Modular Electronics

For the Scientific Laboratory

OVER 60 PLUG-IN MODULES for analo

MODULES for analog and digital programming; timing, counting, and signal conditioning. Featuring digital control of analog functions, gain attenuation, signal frequency, filter frequency.

USE THEM FOR

experiment control, computer interface, data acquisition, ancillary electronics needed with polygraphs, computer systems, and electronic instruments. Applications in the life sciences, physical and earth sciences, and engineering.

BUILD YOUR OWN

... compact portables to large laboratory cabinets... special purpose instruments to experiment control and data acquisition systems...

UNLIMITED FLEXI-

BILITY is yours with Coulbourn's modular electronics.

CALL OR WRITE FOR COMPLETE CATALOG. East: Box 2551, Lehigh Valley, PA 18001 – (212) 395-3771 West: Box 194, Laramie, WY 82070 – (307) 742-8246

AMPLIFIER CONVERTER



LETTERS

Medical School Funding

In his article, "Carter attempt to limit doctor supply faces tough going in Congress" (News and Comment, 16 Feb., p. 630), R. Jeffrey Smith discusses the history of capitation grants, in particular a misconception that has been fostered by the Carter Administration. By linking the proposed elimination of capitation grants to a perceived need for reducing the output of physicians, the Administration would have us believe that the cut serves public purposes other than a reduction in government expenditures. Since, however, the link is specious, discussion of the proposed elimination of capitation support is directed to the wrong issues.

Capitation grants to schools of medicine were originally intended to defray a substantial part of medical education costs. To quote from a recent letter from Kenneth M. Endicott, formerly director of the Bureau of Health Manpower:

By 1969, when I took charge of the Bureau, nearly half of the medical schools were receiving financial distress grants. In effect, when a school encountered financial difficulties, the federal government stepped in with the "last dollar" and rescued the school. This seemed to me to be a policy which encouraged over-spending and penalized prudent management. As an alternative, I proposed a "first dollar" approach in the form of capitation grants at a level calculated to put most of the schools on a sound financial base. The idea was accepted by the Administration and was incorporated in the Administration's legislative proposal. There were to be no strings attached other than maintenance of effort. In the course of the legislative process, the House added a requirement that each school increase enrollment. . . . In conference, the House prevailed and, as a result, the 1971 Act mandated an increased enrollment as a condition for receiving capitation grants.

Thus capitation grants, although conditional upon, were not intended as a reward for or the financing of expansion. More important, the expansion that occurred as a result of this condition is not a very significant factor in the need of schools for the flexible funds that capitation grants provide. Schools of medicine with the number of students; the need for faculty, by far the largest item in educational costs, varies only slightly with moderate changes in class size. Thus the 20 students per class that most schools added as a consequence of the federal health manpower program may have required some capital investment in facilities but had little effect on faculty size and cost. Because these additional students, at least currently in privately supported schools, add more in income (in

SCIENCE, VOL. 203

the form of tuition) than they do in cost, the last thing these schools are likely to do in the interests of financial stability is to decrease their enrollment. Merlin DuVal is quite right in saying that if the Administration wants schools to reduce their enrollment they will have to provide funds specifically for that purpose and the amount needed would have to be significantly greater than that which would be lost in tuition. That amount would be a substantial part of the current capitation support and would largely negate the primary purpose of the Administration, which is a reduction in expenditures.

Rather than concentrating on the fancied effects on medical school enrollment that would be entailed by elimination of capitation grants, and debating the desirability of an increase or decrease in the future number of physicians, we should be examining the more readily predictable consequences. Schools of medicine would lose a substantial fraction of their flexible funds. and since most would find it difficult to make up the loss by reducing expenditures, a major increase in tuition would be necessary, at least in private schools. Since the increased need for student financial aid eats up about half of any increment in tuition, it would be necessary to raise tuition by roughly twice the lost per capita amount in order to generate an equal net income. Those low- and middle-income students not discouraged by the cost from undertaking a medical education would have to borrow the additional money, increasing further the already substantial debts with which most of our students already graduate, or apply for scholarship support through the Health Service Corps, which could accommodate few of them because it is already oversubscribed. While the earning power of physicians is such that they should be able to repay their debts from future income, many of us are concerned about the bias toward careers that lead rapidly to high incomes that is inevitably induced by such substantial debts. I am particularly concerned that talented people who might make substantial contributions to the future of medicine will be diverted from academic careers by the relatively low income that such careers promise.

These are the issues that we should be addressing when we consider the President's budget proposals, not the imponderables of the supply of physicians.

ROBERT W. BERLINER Office of the Dean, School of Medicine, Yale University, New Haven, Connecticut 06510

16 MARCH 1979

We're not permitted to say this is today's most versatile stereomicroscope

> Wild M-5A Stereomicroscope. Because of high resolving power, ample working distance, large field coverage, powerful adjustable lamps and a complete range of accessories, we think you'll say it for us.

The M-5A is an improved M-5. Magnification range is 1.4x to 250x, producing exceptionally crisp images. New focusing and power changing mechanisms are smooth-working and jam-free. A protective steel hood makes it an ideal traveling companion.

Options

BEAMSPLITTER PHOTOTUBE: Easily inserted to convert the binocular unit into a trinocular instrument to support a camera, as shown.

DOUBLE IRIS DIAPHRAGM: Depth of field is adjustable at any given power for critical dissecting and micro-manipulation.

CAMERA LUCIDA: Attaches to make pencil tracing fast and easy. HORIZONTAL TAKEOFF TUBE: Beamsplitter permits accurate picture taking compatibility with movie cameras and CCTV systems.

THERE'S MUCH MORE TO THE M-5A. Ask for brochure.



FARMINGDALE, NEW YORK 11735 • 516-293-7400 Wild Of Canada, Ltd. 881 Lady Ellen Pl., Ottawa 3, Ont. Wild Of Mexico, Comercial Ultramar Sa, Colima 411, Mexico 6, D.F.

Circle No. 205 on Readers' Service Card