

REFERENCES

1. J. A. Cookson, A. T. G. Ferguson, F. D. Pilling, *J. Radioanal. Chem.* 12, 39 (1972).
2. G. J. F. Legge and I. Hammond, *J. Microsc.* 117, 201 (1979).
3. G. J. F. Legge and A. P. Mazzolini, *Nucl. Instr. Meth.* 168, 563 (1980).

Response: Legge is correct in noting that an error was introduced (during the production process) into the subtitle of an article on the Oxford proton microbeam by Jeremy Cherfas. Indeed, there are about two score proton microprobes around the world, so the Oxford instrument is not alone in its class. However, the Oxford group claim the distinction of being, as Frank Watt puts it, "the first group to achieve 1- μ m spot sizes and currently hold the state-of-the-art performance of 300-nm beam spot for 100 pA of beam."

It was in part because of these claims that *Science's* European correspondent Cherfas chose to describe the Oxford group's work, and in part because of the remarkable range of applications their work was finding. It was not Cherfas's intent to denigrate by omission the efforts of other groups around the world, nor did the piece claim to be a review of the field.

As for Legge's assertion concerning the

origin of the key technique—proton-induced x-ray emission (PIXE)—Oxford's Watt credits neither his own group nor that at Harwell. Rather, he contends that "PIXE was in fact started at Lund, Sweden." He adds that "Harwell developed the first probe utilizing PIXE."

Watt also takes issue with Legge's remarks about the Alzheimer's application. He told *Science*, "The proton microprobe community is well aware of the problems introduced by preparation techniques in medical samples. There are special problems associated with Alzheimer's tissue, and we are trying to address these problems. If George Legge wishes to know about these problems, then he should contact us directly!"

—EDS.

Indirect Costs and Merit Review

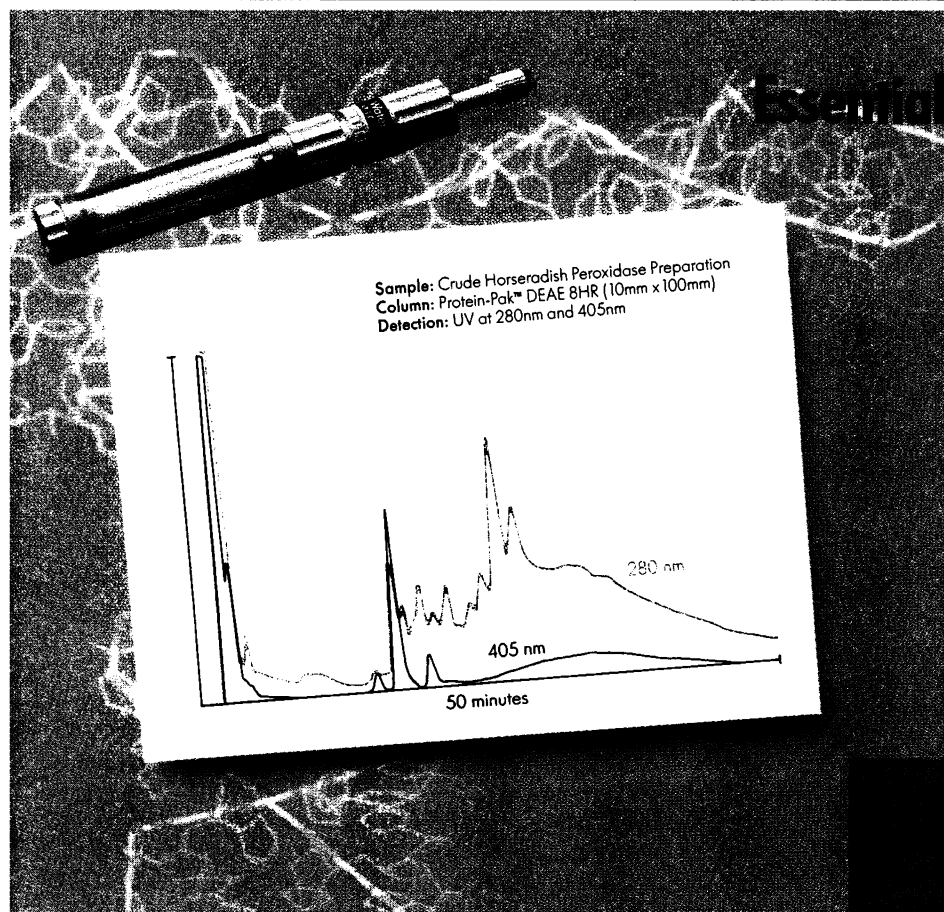
Joseph Palca's article "NIH urged to be a smart shopper" (News & Comment, 28 Sept., p. 1496) contains the incorrect statement that study sections "do not even see the indirect costs." Such costs are, by congressional mandate of many years, displayed on the face sheet of grants. This requirement

was inserted in Senate report language approximately 8 years ago. The committee wanted reviewers to have a sense of total costs, but it did not want these costs factored into merit review. To ensure that this did not happen, the National Institutes of Health was specifically directed by the congressional staff to educate study section members and to direct them not to consider indirect costs in the determination of merit. It is this policy that is explicitly reversed by the current appropriations report language. It is also important to note that the costs of proposals are among the factors considered by advisory councils in their review of proposals and their guidance to the institute.

CAROL R. SCHEMAN
Director of Federal Relations,
Association of American Universities,
One Dupont Circle, Suite 730,
Washington, DC 20036

Erratum: The last sentence of reference 3 (p. 801) of the response by B. T. Mossman *et al.* (Letters, 18 May, p. 799) to a letter by A. R. Brody was incorrectly printed. It should have read, "Brody's experiments were done at 4, 10, and 13 milligrams of chrysotile per cubic meter of air."

Erratum: In Bernard M. Oliver's letter "Mettrification oversold?" (2 Nov., p. 611), William (Ed) Deming's name was misspelled.



Essentials in protein purification.

Waters new expanded line of bio-chemistries combined with the 650 Advanced Protein Purification System provide unmatched resolution and recovery of macromolecules. Now you can select from a variety of separation techniques—gel filtration, hydrophobic interaction and ion exchange, including Waters new Protein-Pak™ HR ion exchange resins in scalable glass columns. Combine the chemistry of choice with the convenience and power of the 650 system and get unmatched separation capability for any step of your purification process.

Only Waters provides all the essentials necessary for your bioresearch. Ask for our complete bioseparations catalogue of instrumentation, chemistries and applications. Circle the reply number or call us at (508) 478-2000, ext. 2777.

Waters. The absolute essential in bioresearch.

Waters
Division of MILLIPORE

Circle No. 106 on Readers' Service Card