

# LETTERS

## At the edge

Carl Sagan is remembered as one who could "skillfully communicate the power and beauty" of scientists' work to the public. The costs of colliders and "marine protected areas" are discussed. Vigilance in safeguarding the integrity of clinical trials is stressed. And three writers emphasize "the experimental nature of Biosphere 2" (right, Biospherian at work).



## Bright Star

The editorial "Bright star among billions" by Stephen Jay Gould (31 Jan., p. 599) was a fine tribute to a distinguished scientist. It did, however, reveal an unfortunate aspect of contemporary science that likely would have puzzled our scientific predecessors: the belief that popularization of science necessarily involves trivialization and inaccuracy. If the future confirms—as some fear—that support of scientists and their work peaked in our time, those seeking explanations could do worse than reread Gould's editorial. How well we encourage and support scientists who can skillfully communicate the power and beauty of their work to the public may largely determine whether the golden age of science is history. Carl Sagan was indeed a bright star.

**John C. Whitmer**

Department of Chemistry,  
Western Washington University,  
Bellingham, WA 98225, USA  
E-mail: whitmer@mailgate.chem.wvu.edu

Sagan's final book, *The Demon-Haunted World: Science as a Candle in the Dark*, epitomizes Sagan's main message (1). Most important, it provides an antidote to the obscurantism or "New Age" claptrap of those who would seize on myth and magic as answers to the problems of mankind, no matter how valid the personal succor these may provide to some.

**Peter Bearse**

Development Strategies Corporation,  
47 Pleasant Street,  
Gloucester, MA 01930, USA

## References

1. C. Sagan, *The Demon-Haunted World: Science as a Candle in the Dark* (Random House, New York, 1996).

Was Sagan really "the greatest [science] popularizer of the 20th century, if not of all time?" It is interesting to know that Sagan dwarfed several other luminaries of the 20th century, including H. G. Wells, Julian and Aldous Huxley, J. B. S. Haldane, Lancelot Hogben, George Gamow, Arthur C. Clarke, and Isaac Asimov, to name a few!

**Krishna R. Dronamraju**

Foundation for Genetic Research,  
Post Office Box 27701-0,  
Houston, TX 77227, USA

## LHC "Price Tag"

The dollar figures quoted in Alexander Hellemans' article "CERN sets sights on an early LHC [Large Hadron Collider]" (News & Comment, 3 Jan., p. 19), could be misinterpreted in the absence of appropriate clarifications. In particular, the \$2 billion quoted as LHC's "price tag" includes the accelerator, but not the detectors, and is based on accounting practice at CERN (the European particle physics center). On the other hand, the \$530 million from the United States is to fund equipment and materials for both accelerator and detectors, and the amount of that equipment and materials is determined on the basis of U.S. Department of Energy (DOE) and National Science Foundation (NSF) accounting practices. Unlike the DOE-NSF costing procedure, CERN accounting excludes a number of elements such as research and development and a substantial fraction of labor costs, which CERN covers and accounts for separately. Thus, the figures of \$2 billion and \$530 million are not at all comparable.

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>

Circle No. 1 on Readers' Service Card