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Response: The suggestion that our findings, which show the existence of cells in the temporal cortex of sheep that respond to the sight of animal and human faces, might be relevant to an understanding of potential neurological defects in infantile autism is interesting, if somewhat speculative. Although these cells have also been described in monkeys by a number of authors (*1*), their precise anatomical connections have not been studied electrophysiologically; and while these authors have studied the topographic organization of the cells within the temporal cortex of the monkey (*1*), there is still a long way to go. In sheep, there is no anatomical distinction made between superior and inferior temporal cortices and, in both monkeys and sheep, cells in this region which respond to faces represent only a small proportion of the total population. In consequence, despite demonstrations of general neuroanatomical connections between the temporal cortex and other brain regions, we cannot be certain which structures have connections with cells responding to faces.

Infantile autism is associated with a cognitive defect in the ability to correctly gauge the emotional or social significance of stimuli. In this respect, as Fotheringham points out, it is interesting that in humans, damage to this general region of the brain is associated with defects in ability to interpret emotion through stimuli such as facial expression. The finding that autistic children use different strategies from normal children for facial recognition (*2*) is also suggestive, even though they do not show actual impairment of facial recognition.

Our findings in the sheep that cells which respond to faces are influenced by features relating to socially important factors such as dominance (presence and size of horns), breed, familiarity, and potential threat (in humans and dogs) suggests an important link between perceptual and social-emotional response mechanisms at this level of processing. Similarly, some cells in the superior temporal cortex of the monkey respond to particular facial expressions or faces of specific individuals (*1*). The fast response latencies of these cells in both monkeys and sheep (generally less than 150 milliseconds) indicate that they are involved in sensory processing rather than in the initiation of a behavioral or emotional response. However, the fact that they appear to be specialized for responding to socially or emotionally important stimuli suggests that there is a dynamic interaction between brain mechanisms regulating the visual coding of faces and the emotional-social responses to them. Perhaps it is this interactive process rather than the visual coding or emotional-social response mechanisms themselves that is impaired in autistic children. Clearly studies on the normal development of facial recognition cells and their precise neural connections will advance our understanding of these processes.

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Transmission of AIDS Virus

David Siemens' "most obvious" scenario for insect transmission of AIDS (Letters, 9 Oct., p. 143) is unrealistic. If, for example, a mosquito is "swatted while completing her meal" some of the blood in her gut might well be introduced into the bite wound or through the skin by scratching. But, except in the most unlikely of circumstances, the blood would only be reintroduced into the person from whom it came. The blood of patients infected with the human immunodeficiency virus generally contains less than 100 tissue culture infectious doses per milliliter. A mosquito whose feeding is interrupted is therefore unlikely to ingest as much as one infectious unit, and as only a tiny fraction of that could possibly be introduced through the skin by slapping or scratching, the probability of transmission remains minuscule.

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With regard to the News & Comment article on "AIDS and insects" (24 July, p. 355) and the subsequent letter by Siemens, I have but one question: if AIDS were transmitted by an insect vector, why are children, who play in the woods and tall grass while the rest of us are at work in office buildings and laboratories, not affected (unless they are born to infected mothers or have received contaminated blood transfusions)?

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Confused Musician

Constance Holden, in her article "Why do women live longer than men?" (Research News, 9 Oct., p. 159), quotes A. D. Steinberg as having made "the informal observation that football players with early male-pattern baldness do not live as long as band members."

I am confused and seriously worried. As a male with early baldness who is not a football player yet a member of a jazz band, where do I fit in?

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Correction

It was erroneously reported in Constance Holden's article "Animal regulations: So far, so good" (News & Comment, 13 Nov., p. 880) that animal activists broke in and stole 15 monkeys in a 1981 raid on the laboratory of Edward Taub in Silver Spring, Maryland. In fact, 17 animals were seized by Montgomery County police, who had a warrant, in response to allegations by activists, including one who was employed at the lab.

Erratum: In Constance Holden's article "Why do women live longer than men?" (Research News, 9 Oct., p. 158), the name of the principal author of a study linking "attitudes with immune response" was inadvertently omitted. That author was Leslie P. Kamen.