The Joy of Folding

Most biotech companies hawk their wares with ads featuring sequencing machines, gels, or graphs. A few try to spice things up with photos of hip young scientists, while one even coyly proposes to "Unzip Those Genes ..." Still, some readers of *Nature* may have been a tad taken aback last month by an ad (above) that bared more skin than a Calvin Klein spread.

"Some people may have a dirty mind and see two naked people," says Jean-Pierre Rosat, an immunologist and marketing manager for Dictagene, a small biotech company in Lausanne, Switzerland. Even the high-minded may have trouble discerning any clothing on the pair ... but that's not the point. The ad's message is not sex, but the beauty of folding—as in protein folding, of course—and the joining of amino acids. In fact, says Rosat, whose company synthesizes designer proteins, "we felt that the picture expressed purity"—as in the purity of a synthesized protein—"and virginity."

Sure beats chromatography, anyway. "*Science* and *Nature* are traditionally such hard-core titles," says Jahnvi Yagnik, *Nature*'s display sales manager. "This adds a little lightheartedness." At least the pages weren't perfumed.

Sunbath for SOHO

First came the self-cleaning oven. Now comes an even more stellar achievement: a self-scouring telescope.

When the $1 billion Solar and Heliospheric Observatory (SOHO) spun out of control and lost power last June, astronomers feared that extreme heat and cold would ruin its sensitive instruments. They imagined metal bands around lenses contracting until the glass cracked, and soldered wires melting in the sun's unrelenting glare. But after scientists miraculously recaptured the craft in September, they were amazed to find that the instruments had not only survived but that one sophisticated telescope is working better than before the accident.

The Extreme Ultraviolet Imaging Telescope, used to study the sun's corona, fiery plumes, and other features, has produced spectacular images since SOHO's launch in 1995. But it had been increasingly plagued by blurring contaminants such as frozen water vapor and hydrocarbon residues. When SOHO was disabled, however, the craft flipped on its side, placing its solar panels edge-on toward the sun. That bathed the telescope in constant sunlight, heating it to more than 30 degrees Celsius. It looks like the contaminants "got baked out of the instrument," says SOHO scientist Joe Gurman of NASA's Goddard Space Flight Center in Greenbelt, Maryland. This "curing," which he says "seems to be long-term," has improved the scope's sensitivity by 60% over its preaccident performance.

SLAC Chief Steps Down

Burton Richter, director of the Stanford Linear Accelerator Center (SLAC), announced last week that he will be resigning the post next August. After 15 years at the helm, "it's time for a new team to take over," says Richter, 67. "I could start some new projects, but I wouldn't be able to see them through." He will continue to work at SLAC.

Richter

Widely admired for his skill as a physicist and his power to persuade legislators to fund SLAC's projects, Richter shared the Nobel Prize in physics for the discovery of the charm quark in 1976. As director he put some bends in SLAC's linear accelerator, transforming it into a more powerful machine that could collide electrons and positrons head-on. Richter leaves the lab with a newly minted B factory, designed to ferret out why there is more matter than antimatter in the universe (*Science*, 7 August, p. 764). But SLAC's fortunes may be tied to those of the Next Linear Collider, a giant 30- to 50-kilometer-long accelerator still in the planning stages, which labs all over the world are competing to have in their backyards. Richter, "infinitely smart and infinitely persuasive," would have enhanced SLAC's chances in this competition, says longtime colleague George Trilling, a physicist at the University of California, Berkeley.

Who will fill Richter's size-15 shoes? Insiders suspect B factory project director Jonathan Dorfan may be the pick—unless Fermilab lures him to Illinois to replace its own outgoing director, John Peoples.

CREDIT: (BOTTOM) SLAC

The Tuna Within

Humans and chimps appear to have in common about 98.5% of their DNA—a circumstance that has led physiologist Jared Diamond to call us "the third chimpanzee" (*Science*, 4 September, p. 1432). But how closely related is our species to, say, a horse?

Some members of the Human Behavior and Evolution Society were commenting on their listserv last week that comparisons with other species would be helpful to put the chimp-human overlap in perspective for their students. Anthropologist Peter Frost of Laval University in Sainte Foy, Quebec, contributed this list. Cytochrome C is a stable protein whose gene is thought to mutate—and lead to a change in one of the protein's 104 amino acids—at a constant rate over the millennia. Its substitutions, Frost says, "correlate very well with DNA substitutions," so his table may give a rough index, for example, of our dogginess—or a dog's humanness.

AMINO ACIDS IN CYTOCHROME C SHARED WITH HUMANS BY:

Chimpanzee	104
Rhesus monkey	103
Kangaroo	92
Rabbit	92
Dog	91
Donkey	88
Horse	87
Duck	87
Chicken	86
Turtle	85
Rattlesnake	84
Tuna	73
Moth	68
Yeast	38