

Letters

Indirect Costs at Universities

David P. Hamilton's use of "SCAM" as an acronym for a typical university ("Tour through the indirect cost labyrinth," News & Comment, 8 Nov., p. 789) contributes unfairly to the notion that universities are seeking larger reimbursements for indirect costs of research than they deserve. Furthermore, the "examples" cited by Hamilton are contrived and seriously misleading, and he propagates a myth of complexity that deters serious efforts to improve the indirect cost process. The tone of the whole piece is negative toward universities without obvious justification.

The charges to federal sponsors that have been found to be inappropriate did not come from "SCAM administrators" seeking to insert unallowable costs in their proposals. They were discovered by audits long after the money was spent, and they occurred because the administrators authorizing expenditures are different from those who prepare the indirect cost analyses. The indirect cost accountants make assumptions about the nature of expenditures from accounts about which they have only summary information. Those spending from the accounts are often unaware of the assumptions that the accountants are making. This lack of communication is not desirable, and it has led to serious consequences for our institutions. But it is understandable in view of the extremely large number of accounts and transactions in a typical research university. My own relatively small institution has hundreds of thousands of transactions per year in thousands of separate accounts. In view of these numbers, the error rate discovered by the Department of Health and Human Services (HHS) audits is remarkably low.

More troublesome is Hamilton's portrayal of the system of indirect cost accounting itself as arcane and barely comprehensible. Accounting is a technical subject, but it is not tremendously complicated. The methodology described in the Office of Management and Budget Circular A-21 is a relatively straightforward exercise in departmental accounting, as can be confirmed by consulting any general accounting textbook. Chapter 22 of the widely used text by Pyle and White (1) explains clearly the concept of indirect cost and the "stepdown" analysis typically used to compute it. There is no mystery here, and little confusion. A 1988 American Association of Universities report on indirect costs (2) found little disagree-

ment about the methodology of the process, but expressed concern about how it was implemented.

It is extremely important for the public to understand that indirect costs are real costs, that they can be determined and managed like other costs, and that if sponsors do not pay them they have to be paid from some other source. There is no doubt that indirect costs are substantially increased by federal requirements directed toward nonresearch objectives, but they are still not high by industrial standards—and they are not at present fully recovered by any institution. Federal agencies seeking to increase the research productivity of their limited budgets cannot do it by refusing to pay full indirect costs without shifting the burden to some other sector of society. That will cause powerful disincentives for higher education to continue to invest in the facilities and faculties that have made U.S. science the best in the world.

JOHN H. MARBURGER
President, State University of New York
at Stony Brook,
Stony Brook, NY 11794-0701

REFERENCES AND NOTES

1. W. W. Pyle and J. A. White, *Fundamental Accounting Principles* (Irwin, Homewood, IL, ed. 7, 1975).

3rd NIH-Sponsored Symposium

IRON CHELATORS FOR CLINICAL USE

May 20 - 22, 1992

Gainesville Hilton
Gainesville, Florida

Sponsors

University of Florida
Department of
Medicinal Chemistry
National Heart, Lung,
and Blood Institute

National Institute of Diabetes,
Digestive, and Kidney Diseases

For more information contact:

Office of Continuing Medical
Education
P.O. Box 100233, JHMH
Gainesville, FL 32610-0233
904-392-3143

WE'LL SHIP YOUR OLIGO IN 48 HOURS, OR WE'LL EAT THE NEXT ONE.

You get your primer or probe on time, or you get your next one for free. No questions, no quibbles. For \$5.00 a base (and \$20 setup charge), you'll receive a research-ready, cartridge-purified product, complete with PAGE gel pedigree. And you'll get it on time, or we'll be eating more **GENOSYS** than our words.



Special Offer! Return this coupon for more information, and get a free knife and pen set with your first order.

Name _____ Title _____
Institution/Company _____
Address _____
City _____ State _____ Zip _____
Telephone _____

Genosys Biotechnologies, Inc. 8701A New Trails Drive, The Woodlands, Texas 77381-4241
Phone: (713) 363-3693 (800) 2345-DNA Fax: (713) 363-2212

2. AAU Ad Hoc Committee on Indirect Costs, "Indirect costs associated with federal support of research on university campuses: Some suggestions for change" (American Association of Universities, Washington, DC, 1988). This report concludes that "there was general consensus that the system is basically sound but could be improved in practice" and that "Most of the costing disagreements arise from a lack of exactness in assigning costs to research and instruction and not from principles on which the accounting procedures are based."

In his News & Comment article "Indirect costs: Round II" (8 Nov., p. 788), David Hamilton refers to "low-level but persistent abuse of the indirect cost system" by universities and cites as an example a "\$1-million" dispute between the U.S. Department of Health and Human Services (HHS) and the University of Chicago about our Alumni Development Database System (ADDS). His comment is inappropriate.

HHS auditors questioned \$1,032,890 of costs associated with ADDS, which represents the gross cost allocated to the cost pool. The amount actually allocated to the research indirect cost rate was \$179,722, or 17.4%.

The university's research base includes both federal and nonfederal research activity, and all nonfederal research awards are processed through ADDS, which is fully integrated with the university's financial accounting system. The integrity of the data

reported in the university's financial statements depends on ADDS, which improves the quality of financial data and the university's ability to meet the audit requirements of the Office of Management and Budget.

Issues of allowability and "allocability" are often not black and white, but highly technical. In this case, the final HHS Audit Report indicated that some of the costs associated with the ADDS were considered to be unallowable, but others were found to be appropriate. Final resolution of the allocation of ADDS costs will be determined by negotiation between the University of Chicago and HHS, which is precisely the way the indirect cost negotiation process was intended to work.

GERHARD CASPER
Provost,
University of Chicago,
5801 South Ellis Avenue,
Chicago, IL 60637

Nanotechnology: The Past and the Future

The special issue of *Science* on Engineering in a Small World (29 Nov. 1991) brought back vivid memories for me, since I

was one of the attendees at the now legendary talk Richard Feynman gave in 1959. I have kept it in mind over the many years since because of its profound and uncannily accurate foresight. A note of clarification about Tim Appenzeller's News Report (p. 1300) is important to make, however. Feynman was the after-dinner speaker at the banquet held at the Pasadena meeting of the American Physical Society (APS); his talk was not part of the regular technical program. Also, the gathering was not the annual meeting of the APS, but rather of its West Coast section.

During the talk, Feynman also announced a reward—\$1000 of his own money—to the first individual (within some extended time frame) who could demonstrate a working electric motor at or below a specified microscopic scale. No doubt Feynman made the dimensions sufficiently small to keep his money safe. As it turned out, he had to pay off within a matter of months.

N. RICHARD WERTHAMER
Executive Secretary,
American Physical Society,
335 East 45th Street,
New York, NY 10017-3483

In discussing molecular nanotechnology, Ivan Amato (News Reports, 29 Nov., p.

Primers for Rapid Mapping

Operon Technologies now has 500 different 10-base oligonucleotide primers in stock, for use in the new genetic mapping method developed by Williams *et al.* (*Nucleic Acids Res.*, 18 6531-6535). In this method, single 10-base primers are used to amplify DNA polymorphisms, which are useful as genetic markers. This method has considerable advantages over RFLP methods. Operon's primers are available for immediate shipment at \$150 per kit of 20 sequences, with no charge for domestic delivery. Please call or fax for details.

1-800-688-2248

OPERON

OPERON TECHNOLOGIES, INC.

1000 Atlantic Ave., Suite 108 · Alameda CA 94501
Tel. (510) 865-8644 · Fax. (510) 865-5255—NIHBP 263-00033233

WORLD'S LEADING SUPPLIER OF SYNTHETIC DNA.

SCIENCE



ORDER ADDITIONAL COPIES OF ARTICLES YOU HAVE SEEN IN SCIENCE

For full details and prices, call the Science Reprint Service and ask for Corrine Harris at (202) 326-6527 or fax your request to (202) 682-0816. You may also write us at Science, 1333 H St., N.W., Washington, D.C. 20005.

Master Card and Visa accepted