My first involvement in reviewing this program was in 1978 when John Deutch, then director of energy research at the Department of Energy (DOE), set up a review panel chaired by John Foster to go over the entire DOE fusion program (magnetic and inertial). In three phases (known in the community as "Jaws One, Two, and Three"), the entire program was reviewed; inertial confinement fusion was identified as a serious potential competitor for power plant applications; and heavy ion drivers were identified as the most promising technology to ignite a fusion pellet, whether the applications be civilian or military. Many other suggestions with respect to the program were also made, most of which were eventually carried out. The report was classified and remains locked in a filing cabinet at DOE.

Since that time, many other reviews of the inertial fusion program have been made, and all have come to the same general conclusion as the Foster panel with respect to drivers. I personally reached the point in the mid-1980s when I refused to serve on any more review panels, because no matter what one said, the most promising approach, heavy ion drivers, continued to be starved and virtually ignored.

It is interesting to note in Taubes' article that heavy ion accelerators are still regarded as "the best bet for drivers." What is not said is that nearly 16 years after the first Foster panel report, the heavy ion program is still starved for funds, and we have made very little progress on "the best bet."

I learned one other lesson from my service on the Foster panel—never agree to serve on a classified panel that will not, at the very least, have an unclassified executive summary.

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ApoE, Amyloid, and Alzheimer's Disease

The amyloid cascade hypothesis for Alzheimer's disease (*1*) undoubtedly has some holes in it; thus, the distinctive distribution of lesions in the disease remains unexplained (*2*), as does the precise mechanism of neuronal death. Furthermore, the results emanating from Allen Roses' group at Duke University relating the presence of the E4 allele of apolipoprotein E (ApoE) to the occurrence of Alzheimer's disease (J. Travis, Research News, 13 Aug., p. 828) (*3*) are undoubtedly important—possibly the most important ever presented in the study of the epidemiology of the disease. However, while some may now appear to wish to jettison the amyloid cascade hypothesis (J. Marx, Research News, 19 Nov., p. 1210), I suggest that this would be throwing out the baby with the bathwater.

The original identification of ApoE as a risk factor for disease (*3*, *4*) was made because the Duke group was searching for β-amyloid binding proteins. In other words, they were implicitly working within the framework of the amyloid cascade hypothesis and came up with an important finding based on their version of this hypothesis. Not only have they demonstrated isoform-specific effects of ApoE4 (compared with those of ApoE3) in its binding to β-amyloid (*5*), they have also demonstrated that individuals who are homozygous for ApoE4 have a greater amyloid burden than those who are homozygous for E3 (*6*); in addition, we have demonstrated that in Alzheimer's patients with amyloid precursor protein (APP) mutations, the ApoE genotype modulates the onset age (*7*). These findings strongly support the notion that there is a biochemical relationship between β-amyloid and ApoE and, together with the occurrence of Alzheimer's in individuals with Down syndrome (*8*) and in those with pathogenic mutations in APP (*9*), they provide strong evidence for the validity of the general framework for the amyloid cascade hypothesis.

It is difficult to judge the hypothesis by the Duke group that ApoE4 is not itself a risk factor for disease, but rather that ApoE3 (or ApoE2) is necessary for normal neuronal function and resistance to neurofibrillary change. However, because ApoE4 appears to be the ancestral allele in related animal species, because a high proportion of people with typical Alzheimer's pathology are homozygous for ApoE3, and because persons with APP mutations develop Alzheimer's disease whatever their ApoE genotype, it seems unlikely that this new hypothesis will endure. It is more likely that the binding of ApoE to amyloid is somehow closely related to the transition between diffuse, apparently benign, β-amyloid deposition and neuritic, damaging deposits (*10*).

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Academic Decision-Making

On balance, although I support the University of Maryland in its efforts to survive under horrendous fiscal mandates, I would like to take issue with J. R. Dorfman's revisionist view of events (Letters, 3 Dec., p. 1499). In particular, Dorfman asserts that "The process used to accomplish [monetary savings] involved faculty, staff, and students in every stage of the decision-making." As president of the Physics Graduate Student Association (PGSA) at the University of Maryland during the period in question (1991–1992), I have to say that I know of no efforts to involve either students or staff in the decision-making. On the contrary, I was present at several meetings about, and protests against, administration decisions.

Had I been consulted, I most certainly would have communicated the view of the majority of my fellow students and coworkers. That view is that a university serves two primary functions, research and teaching. And before a university takes any role interfering with either of these functions, it should make reductions in functions *not* related to research or teaching.

Administration is one example; large building projects is another. The University of Maryland is one of several universities at which a visitor will observe a truly extraordinary phenomenon: research and teaching support is trimmed to the bone at the same time that enormous resources are poured into several simultaneous construction enterprises. During the year that I served on the PGSA, the Science and Engineering library was forced to cancel subscriptions to more than 600 periodicals, professors in the mathematics department took turns working in the mailroom, seven entire academic departments were slated for elimination, and as many new buildings were constructed. What was the first of these buildings to be completed? The administrative annex. At the same time that academic cuts were planned, the administration was actually expanding.

The administration's role was never to actively involve faculty, staff, or students in these decisions. Its role was not to vigorously protest the budget cuts, to lambast its congressional foes, to sponsor alternative initiatives, or to expose the financial fictions that permitted frenetic construction at the same time as Draconian cuts in research and teaching. Its role was to manage the reductions. It played that role expertly. And the university is poorer as a result.

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For the Record

In connection with our Research Article "Guanidinium chloride induction of partial unfolding in amide proton exchange in RNase A" (5 Nov., p. 873), Clare Woodward asks that, for the record, we point out her early paper [C. Woodward and B. D. Hilton, *Biophys. J.* **32**, 561 (1980)] which proposes two different processes leading to hydrogen exchange in native proteins, on the basis of exchange rate data for individual peptide NH protons in bovine pancreatic trypsin inhibitor. We are glad to do this. References to later work on this problem by Woodward and her coworkers are given in a review by C. Woodward, I. Simon, and E. Tüchsen [*Mol. Cell. Biochem.* **48**, 135 (1982)].

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Corrections and Clarifications

In the report "A link between cyclin A expression and adhesion-dependent cell cycle progression" by T. M. Guadagno *et al.* (3 Dec., p. 1572), figure 2B on page 1573 was incorrectly printed. The correct figure appears below.