, can help pin down potential drug targets for malaria and other diseases, mainly tropical ones, that have gotten short shrift from pharmaceutical companies.

For five killer pathogens, including the tuberculosis bacterium and the parasite that causes African sleeping sickness, the TDR Targets Database compiles genomics data from GeneDB, Tuberculist, and other sources. Users hoping to

Malaria causing plasmodium.



improve their molecular marksmanship can hunt for proteins by structural features, including how many segments penetrate the cell membrane, or by whether they are essential for survival. The entries also rank potential targets on measures such as "druggability," which indicates whether small molecules are likely to stymie them. >> tdrtargets.org/search

Wolf Clones in the Clear

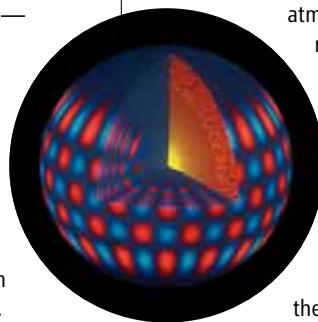
Seoul National University announced last week that despite some sloppy editing of their report, researchers have indeed cloned two wolves. Readers questioned some statistics in the report, published in March in the journal *Cloning and Stem Cells*, and the journal took it off its Web site (*Science*, 20 April, p. 347). But after an investigation, the university accepted researcher Byung-Cheon Lee's claim that he had made a simple mistake in calculating the success rate for wolf cloning. Furthermore, it appears a junior researcher accidentally pasted in the wrong table showing some DNA data. The journal is putting the revised paper back online.

Shivering With the Sun

The sun vibrates like a ringing bell. Now scientists are finding that the whole Earth and many things on it—even cell phones—dance along.

What carries the tune is the thin solar wind blowing through the solar system. When statistician David Thomson of Queen's University in Kingston, Canada, and colleagues reported that the wind vibrates at the same distinctive frequencies as the sun, skepticism ran deep (*Science*, 14 July 1995, p. 160). Turbulence should wipe out such solar vibrations, or modes. But those doubts are lifting, and now the team has extended its search for solar modes.

In the *May Proceedings of the IEEE*, the researchers describe how they used mathematical methods to unearth signals buried in the random noise of geophysical records.



The sun oscillates in and out (reds and blues).

They have found solar modes jiggling Earth's plasma-filled magnetosphere, the charged ionosphere, the geomagnetic field, the atmosphere, and Earth itself as revealed in seismic records of the planet's "hum." While troubleshooting a Chicago cell-phone system, Thomson stumbled across solar-mode frequencies in upswings in the rate of dropped calls, related perhaps to effects in the ionosphere.

Finding Earth and everything around it shimmying to a solar beat "is a little bit hard to swallow," says seismologist John Orcutt of Scripps Institution of Oceanography in San Diego, California. But at least on the seismic side that he's looked at, "I think it's a good, strong story."

A Long-Lost Relative

Lonesome George, a Galápagos giant tortoise locally known as Solitario Jorge, is called the "rarest living creature" by Guinness World Records. After a futile worldwide search in zoos to find others from his home island of Santa Cruz and failed efforts to get him to mate—including flying in an attractive Swiss zoologist to extract some sperm—70-year-old George seemed destined to stay the last of his species.

Until now. A team of geneticists led by Adalgisa Caccone and Jeffrey Powell at Yale University report this week in *Current Biology* that, after analyzing DNA from 27 tortoises on neighboring Isabela Island, they've found a relative. One male turned out to be a cross between the native species (*Geochelone becki*) and George's (*G. abingdoni*). Caccone says she plans to lead a bigger expedition back to the Isabela Island turtle population—which may number up to 8000—to sample 1000 more. "Chances are quite high that there's a pure Santa Cruz individual out there," says Caccone, which means hope yet for finding George a mate or even an extended family.

"It's good to have a positive story in our world of diminishing biodiversity," says Oliver Ryder, a geneticist at the San Diego Zoo. But just in case no kin turn up, the zoo hopes to add tissue from George to their Noah's Ark of cell lines, perhaps one day to clone a twin.

