



Sexual Warfare?

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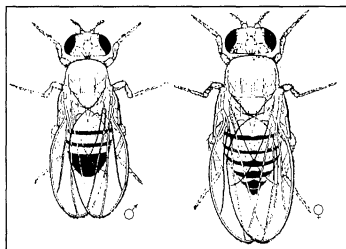
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LETTERS

Battleground?

A “biochemical ‘arms race’” exemplifies the evolutionary conflict that can occur between the sexes of a species, says one author, but “highly convergent interests” between the sexes are common in many species as well. (Right, fruit flies provide a model of the distance between the sexes.) Writers discuss the merits of a program—“under fire” from some academics—that funds research and development performed by small companies. And in France, funds for the humanities and social sciences are being cut in a manner that is said to be “brutal and incomprehensible.”



T. H. MORGAN/DROSOPHILA GUIDE

Sexual Warfare?

In her discussion of William Rice's selection experiments in fruit flies showing the evolution of seminal components toxic to females, Virginia Morell (Research News, 17 May, p. 953) states that “a basic tenet of sociobiology [is] that the reproductive interests of males and females are essentially at odds.” Divergent reproductive interests occur between the sexes in many species, but highly convergent interests are common in many other species, indicating no fixed pattern of relationships between males and females across all species. The experiments she describes by William Rice provide an exciting illustration of an intense coevolutionary biochemical “arms race” that can evolve when reproductive interests have diverged. Rice suggests that intersexual biochemical competition may be a widespread cause of speciation, but, so far, the mechanism he found is known only in one species and its general importance may be limited by a convergence of male and female reproductive interests. Male traits that produce toxic effects in females would often be selected against if there were prolonged female investment (for example, parental care) in offspring; if males have a future mating advantage with past mates; if single matings by females are common; or if there is inbreeding or a prolonged use of an individual male's sperm, or both, by the female. Many specious groups of organisms—for example, ants, parasitic hymenoptera, rodents, and passerine birds—have one or more of the above traits, making it unlikely that sexual antagonism has driven speciation in these groups.

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Merit, Quality, and the SBIR Program

Jeffrey Mervis (News & Comment, 17 May, p. 942) correctly notes that the Federation of American Societies for Experimental Biology (FASEB) has raised serious concerns regarding the National Institutes of Health (NIH)-funded Small Business Innovative Research (SBIR) Program. FASEB does believe, as stated in our consensus conference report on funding for fiscal year 1997 (1), that there should be no increases in this program until the questions of merit and quality have been resolved and that NIH should be relieved of the obligation to award a fixed percentage of its extramural budget for such grants because such a restriction can be inconsistent with selection on the basis of merit. However, it is a distortion of the FASEB position to describe our reasonable recommendations for quality improvement as “an all-out war,” as suggested by Robin Risser, Chief Executive Officer of Picometrix Inc. In fact, we find the description by Mervis of the success of Gerd Muehlechner entirely consistent with our position. It is not the high-quality proposals, such as Muehlechner's, that are of concern to us.

Ralph A. Bradshaw
President,

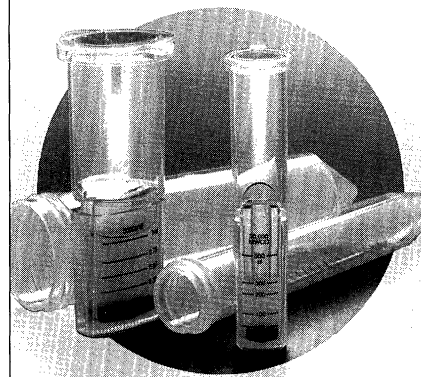
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References

1. *Sustaining the Commitment: Federal Funding for Biomedical and Related Life Sciences Research FY 1997* (FASEB, Bethesda, MD, 1996).

The General Accounting Office (1), the National Academy of Sciences (2), and others, have consistently given SBIR high

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