rily rain-fed agriculture, we see in the final quarter of the third millennium B.C. an increase in settlement numbers and the growth of a town at Tell Sweyhat. In moister areas near Kurban Hoyuk in southern Turkey, growth in rural sedentary settlements was at the expense of towns. As Frank Hole states ("Wheat domestication," Letters, 16 Jan., p. 303), something was going on at this time, but whether it was culturally or climatically driven, or a combination of both, is unclear (*4*). A case for increased atmospheric moisture in the mid-Holocene can be made from lake sediments and alluvial sediments (*5*). The former record suggests that there was dwindling but fluctuating moisture toward the end of the third millennium B.C., followed by greater drying in the later second millennium B.C., when settlement in northern Mesopotamia did indeed decline, but did not disappear. Although I, too, accept a role for climate, especially in these fragile, highly stressed semiarid agricultural systems, archaeological evidence suggests that not only was settlement decline in one part of this zone counteracted by increases in other areas, but also that there were adjustments within both pastoral and sedentary communities that could absorb some of the stress of climatic shocks.

Tony Wilkinson
Oriental Institute,
University of Chicago,
Chicago, IL 60637, USA
E-mail: t-wilkinson@uchicago.edu

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Gentlemen of Science

In a Special News Report, Jon Cohen describes "Scientists who fund themselves" (9 Jan., p. 178). I would like to add the names of my mentor J. B. S. Haldane (1892–1964) and his father J. S. Haldane (1860–1936). The younger Haldane, in particular, exemplified the amateurish tradition by making significant contributions to genetics, physiology, biochemistry, and biometry, while possessing no academic qualification in any branch of science (*1*). Both Haldanes funded their own research as well as that of their students from their own pockets whenever they could.

Much of our research did not require expensive facilities, but we needed support for salaries, travel, and other expenses to attend scientific meetings, which was partially provided by Haldane. He even edited his own journal, the *Journal of Genetics*, which bypassed the usual peer-review system, but Haldane privately arranged for us to obtain the comments of distinguished colleagues before he accepted a paper for publication. His father, Oxford physiologist J. S. Haldane, built his own laboratory on the ground floor of his sprawling house in Oxford ("Cherwell"), complete with an airtight chamber with a sealable door and observation window. Both father and son conducted physiological experiments, in which they were their own "guinea pigs," that were often painful and involved the testing of the effects of various gaseous mixtures, atmospheric pressures, and temperatures.

Krishna R. Dronamraju
Foundation for Genetic Research,
Post Office Box 27701–0,
Houston, TX 77227, USA

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Muon Collider Studies

The article "Physicists dream of a muon shot" by Alexander Hellemans (News, 9 Jan., p. 169) gives a useful account of the 4th International Conference on Muon Colliders (San Francisco, December 1997), which I, with the assistance of others on the program committee, organized.

The concept of a Higgs factory muon collider (*1*) arose (and the name was coined, as I recall) at our first conference in 1992 in Napa, California, but it had little scientific support at that time.

At the 1997 conference, however, there were reports about four independent studies of the parameters of the electroweak theory that suggest the existence of a low-mass Higgs scalar particle (below 200 gigavolts). This is precisely the mass range in which a Higgs factory is designed to operate and that is expected by supersymmetry.

A similar situation happened with the Z particle. Before the Z particle was discovered in 1983 at the European Organization for Nuclear Research (CERN), the mass was known well enough to start the design of the Large Electron-Positron Accelerator (LEP, a Z factory) machine at CERN and the Stanford Linear Collider (SLC). History may