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Cover: New computer viruses spread quickly over the Internet. Digital immune systems—processes that can recognize and destroy viruses that the computers have never encountered before—may become a critical part of keeping computers healthy in an increasingly connected world. **Page 76**
(Illustration: Kay Salem)

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Letters

Skip the bioethics

It surprises and dismays me to read that TIGR scientists have halted research into the genome of *Mycoplasma genitalium* in order to refer a decision on whether to proceed to a group of bioethicists and religious scholars ("One small bacterial genome, to go," SN: 6/12/99, p. 377). Basic research into the nature of life on Earth—and especially that conducted through the use of material unrelated to the human genome—contains no ethical component whatsoever. Where would science be today if Copernicus, Darwin, Gamov, and Crick had sought permission from the religious ethicists of their time for permission to proceed with and to publish their studies?

William C. Atkinson
Weston, Mass.

The researchers have not stopped their studies of the genome. They've merely temporarily halted plans to use information drawn from their studies to create a new life-form.

—J. Travis

Disaster's consequences are good

The article "Natural-disaster policies need shaking up" (SN: 5/29/99, p. 341) correctly points out that weather forecasting and advance-warning systems may inadvertently encourage development in areas vulnerable to natural hazards. Traditional federal flood-control and shore-protection programs, disaster relief, and federally subsidized flood-insurance rates also often foster unwise growth.

Fortunately, the Federal Emergency Management Agency (FEMA) is correcting this situation. Since the Great Flood of 1993, FEMA has successfully implemented voluntary property buyout programs to relocate more than 20,000 business and residential properties out of the floodplains. These buyouts signal an important shift toward proactive federal disaster prevention. Government agencies must build upon these and other efforts to discourage development in vulnerable natural areas and help restore them to their natural states.

Mark Van Putten
National Wildlife Federation
Vienna, Va.

Birds do or don't?

The article "Waterways carry antibiotic resistance" (SN: 6/5/99, p. 356) has a picture of a Canada goose with the caption "Wild birds harbor and may transmit drug resistance." What were you thinking? The text of the article in no way supports the picture and its caption.

The article does, however, state, "The most important source of environmental, antibiotic-resistant bacteria is domestic animals." The caption would be a harmless non sequitur except that it appears to gratuitously blame the victims of human-perpetrated pollution.

Jo Chamberlain
Lobitos Canyon, Calif.

There's nothing gratuitous about it. Those geese, as the story notes, are a reservoir of the resistant bacteria that were likely acquired from human or animal wastes. Once in rivers and in these mobile birds, however, the microbes can be spread throughout urban-suburban areas to infect other wildlife and humans far removed from the original source of the bacterial contamination. —J. Raloff