scientific discovery and fundamental engineering research, and an unhealthy science enterprise would adversely affect engineering research as well.

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References

1. Commission on the Future of NSF, *A Foundation for the 21st Century: A Progressive Framework for the National Science Foundation* (National Science Board, Washington, DC, 1992).

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Basic Research and the Cost of Health Care

Christopher Anderson's 23 July article "Research and health care costs" (News & Comment, p. 416) highlights a disturbing idea that is apparently gaining acceptance in some quarters—that investment of public funds in biomedical research may lead to increasing health care costs.

Medical cost containment should not be based on cutting the budget of the National Institutes of Health. Opportunities to contain health care costs are found in clinical practice, not in the laboratory. The cost of using new technology is primarily a function of market economics, not federal research spending. For the pharmaceutical industry, cost-effectiveness of new products is critical. Companies face significant price competition from both generic products and other innovative products with similar mechanisms of action. They also must deal with a changing customer base, as managed care organizations and other major purchasers gain greater negotiating power.

These and other market forces should lead efforts to contain health care costs. Decreasing investment in basic research, while reducing current federal spending, would stifle innovation. Because research is inherently unpredictable, we would never know which therapeutic opportunities had been missed. Scaling back basic research would invariably interfere with our national system for developing better and more cost-effective products.

There will always be debate over priorities in the federal budget about what we, as a nation, should spend on basic biomedical research. Let's keep health care cost containment out of that debate; it simply doesn't belong there.

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Corrections and Clarifications

Figure 4 (p. 997) of the article "The genesis and collapse of third millenium north Mesopotamian civilization" by H. Weiss *et al.* (20 Aug., p. 995) contained some errors. The correct figure appears below.