

and less restricted methods of analysis. In the forefront of this enterprise should be the difficult task of interpreting the results from these analyses. No doubt, mistakes will be made and major refinements required. Nonetheless, in order to make useful predictions about the behavior of ecological systems, the challenge of conducting and interpreting multivariate analyses of interacting components must be tackled with vigor.

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Surprise Authorship

Recent letters (6 Dec., p. 1593; 24 Jan., p. 461) have proposed strict rules for co-authorship of scientific publications. I wholeheartedly agree that to put one's name on a paper is an assurance to the scientific community that one has contributed to the work and that one stands behind the work reported. However, one aspect of the co-authorship problem that I have not seen discussed in this forum is that of finding one's name as a co-author on a publication of which one has

no knowledge. This recently happened to a colleague and me when we found a paper in a journal listing our names as co-authors, although neither of us had ever contributed to the work, seen the manuscript, or been notified of its submission or publication.

I felt victimized by this event and by the use of my name in an inappropriate manner. Integrity and reputation are among our major assets as scientists. I agree with previous letter writers that every reputable journal should secure a written statement from each author listed on a manuscript assuring that a contribution to the work was made and accepting responsibility for the work. Such a requirement will protect both the integrity of the literature from bogus authorship and the integrity of researchers whose names may be usurped.

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Medical School Funding

Although medical schools might appear to be robust enterprises, with aggregate annual

expenditures in 1995 of more than \$30 billion, the fact is that on average only about 10 to 20% of their annual revenues comes from such secure sources as tuition and fees, endowment earnings and gifts, or (mainly for the public schools) state support. About 20% of their annual revenues comes from the NIH (National Institutes of Health), nearly 35% from fees generated by the faculty physicians' practice of medicine, and another roughly 15% in direct payments from teaching hospital partners. In other words, about 50% of the schools' aggregate revenues is derived from the provision of medical care; these revenues have provided surpluses that have been used by the medical schools as flexible funds for academic investments. In fiscal year 1994, the Association of American Medical Colleges survey indicated that revenues from the faculty physicians' practice alone contributed \$2.4 billion to medical schools for support of education and research. Although the majority of the funds were expended for clinical education and research, not all of them were, and the fact that the funds were discretionary is their critically important feature. It is these clinical surpluses that are being wrung out of the health care system by a managed care enterprise that has demonstrated little willingness to contribute to the costs of education and

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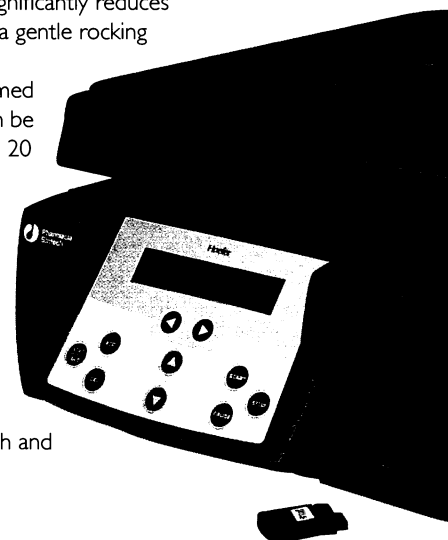
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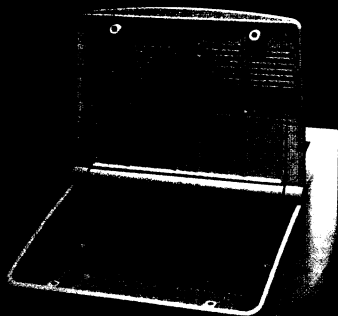


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Doug Burtrum,
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Haiku writer,
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research. And just as the teaching hospitals are threatened by this new environment and require additional stabilization funds, so, too, are the medical schools.

The purpose of a new Medical School Fund (K. I. Shine, Editorial, 3 Jan., p. 9) is to replace these clinical revenues and provide the schools with flexible funds for the support of their academic objectives. Some of the new funds would go toward the support of curricular innovation, others to the support of the research infrastructure (or capacity) that enables the medical schools to partner with NIH in sharing the costs of sustaining the world's leading biomedical research enterprise. A good fraction of the funds would undoubtedly go to the support of clinical research, but that should be by choice and not by mandate. The schools must certainly be held accountable for the expenditure of any monies that might be received from a new public fund, but the overriding need of the medical schools at this time of convulsive change is for new monies that are flexible, not earmarked by prescription to overly specific applications.

There is an old adage in medical school lore which says that any policy that would gratuitously restrict a previously unrestricted source of funds is bad policy. From this perspective, and with deeper understanding of the schools' historic dependence on flexible clinical revenues to support a broad array of educational and research objectives, one should oppose the suggestion by Shine that funds to be raised from a new all-payer assessment be restricted by policy to support clinical investigation.

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Response: The key concept is accountability. Korn's letter clearly exemplifies the justification for a clear and accountable support of clinical research as opposed to including such monies in a broad Medical School Fund. Certainly, there must be a funding stream to support education in academic health centers, but it is the uncertain discretionary application of money in a Medical School Fund that would make accountability for clinical research to the scientific enterprise or to payers problematic. Flexible funds are wonderful, but flexibility is not the national goal. High-quality research and education that improve health are the goals.

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International Support for Natural History Museums

An article by Nigel Williams (News & Comment, 27 Sept., p. 1792) and a Policy Forum by Stephen Blackmore (4 Oct., p. 63) raise three issues: (i) How can the biodiversity information associated with natural history museum collections be made available to a wider range of users? (ii) How can international support and funding for this activity be increased? and (iii) Do we need a new international organization, responsible for coordination and strategic planning, to facilitate these two objectives?

Multilateral and bilateral international funding agencies have already demonstrated a willingness to fund systematic collections and biodiversity information systems, in the context of "demand driven" projects that have close links to users, lead to clearly identifiable outputs, and can be achieved in discrete time-frames. Present examples include the Indonesian Biodiversity Collections Project, a 5-year international program to strengthen the institutional capacity of the national herbarium (Herbarium Bogoriense) and the national zoological museum (Museum Zoologicum Bogoriense), under the Research and Development Center for Biology of the Indonesian Institute of Sciences. This project is funded in part by a \$7.2-million grant from the Global Environment Facility Trust Fund under the supervision of the World Bank. Closely associated with this project is the Indonesian Biodiversity Conservation Project, which includes \$14 million in grant aid from the government of Japan to construct a new, custom-built museum to rehouse the zoology collections.

The urgent need for these projects was first identified in the Biodiversity Action Plan for Indonesia. The Government of Indonesia has since reaffirmed this goal as a national priority and provided substantial counterpart funding.

Careful consideration should be given to how these and other projects are being implemented before the systematics community develops proposals to create new international organizations for the promotion of natural history collections or new financial instruments to facilitate access to information held in these collections.

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