

Face Power

While beauty itself may be skin deep, its effects are registered deep in the brain. Pictures of beautiful faces can activate the same reward circuitry triggered by cocaine, chocolate, money, and even music, report researchers at Harvard Medical School and Massachusetts General Hospital in Boston. The study also showed that appreciation of and desire for beauty are separate functions.

In experiments reported in the 8 November issue of *Neuron*, neuroscientist Hans Breiter and colleagues had heterosexual males view 80 pictures of males and females rated as either

"beautiful" or "average." Volunteers could lengthen or shorten the time they studied each photo by pressing buttons on a keypad. Their brains were also scanned as they just looked at the pictures.

The men chose to linger over the attractive females in the keypad test. "They would bar press for this like rats for cocaine," says Breiter. They were indifferent to "average" females, actually choosing to shorten the viewing time. Their reactions were mirrored in the brain

scan, where pretty women activated reward circuits. As for "beautiful" males, they not only got less viewing time, but their



Pretty woman (l) activated straight men's reward circuit; beautiful guy (second from r) suppressed it.

pictures dampened activity in the reward center—signaling a possible aversion, the researchers say.

"Men like pictures of beautiful woman," notes Roy Wise at the National Institute on Drug Abuse in Bethesda, Maryland. More than that, says Breiter, "We've shown that these faces have reward value in and of themselves." The results contrasted with an exercise

in which males rated the male and female faces on a scale of 0 to 7. The volunteers clearly differentiated "beautiful" and "average" males, indicating that their brains' aesthetic sense can operate separately from the reward center.

Adding another twist to the beauty story, researchers at University College in London reported last month in *Nature* that both males and females showed activity in reward centers when they looked at attractive faces of either sex—providing there was eye contact.

"This part of the brain is involved in going after things, in deciding whether to approach something or avoid it," says Wise. Thus, an approach response might be triggered by the promise of many kinds of social rewards, not just sex.

Lions in Trouble

Lions are plentiful in East Africa, where they are a staple of the tourist trade. But populations in the west and central portions of the continent are sparse, fragmented, and threatened by human encroachments as well as poaching for traditional medicine products, according to a commission set up by the World Conservation Union.

Their report, newly available on the Web (www.africanlion.org), concludes that there is not a single lion population in West or Central Africa that is large enough to be viable—that is, with enough lions to avoid inbreeding. The largest groups, in Cameroon and along the borders of Senegal, Guinea, and Mali, comprise about 200 animals each. There are tiny pockets of lions elsewhere, some with no more than 10 animals. The whole region probably contains no more than 2000, says Hans Bauer of the University of Leiden, a member of the African Lion Working Group.

Bauer says lions are especially tricky to count. "Aerial counts, roadside counts, sampling meth-



Lions mate in Waza National Park, Cameroon.

ods, dung counts: It all works very well for prey, but not for lions," he says. "The only method recognized as accurate is knowing them all individually."

The lion experts want to start a lion database, but so far there's no money for it. The World Wildlife Fund does not recognize lions as endangered, partly because no one until now has tried to put together an inventory of West African populations.

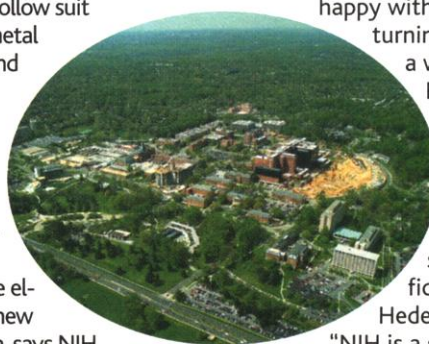
Guarding the Citadels of Health

The Centers for Disease Control and Prevention has started building fences around its campuses in response to terrorist threats, and the National Institutes of Health (NIH) may follow suit erecting a metal barrier around its 130-hectare campus in Bethesda, Maryland.

A "tasteful" fence could be one element of a new security plan, says NIH spokesperson Marc Stern. Already, he notes, NIH has closed six of its

11 campus entrances, hired "vans-full" of guards, and is subjecting all vehicles headed for garages to hood, trunk, and bottom checks.

Some workers are not happy with the idea of turning NIH into a walled camp. But "there is an incredible investment here by the taxpayers," says NIH official Janyce Hedetniemi. "NIH is a symbol of health and hope. We don't want to lose it."



Kornberg

Roger Kornberg of Stanford University School of Medicine last week was awarded the 2001 Robert A. Welch Award in Chemistry, a lifetime achievement award, for major contributions to understanding how DNA is transcribed into RNA. At 54, Kornberg is one of the youngest winners of the award, which brings with it \$300,000. At Stanford since 1978, he collaborates with his wife, Yahli Lorch. She calls his approach "bold beyond measure.... Most of the things he has done people would not do."

Welch Award to Kornberg