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## Letters

### Hope against hope

I'm rather bemused by the immense hope the new technology of genetic engineering is perceived to hold for solving most of the world's problems ("Manipulating milk in mammals," SN: 8/8/87, p. 84). I suggest there is an analogy here to the hope promulgated by the mechanical engineers at the peak of the mechanical era—say, the 1930s to the mid-50s—and by the biochemists and electronics engineers in their turn.

In spite of the predictions, we still don't have a helicopter in every garage; we don't have our personal "jet-packs," so we can't avoid the commuter crowds by sky-hopping from home to office; and the highways are still crowded and getting worse while we wait for our automatic electronic auto guidance and control systems. Instead of gleaming streamlined trains whisking us back and forth in comfort and luxury at the speed of sound, we have freight trains falling off the tracks and

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Cover: A computer simulation of the mantle shows a plume of hot, buoyant rock rising through a more viscous mantle. These plumes are believed to feed the so-called hotspots of the earth, which create tracks of volcanoes and plateaus. While many earth scientists have believed that hotspots are fixed and do not move, new evidence suggests that they might actually be drifting. (Image courtesy: Peggy Goldman/Los Alamos National Laboratory)



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overcrowded airports. Our houses are still infested with roaches—or contaminated with poisons (we seem to have a choice on that one). Although we've essentially controlled polio, gonorrhea and syphilis are still here and getting worse, and now we also have AIDS.

There is a cliché popular among scientists, which says, "We have raised more questions than we have answered." Science is interesting, but I wonder if the cliché might better be rendered, "We have created more problems than we have solved."

Gene Addor  
Birmingham, Ala.

### Unproven inference

The inference in the introductory paragraph of "RNA satellites confer viral resistance" (SN: 8/29/87, p. 133), that the satellite molecules occur in a dormant form in unin-

fect normal plants, is unproven as far as I am aware. What can be said is that satellite RNA molecules occur as components of some cultures of a number of different plant viruses and may then alter the disease symptoms caused by these viruses. The achievement of the British and Australian workers is to make DNA copies of virus satellite RNA and to insert them in the nuclear DNA of the tobacco plant in such a way that these genetically transformed plants behave in the way summarized in your article.

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