

Sex and Anger

So he's slow to pick up on it when you're peeved? Well, it may just be that old hunter-gatherer brain speaking: You're not as dangerous to him as another man.

Psychology graduate student Lisa Goos of York University in Toronto, Canada, showed 58 female and 56 male college students photographs of male and female faces displaying four negative emotions: anger, fear, disgust, or sadness. Each photo was flashed to viewers for only 30 milliseconds.

There was a significant difference between males and females when it came to the perception of an angry expression on a woman,

says Goos. Although in most pair-ups subjects correctly identified anger about 40% of the time, males who were exposed to angry female facial expressions recognized them only about 30% of the time.

That's interesting, because "reams of research have shown that most expressions are perceived better when the expresser is a woman," says Goos, who

will present her work at next month's meeting of the Human Behavior and Evolution Society in Salt Lake City. "The reversal of the pattern is predictable by evolutionary theory, which says that information important for survival will be taken in, and used, in very special ways." A next step, she says, might be to try



Is she mad?

Elephants can swim dozens of kilometers at a time, their trunks skimming like a snorkel above the water. Now experts have new evidence that the lumbering land giants may have inherited their expert swimming ability from a distant aquatic ancestor.

According to fossil and DNA evidence, some of the closest living relatives of elephants are manatees, or sea cows, which live in shallow coastal and river waters. And some of the earliest elephant fossils have been unearthed in areas that were once near-shore environments. Seizing a rare opportunity to look for vestigial signs of aquatic adaptations in the early stages of a developing elephant, reproductive biologists Roger Short and Marilyn Renfree and graduate student Ann Gaeth of the University of Melbourne, Australia, obtained one embryo and six fetuses from pregnant females killed in a campaign to limit their population in Kruger National Park, South Africa, between 1993 and 1995. The scientists estimated the embryo to be 58 days old, and the oldest fetus 166 days. (Elephant gestation takes about 660 days.)

The researchers cut the preserved fetuses in razor-thin slices and put them under the microscope. They soon spotted something strange in the fetal kidneys: ducts, called nephrostomes, that also appear in fish and frogs. In most mammals, nephrostomes appear only briefly during fetal development. But in the slow-developing elephant, the ducts, which disappear before birth, seem to be present for at least 2 months. The scientists, who report their findings in the 11 May *Proceedings of the National Academy of Sciences*, propose that they are an evolutionary remnant of an aquatic ancestor.

"It's a thought-provoking argument," says Hans Thewissen, an anatomist and paleontologist at Northeastern Ohio University's College of Medicine in Rootstown. The fetal kidneys are not functional, he notes, because waste products are filtered through the placenta, so they are a promising place to look for traits forgotten by evolution.



Fetal elephant at 166 days.

Known as the "master laser chemist of our time," according to the Welch Foundation, Richard Zare of Stanford University last week won this year's \$300,000 Welch Award in Chemistry

"Renaissance Man" Wins Welch

from the Houston-based foundation. Zare pioneered the use of lasers to follow split-second chemical reactions and to analyze the chemical composition of mixtures.

Some colleagues have called Zare a "Renaissance man." The 60-year-old Zare, former chair of the National Science Board, says he doesn't know about that, but admits, "I'm the type of person who wants to know as much as I can about everything." He's handing the prize money over to Stanford to support his research.

to identify special brain regions involved in anger recognition. Psychologist Ruben Gur, director of the Brain Behavior Laboratory at the University of Pennsylvania Medical Center, says the findings are "consistent with evolutionary theory—because men are physically stronger, it's less important for them to know whether a woman is upset."

Simply Science

Bill Nye, television's "Science Guy," will do almost anything to get children excited about science—from stirring up explosive concoctions to slithering around in a swamp. But Nye told the National Science Foundation (NSF) this month that his cardinal rule is to keep it simple.

Nye was in Washington, D.C., to receive an award for public understanding of science from NSF, which has put \$7.5 million into his program and related outreach. Appearing before its governing board, Nye rebuffed one member who wanted him to tell his young audience that science is also hard work. "That's not a good way to get kids to like science," he replied. "Besides, once they become passionate, they won't mind the work." Nye also warned the board not to support national science teaching standards that are too complicated. "When I do a show on dinosaurs I make two points—they didn't live at the same time as humans, but we know they're real because we've found their bones," he said.

Nye's show is no longer in production. But NSF has promised him \$1.2 million more for a series of prime-time family specials if the former Boeing engineer can find matching corporate sponsors.