sity and academic researchers. This is not accurate. University faculty can easily work as consultants to a small business on these grants. They can be involved substantially in the intellectual effort and share in financial rewards. They cannot, however, administer it through a nonbusiness entity, such as a university.

Mervis, in a companion piece (p. 942), accurately and insightfully alludes to the role of shrinking budgets. The SBIR program is slated to increase to only 2.5% of the total research budget this year. Since 1982, the year SBIR began, all of us receiving federal support (whether for research or entitlements) have lived in an artificially enriched environment. Regardless of what FASEB members do, even if nothing at all, within their own institutions to bring research costs in line with the new reality, this is the wrong time and the wrong issue to raise as part of a public controversy over government support of research and development. No one can reasonably expect to win as much as they are certainly going to lose.

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I disagree with the notion that the differences between the priority score distributions for RO1 grant proposals and those for SBIR proposals are significant. If anything, these differences point out the failure of RO1 study sections to properly use the scoring system to differentiate among proposals.

One of the chief reasons why SBIR priority scores are different is that the ad hoc study sections that review SBIR proposals generally contain academicians who apparently do not grasp the real purpose of SBIR programs, namely, to commercialize new technology. These programs are not for the purpose of conducting basic research. Thus, the importance of recent publications in peer-reviewed journals, for example, is truly secondary.

SBIR provides a direct return to the citizen taxpayers who pay for all government programs. It remains one of the few mechanisms available to support applied research, particularly in bioengineering.

I suspect that U.S. taxpayers want to fund programs that offer the public a direct return as well as support for basic research. The objections raised against the SBIR program are little more than a rationale on the part of some to justify why 97.5% of the available research funding is not sufficient for their perceived needs.

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French Humanities and Social Sciences in Crisis

In France, the Centre National de la Recherche Scientifique (CNRS) is dealing with the problem of how to balance its finances. For 2 years, this has been done in a way that is perceived by many to be brutal and incomprehensible. In 1996, in the midst of inextricable financial chaos, the General Director of CNRS announced that certain laboratories seemed to have overspent in 1994 and 1995, and as a consequence he reduced their finances to virtually zero. The funds still available on 31 December 1995 were canceled (even if they were for research programs running over a number of years), and it was decided to grant the laboratories only part of their annual budget (the other part being dis-

tributed on an item-by-item basis).

Not only does this last measure make any kind of scientific programming impossible, but it leads to a form of clientelism in the Department of Humanities and Social Sciences of the CNRS. Just when difficulties make good management a necessity, negotiation and discussion are becoming less frequent, the opinion of the National Committee is rarely taken into account, and the editorial boards of journals are being disbanded.

Matters are equally difficult in the area of personnel. Because of insufficient recruitment of young researchers, the average age of the researchers in the department is rapidly increasing (48 years and 7 months in 1995). In addition, two out of every three positions vacated because of retirement have been struck from the books.

As the gaps between North and South and between East and West are widening, and as the French nation is slowly becoming aware of the number and seriousness of the fractures that threaten it, humanities and social sciences are more than ever needed to understand such phenomena and to help find a responsible attitude toward the future.

While we are not systematically opposed to restructurating, provided the measures proposed are clearly expounded and discussed, we cannot accept practices that entail the paralysis of many French research teams and the loss of committment of the personnel involved. That is why the undersigned have appealed to the Prime Minister of France.

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Warning! Long Commute

The title of Joel Cohen's book *How Many People Can the Earth Support?* (Book Reviews, 3 May, p. 696) reminds me of medieval debates about how many angels could dance on the head of a pin. No doubt these were scholarly in their own way. There are, of course, "ultimate limits to human population." For instance, human population could never increase to the point at which all of the carbon on Earth is contained in human biomass.

In the same issue of *Science* as this review, which talks about a lack of warning signals of overpopulation, is a mention that in Bangkok the average commute is now 3 hours daily, certainly a sign of local overpopulation (Random Samples, p. 657).

More important, and central to many of the themes explored in the book, is the question: How many people *should* the Earth support?

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Toxicology of a PFPE Surfactant

W. J. Brock of DuPont Haskell Laboratory in Newark, Delaware, and A. E. Feiring of DuPont Fluoroproducts R&D in Wilmington, Delaware, have recently provided unpublished data regarding the toxicology of a perfluropolyether (PFPE) surfactant similar to the one we reported in our *Science* paper of 2 February (Reports, p. 624). They found that PFPE surfactants can cause decreases in body weights and increases in liver weights in rats. Thus, our PFPE surfactant is not likely to be biologically inert, although fluorinated surfactants are often biochemically stable (*1*). Many fluorinated surfactants exhibit very low toxicities, and they have been used clinically in blood substitute applications (*2*). A preparation containing perfluorotripropylamine and Pluronic F-68 is approved by the Food and Drug Administration for use during percutaneous transluminal coronary angioplasty. We thank Brock and Feiring for bringing their data to our attention.

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1. E. Kissa, *Fluorinated Surfactants* (Dekker, New York, 1994).
2. G. M. Vercellotti and D. E. Hammerschmidt, in *Blood Substitutes*, K. C. Lowe, Ed. (VCH, Cambridge, UK, 1988), pp. 173–183.

Letters to the Editor

Letters may be submitted by e-mail (at science_letters@aaas.org), fax (202-789-4669), or regular mail (*Science*, 1200 New York Avenue, NW, Washington, DC 20005, USA). Letters are not routinely acknowledged. Full addresses, signatures, and daytime phone numbers should be included. Letters should be brief (300 words or less) and may be edited for reasons of clarity or space. They may appear in print and/or on the World Wide Web. Letter writers are not consulted before publication.

Corrections and Clarifications

Figure 2 (p. 371) in the Perspective "Green light for steroid hormones" by David W. Russell (19 Apr., p. 370) contained errors. The correct figure is printed below.

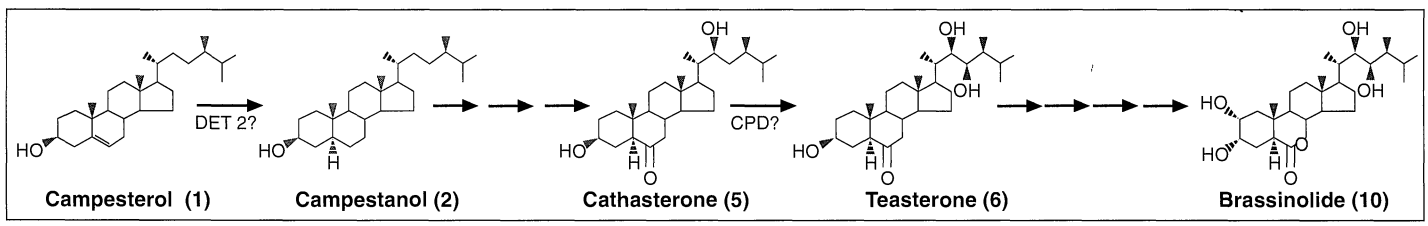

Fig. 2. The biosynthetic pathway of brassinolide. Genetic evidence in *Arabidopsis* suggests that the *DET2* and *CPD* gene products catalyze the indicated reactions in the multistep pathway leading to brassinolide. [Courtesy J. Chory, Salk Institute]