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## This Week

- 52 X-Ray Source With a Quasi Beat
- 52 Monday turns a lighter shade of blue
- 53 Protesters prompt halt in animal research
- 53 Conversing with computers naturally
- 54 AMPTE's last blast: Another comet made
- 54 EPA approves compound 1080 for collar use
- 55 Family planning: U.S. policy changing?
- 55 Yeast-made vaccine nearing market

## Research Notes

- 56 Astronomy
- 56 Behavior
- 57 Technology
- 57 Computers

## Articles

- 58 Drugs That Fight Cancer . . . Naturally
- 61 Gravity Refracts

Cover: Einstein looks as if he is swallowing his own face. He isn't, but the rest of us have to swallow his theory. This is how Einstein would look if he were somewhere in the sky and his image were distorted by the gravitational lensing of a black hole somewhere between him and us. Gravitational lensing is a prediction of his general relativity theory. (Einstein photo: UPI/Bettman Newsphotos; Imaging: Smithsonian Astrophysical Observatory)



## Departments

- 50 Science on the Air
- 50 Books
- 51 Letters

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## Letters

### Open-air genes

As you duly note at the end of "An open airing of the gene-splice debate" (SN: 6/22/85, p. 390), the discussion between two disciplines dealing with this is long overdue. We hope that this meeting will stimulate interest in related meetings in the years to come because if one does deal with issues on specific grounds then there will be need to review a large number of projects individually. What is needed is for more molecular biologists to be involved in the same discussions so that the new dimensions of biology can be integrated with the experience of our better ecologists.

Harlyn O. Halvorson  
Brandeis University  
Waltham, Mass.

### Notions on emotions

In "The Face of Emotion" (SN: 7/6/85, p. 12), you identify psychologist Robert Zajonc as de-

fending Israel Waynbaum's theory of emotion. The crux of Waynbaum's theory appears to be the idea that behavior, i.e. facial movements, precedes the experience of emotions which involve vascular changes. My point is neither to attack nor defend Waynbaum's theory but to cite the James-Lange theory of emotion as one that probably influenced Waynbaum. The James-Lange theory described a stimulus precipitating particular behaviors, many of which were characteristic of species-survival, which then produced visceral changes experienced as emotion. This idea parallels Waynbaum's notion that stimuli trigger muscular movements that result in cerebral blood flow associated with facial emotional expressions. In other words, I don't think Waynbaum's theory was novel as the article seems to suggest.

Hank McGovern  
Staff Psychologist, John Umstead Hospital  
Butner, N.C.

### Running on empty

Reporting that two men who developed cecal volvulus also happened to be marathoners ("Twisted runners," SN: 6/1/85, p. 344) represents a popular trap in cause-effect thinking. Your last two sentences summed it up better: The men were extra-lean, lacking in stabilizing fat tissue, and were also born with intestines not "firmly tacked down." These two factors describe their hazard much more accurately than postulating running as a hazard.

If it had been noted that each of the men routinely kept milk in their refrigerators, would we consider milk drinking a cecal volvulus hazard?

George Harold Waxter  
Herndon, Va.

The marathon running—unlike milk in the refrigerator—accounts for their leanness, which was a factor in the volvulus. —J. Silberner

JULY 27, 1985

51