Letters

The Value of Animal Research

I was displeased to find my arguments that interpretation of experiments of nature has played a crucial role in the scientific revolution in medicine used in support of the position of animal rights activists (Letters, 11 Aug., p. 583).

It is true that the impact of natural experiments reflected in children born with X-linked agammaglobulinemia, severe combined immunodeficiency disease, DiGeorge syndrome, and numerous other immunodeficiency diseases has been vital to an understanding of human immunobiology. However, the interpretation of such experiments regularly requires that the questions raised by studying patients at the bedside and in the clinical laboratory be taken to the basic laboratories, often to basic animal laboratories. There answers are obtained that can be returned to the clinic in a form helpful in the treatment of patients and generally useful to clinical medicine. It is the to-and-fro interaction of clinic and basic laboratory, including the animal laboratory, that represents a most incisive and productive approach to medical science. Neither clinical investigation nor basic investigations with animals should stand alone. Both must be developed further, and both must continue to be employed as crucial components of the scientific revolution in medicine.

The major discoveries and insights of modern immunology would have been impossible without animal research. Elucidation of the functions of the bursa of Fabricius in the chicken and the biological role of the thymus in the mouse represent cornerstones of knowledge that have enabled us and many others to save the lives of babies suffering from immunodeficiencies. I regularly have instructed and continue to instruct my students that among the greatest contributors to medical science in general and immunology in particular have been laboratory mice.

My life's work and that of colleagues in pediatrics, immunology, and other fields have been guided by the desire to help sick human beings. We deeply respect animal life and are scrupulously humane in the treatment of our animals. We must, however, continue to be able to proceed with analysis of the mechanisms of disease and development of new treatments without limitation by animal rights activists, "antiresearchists," or others as we search for answers to the many questions that remain: questions posed by illnesses that we cannot yet cure. Our search would be disastrously slowed, if not stopped altogether, if we could not study animals as well as human beings.

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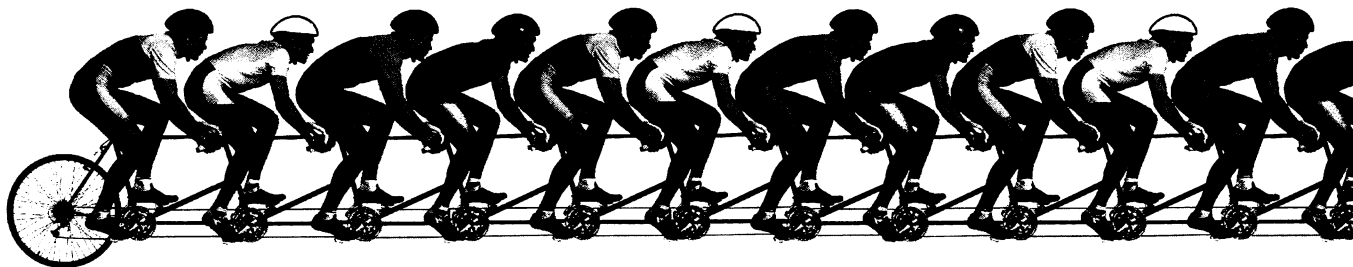All Children's Hospital,
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Federal Housing and Poverty

In his letter of 23 February (p. 905), Stephen Dewhurst is in error when he argues that federal housing assistance for the poor has been slashed precipitously. He states, "in 1980, the Department of Housing and Urban Development [HUD] was funded at $32 billion, today that figure stands at just over $7 billion."

The figures Dewhurst cites are for budget authority, not actual spending outlays. Actual federal spending for low-income housing assistance in fact rose sharply during the 1980s. HUD spending increased from $12.5 billion in 1980 to $22.8 billion in the current fiscal year (1, 2). Federal spending on housing assistance for the poor increased from $5.6 billion in 1980 to $13.9 billion in 1988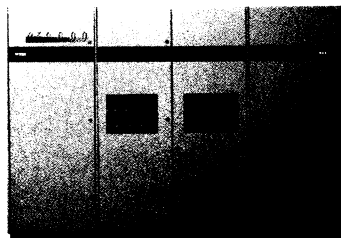, a real increase of 65%, and has grown