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Cover: With computer graphics, researchers have turned a molecular docking site of an HIV protein into a gridiron. Arrows show the protein's twists, while the stick figures inside depict a molecule in optimal (blue) and increasingly less optimal (green, yellow, then red) orientations for docking — and thus possibly blocking the protein's activity. (Image by G.M. Morris and A.J. Olson © TSRI, 1994).



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Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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# Letters

## Two takes on adoption

In trying to explain why the adopted 2 percent of children make up 5 percent of children in psychotherapy, the writer speculates that adoptive parents may be more willing than biological parents to seek this sort of help for their families ("Adapting to Adoption," SN: 8/13/94, p.104). As an adoptive parent in one of the states studied by the Search Institute, I can tell you that the relationship between adoption and psychotherapy is not at all vague or fuzzy.

While conducting the home studies for both of our adoptions, the social workers used our willingness to seek counseling, our awareness of counseling services in our community, and our ability to take advantage of psychotherapy as measures of our fitness as adoptive parents. Group discussions, postplacement evaluations, and even informal discussions all included encouragements to use, and offers to help us find, such services if the need arose.

With this sort of indoctrination, it is amaz-

ing that adopted children make up only 5 percent of kids in therapy.

Russell King  
Madison, Wis.

**Bower's article focuses** on psychosocial phenomena to the complete exclusion of the issue of inherited psychiatric illness. Multiple studies over the years have shown a higher tendency toward schizophrenia, manic-depressive illness, and hyperactivity in adoptees, and these are now known to be conditions with a strong genetic component.

This ought not to be surprising. Who puts a child up for adoption? The birth mother is likely to be someone with poor judgment, impulsivity, drug abuse, low self-esteem with a depressed mood, or frank hallucinations. One of my schizophrenic inpatients got preg-

nant by another schizophrenic on the ward a number of years ago; the child, with a risk of developing schizophrenia of 40 to 50 percent, was put up for adoption.

Note that this argument does not hold for adoptees orphaned by war or other social catastrophes, which might help to explain the discrepancies found in the various studies.

Stephen G. Hayes  
Rosemead, Calif.

*Psychiatric disorders indeed occur at a greater rate in adoptees. Inheritance, combined with a child's unique experiences, apparently plays a major role in producing these conditions. But when researchers control for age at adoption, infant adoptees do extremely well, adjusting far better than if raised in institutions or by birth parents.*

*Adoptive placement delays that extend beyond the first year of life present a much greater threat to adoptees' psychological health than do their inherited traits and predispositions.*

*Still, adoptive parents deserve to know more about the psychological histories of both birth parents than they are typically told.* — B. Bower

## CORRECTION

In "Study links smoking, pancreatic cancer" (SN: 10/22/94, p.261), 377 of the 526 patients with pancreatic cancer were smokers or former smokers.

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