ders heretofore conducted experienced a major psychiatric disorder over a 1-year period (*1*). Neuropsychiatric conditions may be even more prevalent in third-world countries. Depression, posttraumatic stress disorder, and other disorders are common among individuals from war-torn areas (*2*). Studies of earthquake survivors in rural India, of psychiatric sequelae of "ethnic cleansing" and genocide in Bosnia and Rwanda, of tortured political activists in Turkey, and of refugees and those who have experienced civil unrest generally suggest that many aspects of life in developing countries contribute to high levels of psychiatric morbidity (*3*).

Not only are neuropsychiatric disorders ubiquitous, they are particularly costly because of their early onset and frequently chronic course. The WHO Collaborative Study on Psychological Problems in General Health Care found psychiatric illness more strongly related to occupational impairment than physical disorders and concluded that "the consistent relationship of psychopathology and disability indicates the compelling personal and socioeconomic impact of common mental illnesses across cultures" (*4*).

Greater personal and public recognition of psychiatric disorders and funding of neuropsychiatric research is needed. In addition to their large direct costs, psychiatric disorders also contribute to the development or complicate the management of other important causes of premature death and disability. Developed countries should devote more resources to psychiatric research and treatment in order to benefit their own citizens and find ways to assist developing nations in caring for their own psychiatrically impaired citizens.

R. Dale Walker
Speaker of the Assembly, American Psychiatric Association, and Chair, Department of Psychiatry, Oregon Health Sciences University, Portland, OR 97201–3098, USA
Matthew Owen Howard
Department of Psychiatry, Oregon Health Sciences University, and National Center of Excellence in Substance Abuse Treatment and Education, Portland, OR
E-mail: howardm@ohsu.edu

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After the Genome

In his Policy Forum "The new genomics: Global views of biology" (25 Oct., p. 536), Eric S. Lander offers a marvelous analogy, likening the conceptual contribution of the Human Genome Project to "the discovery and consolidation of the periodic table." I was relieved that he selected this over the alternative of the Holy Grail.

Lander proposes 10 goals to fill the idle hours of soon-to-be–ex-genome scientists. These are systematically arranged under four helpful subheadings, to wit, "DNA," "RNA," "Protein," and "Society." While this might appear to cover all the bases, his otherwise thoughtful propositions seem to overlook what held most scientists' interest in chemistry as children—putting together unlikely looking components and getting unexpected, highly colorful, delightfully messy, and sometimes explosive results. Between "Protein" and "Society" lies the enormous range of behavior, development,

disease, health, and all that in current genetic jargon can be labeled as "complex traits." This complexity is the manifestation of gene-gene and protein-protein interactions, themselves interacting with the equally rich nongenetic environments in which they operate. Certainly, one post-genome goal should be to try to understand, even if for only a few apparently simple complex traits, how the enormous and exhaustive lists of genes and proteins actually work. After reduction to elemental parts, there must be resynthesis into complex systems.

John Crabbe
Department of Behavioral Neuroscience, and Director, Portland Alcohol Research Center, Oregon Health Sciences University, VA Medical Center (151W), 3710 SW U.S. Veterans Hospital Road, Portland, OR 97201, USA
E-mail: jcrabbe@teleport.com

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Liberal Arts Colleges and Science Education

I'm tired of seeing letters from faculty at small liberal arts colleges (for example, 18 Oct., p. 326) piously proclaiming that they, and they alone, are the only ones capable of reforming the way science is taught at colleges and universities. Although many faculty at research universities do not place much value on teaching, there is a growing cadre of faculty at such institutions who are strongly committed to undergraduate teaching and to the improvement of science education. In many departments and even across entire campuses, these groups are beginning to reach the critical mass needed to bring about substantial change. Although there are many reasons why reform at research institutions has lagged behind change at small liberal arts colleges, one of the most important is that the magnitude of the problems at large universities dwarfs that at small colleges. Indeed, it is not all that difficult to teach effectively when one is dealing with a class of 20 students, carefully selected for their homogeneity. It is another matter completely to deal with 100 to 250 students with a full range of abilities, backgrounds, and learning styles. If faculty at small, liberal arts colleges truly want to contribute to the improvement of science education on the national level, they should join with faculty at larger institutions to find ways of adapting the successes of small institutions to the realities of large ones.

Kenneth L. Verosub
Department of Geology, University of California, Davis, CA 95616, USA
E-mail: verosub@geology.ucdavis.edu

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Sex and Gender

On the topic of sex and gender, I agree for the most part with G. A. Pearson (Letters, 18 Oct., p. 328) and am happy that the topic is being raised. However, I would suggest that, in discussions of biochemical, morphological, and physiological issues where reproductive hormonal characteristics are being studied, "sex" is the more useful term even when it is applied to humans. In psychological, social, and societal issues, "gender" is more appropriate.

Ethel Tobach
Comparative Psychology Research Group, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024–5192, USA

Pearson complains that the word "gender" is misused interchangeably with "sex" in the scientific literature. The former is a term of art used by social scientists to refer