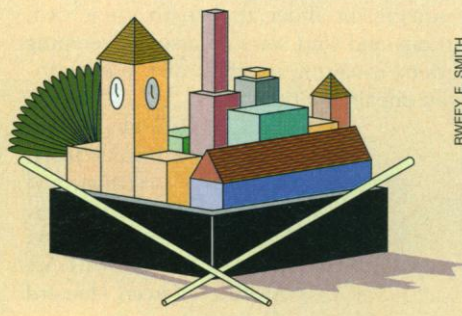


# LETTERS

## Marvelous analogies

If the complete sequence of the "human genome" can be likened to the periodic table, will subsequent research be like playing with a chemistry set? Can a university be compared to a box lunch at a Japanese train station (right)? Does a queen's title qualify her as an insect? And does scientific fraud really "strike" like lightning?



## "Struck" by Fraud?

The soft soap dispensers are back at it again, and *Science* is aiding and abetting. "Fraud strikes top genome lab," a News & Comment piece by Eliot Marshall (8 Nov., p. 908) is pure cultural soft soap inflated into giant bubbles. Fraud did not "strike," it originated in the lab.

Before we call in the lawyers, defer to the ethics committee, arrange a blue-ribbon panel, or make this a long-running story, perhaps we could agree on the following. If you haven't done the work, don't put your name on the paper. If you put your name on the paper, then you are stuck with it.

**Charles F. Wooley**  
Department of Internal Medicine,  
University Medical Center,  
Ohio State University,  
Columbus, OH 43210-1228, USA

As former scientists, we are naturally troubled by controversies about co-authored papers, but find that subsequent discussions within the scientific community generally focus on *how*, and rarely on *why*, such incidents occur. One possible reason is that co-authorship of a paper is not always indicative of participation in the reported research—or even of knowledge about its content. We feel that co-authors should bear collective responsibility for their publications, sharing blame as well as credit. It is a contradiction to be a co-author but then plead ignorance (and assume victim status) if there is controversy regarding data in the paper.

We propose a simple convention embodying the principle that authorship equals responsibility. Publication of an article should require the mandatory submission of a form signed by all authors verifying that they have read the complete manuscript and take equal responsibility for its

contents. One would expect joint authorship to automatically imply this, but evidently this code of conduct needs to be formalized. If scientists do not feel that they can vouch for the integrity of a paper, then they should not assume co-authorship.

**Paul de Sa**  
**Ambuj Sagar**  
Science, Technology, and  
Public Policy Program,  
Center for Science and International Affairs,  
John F. Kennedy School of Government,  
Harvard University,  
Cambridge, MA 02138, USA  
E-mails: paul\_de\_sa@harvard.edu  
ambuj\_sagar@harvard.edu

## Mental Health and Disability

Findings of the World Health Organization (WHO)—World Bank Global Burden of Disease (GBD) study (C. J. L. Murray and A. D. Lopez, Policy Forum, 1 Nov., p. 740) accord well with those of less ambitious investigations and underscore the central importance of neuropsychiatric disorders to the health status and economic productivity of developed and third-world countries. Some readers may have been surprised to find unipolar depression, self-inflicted injuries, violence, alcohol dependence, bipolar disorder, and schizophrenia ranked high among the leading causes of disability worldwide. The authors of the GBD predict that demographic trends will make depression the second leading cause of disability in 2020; human immunological deficiency-related disease has a predicted rank of 10th.

Other studies suggest that psychiatric disorders are common in nonselected samples. More than a quarter (28.1%) of the U.S. citizens participating in the largest epidemiological study of psychiatric disor-

NEED AN  
EASY-TO-USE HIGH SPEED  
BOTTLETOP FILTER?

## Vacuum Filter Up To 20 L In Minutes!



### Sterivac™-GP

bottletop filtration units let you prepare up to 20 L of tissue culture media, buffers, and biological fluids in minutes. Ideal for high throughput applications, the Sterivac-GP10 and Sterivac-GP20 are the newest devices that use the high flow, low-binding Millipore Express™ (PES) membrane for filtering up to 1.5 L / min without loss of protein.

These disposable vacuum devices are easy to use as well. No pumps required. No clumsy bottle changes because our unique "start & stop" action lets you stop and restart filtration with one push.

Call or fax for more information.

U.S. and Canada,  
call Technical Services:  
1-800-MILLIPORE (645-5476).  
To place an order, call Fisher  
Scientific: 1-800-766-7000  
(in Canada, call 1-800-234-7437).  
In Japan, call: (03) 5442-9716;  
in Asia, call: (852) 2803-9111;  
in Europe, fax: +33-3.88.38.91.95

MILLIPORE

<http://www.millipore.com/sterile>