mural research program under a single director, University of Illinois psychopharmacologist Boris Tabakoff, and last year it started a clinical program. NIDA has finally brought its intramural program up from its birthplace in Lexington, Kentucky, and established it in Baltimore under the leadership of Jaffe, who was last seen in Washington heading the Nixon war on drugs.

Both ADAMHA director Donald Macdonald and NIAAA director Robert Niven have indicated they find the merger idea conceptually attractive. But they want to address it with extreme caution, in recognition of the fact that any change in this budgetary climate is likely to be for the worse.

In the long run, there is little question that something should be done to accord ADAMHA's functions higher priority in the federal health research effort. Says Pollin: "During the rest of this century, the behavioral and emotional components of a wide variety of physical illnesses will become increasingly clear and apparent. The agency taking the lead in these areas should not have the status of an afterthought."

—CONSTANCE HOLDEN

Restoration of the Humanities Urged

NEH chairman decries "garage sale" look of college curricula; says it's time to get back to the classics

Now that widespread alarm over the state of science education has led to an array of new initiatives, it appears the time has come to make the case for well-roundedness.

In October the National Institute of Education (NIE) produced a report which called for two full years of "liberal education" for all undergraduates. More recently William Bennett, chairman of the National Endowment for the Humanities (NEH), attracted considerable attention with an eloquent report on the need to restore the humanities to their rightful place at the heart of higher education.

Bennett, a leading candidate to succeed Terrell H. Bell as Secretary of Education, is regarded as an elitist by many less conservative academics, particularly feminists. But during his tenure he has been a forceful advocate for reversing the deterioration of the humanities in high schools and colleges.

Statistically, the decline of interest in humanities has been remarkable: Since 1970, for example, the number of English majors has declined by 57 percent; history by 62 percent, philosophy by 41 percent, and modern languages by 50 percent. In three-quarters of all American colleges, a student can obtain a bachelor's degree without taking any European history. Foreign language study, which was almost universally required for undergraduates in 1966, is now required in fewer than half of the institutions.

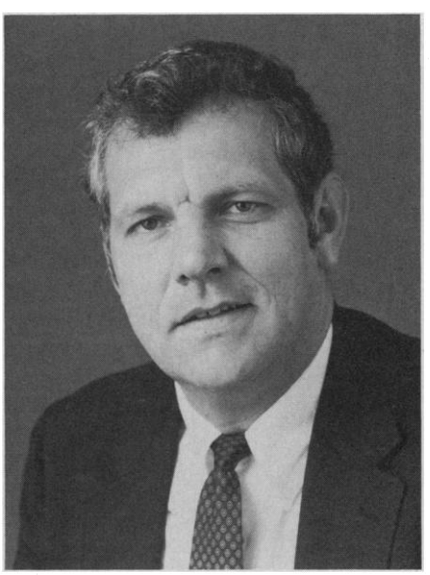
The declining job market for humanists is a big factor. But Bennett contends that the devaluation of the humanities is largely the fault of colleges, which have failed to communicate to students "a clear vision of what is worth knowing and what is important in our heritage that all educated persons should know." Too often, he says, colleges are "allowing the thickness of their catalogues to substitute for vision and a philosophy of education."

Bennett's manifesto, "To Reclaim a Legacy," may be one of a string of reports drawing attention to excess specialization and vocationalism as well as lack of coherence in college curricula. In addition to the NIE report, a forthcoming report by the Association of American Colleges also reinforces the theme that special expertise is no substitute for well-roundedness. And the Carnegie Foundation for the Advancement of Teaching has launched a study of liberal arts colleges.

The report, which draws on the recommendations of a study group Bennett convened early this year, has plenty to say about what is wrong with college teaching. It notes that colleges often assign their most inexperienced faculty to teach introductory courses. Many teachers seem "apologetic" about their fields, says Bennett, and present the ideas as subjective and relativistic, with little inherent value. Others filter their instruction through political ideology. There are also those who give short shrift to their students, their primary interest being research. There are few teachers, in short, who communicate a broad knowledge and passionate appreciation of their subject matter, and students are allowed to conclude that the humanities are of marginal importance.

College administrations are also at fault, says Bennett. The report suggests that in curriculum design, many colleges have been more concerned with satisfying the political demands of various campus constituencies than with articulating a clear educational vision. And college presidents, as documented in a recent report,* spend so much time fund raising that they have little time to attend to academic questions.

Bennett asserts that, despite the career anxiety driving many students, there is time in the average curriculum to include adequate exposure to humanities without undue sacrifice in other areas. He says many college catalogs offer the equivalent of a "garage sale" in courses and that many offerings, designed to cater to contemporary concerns of dubious substance, could be cleaned out. "Universities are not there to cater to students' uninteresting whims." He says college presidents must start setting some firm academic priorities and that



William Bennett

Foe of "intellectual relativism" regarded by many as an elitist.

*"Presidents Make a Difference," by the Association of Governing Boards of Universities and Colleges

regular faculty should be involved in teaching beginning courses.

Bennett's critics do not argue with his basic pitch: that there is a core of common cultural knowledge necessary for the well-furnished mind, and that this core has been eroding dangerously. But critics feel he is hostile to new fields, such as women's and ethnic studies, and that his concepts of excellence are excessively rigid. Helen Moglen, English professor at the University of California at Santa Cruz, contends in an essay in *Profession 83*, a Modern Language Association periodical, that Bennett's vision of the humanities, in absence of more efforts to relate them to contemporary concerns, will only "contribute to the deepening sense of their irrelevance." His view, according to Moglen, is that "the common culture is not to originate with the people . . . but is instead to be imposed" on them.

In an interview with *Science*, Bennett noted that we are all products of Western civilization and should be familiar with its roots. He dismissed the criticism as coming from "people who aren't happy with Western civilization" and who consider it "political" to present it as being at the heart of the humanities. He is emphatically opposed to the notion that the fragmentation and pluralism of this country makes it impossible to arrive at a consensus on the relative value of thinkers and ideas. "We have been our own worst enemies here not to make a more forceful case for rationality," says Bennett. The fact is, he says in the report, the humanities "are not an educational luxury. . . . They are a body of knowledge and a means of inquiry that convey serious truths, defensible judgments, and significant ideas."

Bennett, a lawyer and a philosophy professor who came to NEH from the National Humanities Center at Research Triangle Park in North Carolina, has adopted an approach markedly different from that of his Democratic predecessor, Joseph Duffey, who encouraged innovation in both the substance and presentation of the humanities. According to the National Humanities Alliance, a lobby group set up in 1981 to fight budget cuts, Bennett is putting less emphasis on making humanities accessible to the general public and more on the refurbishment of the core disciplines, in both scholarship and teaching. His approach would appear to be in harmony with the back-to-basics trend at the Department of Education.—**CONSTANCE HOLDEN**

New R&D Centers Will Test University Ties

Interdisciplinary research labs are campus fixtures, but industry, government involvement gives a new twist

Since World War II, a rich variety of centers, institutes, and laboratories have been created in the cause of interdisciplinary research at American universities. By and large, universities have adapted successfully to these entities operating outside the traditional departmental structure. But the recent emergence of a significantly different second generation of extradepartmental organizations is causing some uneasiness.

Dubbed affiliated institutions for lack of a better name, these centers tend to be larger and better financed than their precursors. The major growth area is in the fields of biotechnology and computer science where the new enthusiasm for cooperation between universities and industry is at its liveliest. But what differentiates the new centers is that they are established and operated by mixed partnerships. The misgivings stem from concern that the agreements struck with partners from government and the private sector will blur the universities' traditional lines of administrative control.

The new centers differ widely from each other in form of affiliation and in function. Some examples:

- The California Microelectronics Innovation and Computer Research Opportunities Program (MICRO). Begun in 1981, the object of MICRO is to assist California's electronics and computer industries to bolster their competitive position by sponsoring research and graduate education in the fields at University of California campuses. The program is funded jointly by the state and industry.
- The electronics-industry sponsored R&D cooperative, MCC, in Austin, Texas. Chief among the inducements offered by the state to persuade MCC to locate there was the offer of close cooperation with the University of Texas and Texas A&M and a substantial buildup of the relevant departments at the two universities.
- The recent selection of Carnegie-Mellon University to operate a software engineering center for the Department of Defense (*Science*, 30 November, p. 1059) represents a prime example of a university undertaking to manage a major national center in a high tech area for a federal patron, in this case the Pentagon. Plans for the new software engineering center appear to call for closer links with campus activities than is common with other so-called FFRDC's (federally funded research and development centers) managed by universities.
- A Center for Advanced Research in Biotechnology (CARB) outside Washington, D.C. This project is under discussion by the National Bureau of Standards (NBS), the University of Maryland, and Montgomery County, Maryland, who are still engaged in negotiating the initial hurdles that such enterprises tend to encounter.
- The Whitehead Institute for Biological Science at Massachusetts Institute of Technology. MIT concluded an agreement with industrialist Edwin C. Whitehead under which he is providing construction and operating funds and a $100 million endowment when he dies. The new institute will be administered separately from MIT, but most researchers on its staff will be regular members of the MIT faculty. When MIT acceptance of the link with the Whitehead Institute was being debated (*Science*, 23 October 1981, p. 416), a main concern expressed by faculty was that, although MIT would have the usual right of approval of candidates for joint appointments to MIT and the Whitehead Institute, nominations would be made by the new institute and this could determine the direction of development of biology at MIT.
- A score of industry-university R&D centers are operating under the aegis of the National Science Foundation's Industry-University Cooperative Research program. NSF has wound up its participation in five older centers. The general view seems to be that an adequate mechanism for university control of the centers was included in the original design.