Letters

A Necessary Evil?

Nicholas Wade's report (News and Comment, 16 Aug., p. 598) on Robert L. Heilbroner's essay *An Inquiry into the Human Prospect* (*1*) mentions several points that Heilbroner makes concerning the future. The best of these—"processes that consume resources or generate heat must be regarded as necessary evils, not social triumphs"—is a clear indictment of automobile usage in the affluent parts of the world. We start with metals, plastics, fabrics, and petroleum products; we generate waste heat; and we receive the bonus of air, noise, sight, and hazard pollution.

CONRAD WEILER
Institut für Humangenetik und Anthropologie der Universität Freiburg, Albertstrasse 11, Freiburg im Bresigau, West Germany

References

1. R. L. Heilbroner, *An Inquiry into the Human Prospect* (Norton, New York, 1974).

Medical School Admissions

The medical school admissions process in recent years has harassed many of our ablest college students. Many experienced observers believe that those best able to become excellent physicians are not being selected. The matching program espoused in the editorial by Marcus and Riggs (3 Aug., p. 401) would alter one important variable in this unpleasant process. But changing the current "rolling" procedure to a fixed-date matching program would not affect other important variables contributing to the present unsatisfactory situation. Many would argue, contrary to the suggestion of Marcus and Riggs, that because a matching program would not alter the unfavorable ratio of applicants to places, applicants would continue to apply to as many schools as at present. As a "premedical adviser," not knowing whether admissions committees might alter their criteria and procedures under the new system, I would continue to advise applicants to apply to more rather than fewer medical schools.

What is needed now is a thorough reevaluation of the entire admissions process, and of the varying criteria used by committees, first by a small planning conference of leaders in this field and then by a national task force to include faculty of both medical schools and colleges, administrators, students, practitioners, and social scientists.

No current procedure or assumption should be considered sacrosanct, or above investigation. Most medical school admissions decisions are now made by faculty members serving part-time as committee members. Would more full-time, "professional" admissions officers improve the effectiveness and results of the process? No generally accepted criteria exist for judging what characterizes an excellent physician and therefore for attempting to project what sort of physician an applicant will become. What responsibility do the medical profession and the medical schools have for establishing such criteria? No evidence that I know of demonstrates that a college student with a 3.9, or, for that matter, a 4+, average is more likely to become an excellent physician (or excellent researcher) than a student with a 3.3 average, and indeed some might argue that the edge should go to the student with the 3.3. Should not medical schools establish new criteria for admission to replace the strictly academic ones, so that those students can be admitted whom one can safely predict will be able to learn and use the intellectual tools that an excellent physician must possess?

Faculty members, advisers, and others can know few, if any, students as well as the students' peers know them. What methods can be developed for utilizing this peer-knowledge without offending the customary social boundaries imposed by friendship and other relationships? American medical schools turn away many qualified applicants, while the United States allows many physicians to practice who were trained in foreign schools; medical schools claim that it is their responsibility only to uphold standards for their own students, while licensing authorities claim that it is their responsibility only to ensure that those who practice meet certain standards of examination. Why has no one attempted to bring into equilibrium the needs of the country, the standards of education, and the number of young people desirous of entering the profession?

Other problems include, for example, the differing opportunities for entrance to medical school available to the residents of different states, the difficulties of comparing candidates with differing educational backgrounds, the possibility of restricting the number of applications to medical school, the status of minority group medical education, and the incentive for college students to choose "gut" courses, an incentive created by medical school admissions committees who rely heavily on grade point averages for their admissions decisions.

The students, the college advisers, and the medical schools know that the current situation is unsatisfactory. It is time that a determined national effort was made to attempt improvement.

WILLARD DALRYMPLE
University Health Services, Princeton University, Princeton, New Jersey 08540, and *Rutgers Medical School, New Brunswick, New Jersey 08903*

In response to the editorial, "Medical school admissions matching," your readers may be interested to know that the Association of American Medical Colleges, in cooperation with the 11 medical schools in California and Michigan and with the assistance of the Henry J. Kaiser Family Foundation, is presently engaged in a pilot study to investigate the feasibility of matching in the medical school admissions process.

Last winter, the almost 16,000 individuals who had applied to at least one of the participating schools for admission to the 1974–75 entering class were asked to submit lists of all the schools to which they had applied, ranked in order of preference, together with a brief questionnaire concerning factors which affected their ability to make such a ranking at that time. Similarly the participating schools submitted rank

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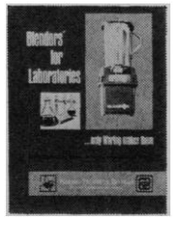

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order lists of their applicants. Both schools and applicants were encouraged to view this as a research project, conducted parallel to the regular application process but having no relationship to actual admissions decisions. These data are now being analyzed, and a computerized "match" is being performed. The results of the match will be compared to the results of the actual admissions process at participating schools, and a final report will be available in November.

As suggested by Marcus and Riggs, matching appears to be a theoretical solution to what has been called the medical school "admissions crisis"; an effort is now being made to determine whether it might be a practical solution as well.

SUZANNE P. DULCAN
Division of Student Programs, Association of American Medical Colleges, Suite 200, One Dupont Circle, NW, Washington, D.C. 20036

Marcus and Riggs suggest that a medical school admissions matching plan similar to the internship matching program would be preferable to the present system of evaluation of applicants by admissions committees. They imply that the admissions procedure would be accelerated, that the average number of applications per student would be reduced, and that the faculty members would spend less time serving on admissions committees if there were a matching plan. There is no question that the National Internship and Residency Matching Program (NIRMP) for the assignment of first-year, post-M.D. clinical appointments (internships and first-year residencies available to graduating medical students) has proved to be eminently successful over the past 20 years. However, the assumption that the selection of interns or first-year residents by hospitals is similar to the selection of entering students by medical schools is incorrect. In the former instance, there are several thousand more clinical appointments available each year than there are graduating medical students; hence the applicants are buyers in a buyers' market. In the case of medical school admissions, the situation is reversed. At present there are three times as many applicants as there are total numbers of available places in all of the entering medical classes; here the applicant finds himself a seller in a very competitive buyers' market. As a consequence, applicants to medical school understand-

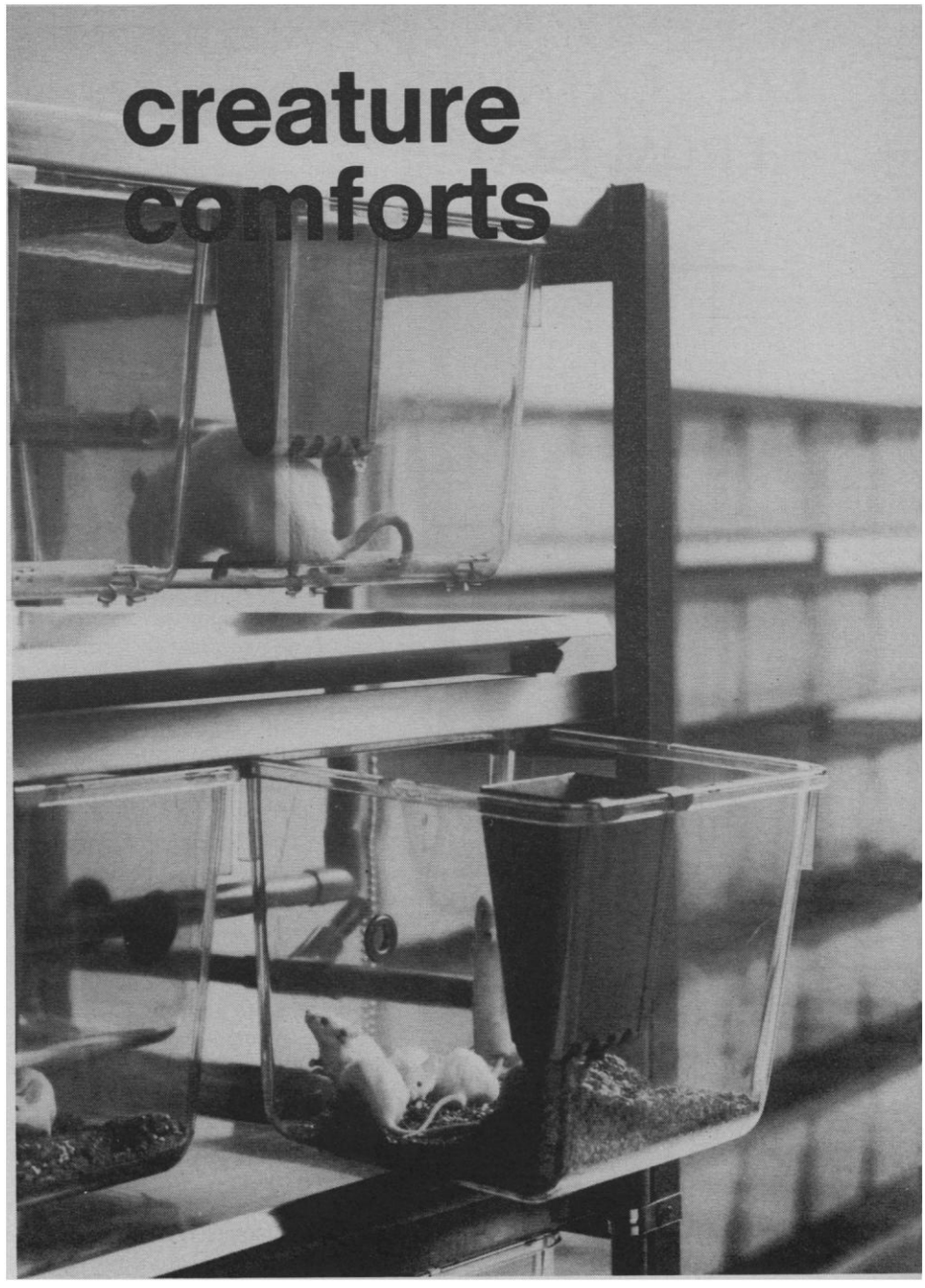
ably apply to an average of eight to ten medical schools to enhance their chances of acceptance. If a matching plan existed, it would be to the applicant's advantage to apply to as many schools as possible, since his chances of getting the best possible match would not be diminished. However, in the process of applying to a larger number of schools, the applicant would increase the number of applications received by each school. The medical schools, in order to establish the rank order of their acceptances in a matching plan, would be obliged to consider seriously a larger number of applicants than they do now, since the schools would have no way of knowing where each stood in the rank order listing of each applicant. The admissions committees, if they wished to interview their prospective students, would have to interview many more than they do now, thereby increasing the time and effort expended by both the members of the admissions committees as well as by the applicants. At present, when a responsible applicant receives an acceptance from one of the schools to which he has applied, he withdraws his applications from the other schools lower on his list and thereby saves both those schools and himself the task of processing these applications further.

The objectives Marcus and Riggs hope to attain could be better accomplished by more widespread use of the Early Decision Plan (EDP). This is a procedure whereby a qualified student may first apply to the medical school of his or her first choice and submit all of the application materials by 15 August. In turn, the medical school will give that applicant a decision no later than 1 October. If accepted, the student need apply to no other school. If not accepted, the student still has ample time to submit other applications. In 1973–74, 51 of the 114 medical schools employed the EDP and in 1974–75 it is expected that an even larger number will do so.

There is no question that additional refinements of the admissions process are needed to alleviate the difficulties that currently confront both applicants and medical school admissions committees. A medical school admissions matching plan similar to the NIRMP, however, is definitely not the answer.

JOSEPH CEITHAML

Office of the Dean of Students,
Pritzker School of Medicine,
University of Chicago,
Chicago, Illinois 60637



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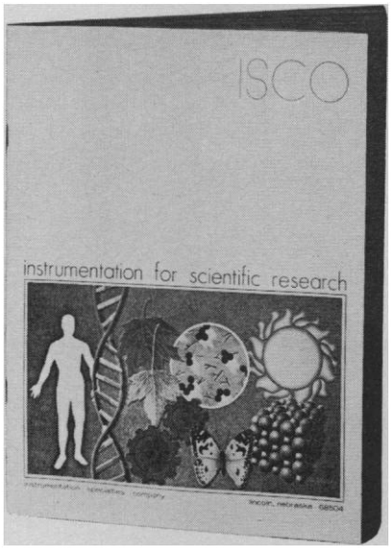

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We are pleased to learn of the American Association of Medical Colleges' research project correlating the present system's results with a theoretical matching program. It must be pointed out that their study did not test the value of uniform reply dates, preference lists before the fact, or the mechanics of a "rounding" procedure to fill all available spaces. If the conclusions of that study demonstrate, as we believe, the assumptive simplicity, reliability, and feasibility of admissions matching, we urge immediate adoption of such a plan to facilitate the notification process.

Replying to the criticisms of Ceithaml and Dalrymple requires brief reiteration of several key points stated in our editorial. Matching of accepted applicants is an expedient to medical school admissions; we do not offer it as a replacement for the traditional committee method by which students are selected to attend medical school. The ultimate success of admissions matching is predicated on significant overhauling of advising programs and on firm statements by medical schools concerning minimum qualifications for serious consideration, so that undergraduate students may have the clearest knowledge of how and where to apply, what to expect in terms of acceptances, and even whether they should attempt application to medical school. Thus, until definite action is begun by undergraduate and medical schools to alleviate the ills of current counseling efforts, we think it *impossible* to predict without presumptions what will happen to application-per-student ratios. We are convinced that blind belief in the inevitable increase in these ratios is erroneous and unfounded.

Institution of admissions matching by no means precludes use of the Early Decision Plan (EDP) as it now exists, since "if not accepted [under EDP], the student still has ample time to submit other applications." Should, as Ceithaml suggests, the EDP be held as the panacea for the ails of medical school admissions, we foresee problems at least as grave as those he portends for a matching program. Widespread use of EDP would certainly decrease the number of applications initially each year, as students are allowed to apply to but one school; the subsequent torrent of applications received after 1 October could only delay the admissions process.

We recognize that there are numerous proposals for modifying admissions procedures, and it seems fairly obvious that no single plan is yet sufficiently broad or flexible to afford both uniformity and individuality mandatory in admissions decisions. Our purpose is to present a scheme by which one phase of the process can be expedited. While the perfect solution to accommodate all interests is not apparent, we are encouraged that new ideas are in the offing.

CHARLES E. RIGGS, JR.
Johns Hopkins University School of Medicine, Baltimore, Maryland 21205
NORMAN A. MARCUS
Stanford University School of Medicine, Palo Alto, California 94305

Publishing Costs

Ralph D. Tanz suggests (30 Aug., p. 735) that it is improper for publishers to charge authors for reprints of their own articles, and he supports legal action which would prevent the loss of copyright by authors to publishers.

In fact, we already have mechanisms which allow the author to retain control of his own work. If we accept the notion that the author raises his own funds, does the thinking, does the laboratory work, and does the writing (all this, presumably, on salary), then we must note that the author is free to go to any printer of his choice and arrange to have his work printed.

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I cannot, offhand, think of any way around the necessity of paying a small filing fee to the Copyright Office or of spending some cash for postage (greater in the case of clay tablets than in the case of ink on paper), but if the author is willing to bear that expense, it is not difficult under the present rules to obtain a copyright.

The author may then present copies of his article to students if he deems it necessary. If he charges his students or interested colleagues for copies of the article, he may be cursed as a money-grubbing publisher, but those are the breaks.

There is still no free lunch.

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