

SCIENCE

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LETTERS

Impetus for NSF Policy

In his article about academic facilities Jeffrey Mervis (*News & Comment*, 17 Mar., p. 1590) writes

NSF [the National Science Foundation] decreed in 1983 that universities should not use federally funded equipment to become testing labs for private industry, reflecting a fear among academics that tight research budgets might tempt universities to sell their souls to industry.

As NSF's deputy director, I oversaw the development of that "decree." While it may reflect the suggested fear among academics, that fear did not provide the impetus for the policy. Rather, the impetus was strong concern in the commercial testing laboratory community about what it perceived as unfair competition from federally funded scientists in tax-exempt university laboratories. While the policy did temporarily allay that community's concerns, they still persist and can be expected to emerge again as a serious issue sooner or later. In the present federal environment, it may be sooner rather than later.

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Who Survived the Cretaceous?

Alan Feduccia's concise review of the explosive evolution of birds and mammals from a tiny starting point at the beginning of the Tertiary (*Perspective*, 3 Feb., p. 637) provokes an ecological question. What animals are most likely to survive a serious nuclear winter? Those whose food in some form does not directly depend on immediate photosynthesis. That is to say, those that eat dormant seeds and insects, those that eat decaying organic matter (especially nongreen plant parts), and those that eat these eaters. And especially those that are very good at finding small particulate bits of these resources, scattered and dwindling until sunlight again can penetrate the clouds in amounts sufficient for serious vegetation growth. That is to say, seed- and detritus-eating invertebrates and the invertebrates and small vertebrates that eat them and each other. In the context of Feduccia's scenario, the transitional shorebirds at the bases of the bird radiations are



R. MAIER/ANIMALS ANIMALS

Sitting pretty? Would a nuclear winter have an impact on shorebirds like this stone curlew?

precisely among these morphs, along with insectivores, little marsupials, small rodents, snakes, small lizards, frogs, granivorous birds, small raptors, and lots of arthropods.

Was there an explosive radiation of these birds, as well as other vertebrates, after the upper Cretaceous cleaning of the slate? It would be hard to avoid in the absence of virtually all large terrestrial vertebrates. Just imagine the possibilities of rebuilding the food pyramid with the world reduced to a large number of diverse little beasts.

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Authorship Criteria

The *News* article "Multiauthor papers on the rise" by Antonio Regalado (7 Apr., p. 25) states that the *New England Journal of Medicine* recently published an article with 280 authors (1). However, according to our criteria for authorship, the only persons who can legitimately lay claim to authorship on the paper he cited are the seven listed on the title page, not the hundreds of trial participants listed in the appendix. Our policy on authorship is clear. Only those who make substantial contributions to conception and design, or analysis and interpretation of data, who draft the article or revise it critically for important intellectual content, and who give final approval of the version to be published should be considered authors (2). When multi-institutional

studies are submitted to us with more than a dozen names on the title page, we insist that all persons listed there sign a statement that they fulfill *all* of these criteria. We believe that in every paper, each listed author must be able to take public responsibility for its content.

Jerome P. Kassirer
Editor-in-Chief,

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1. S. Klahr *et al.*, *N. Engl. J. Med.* **330**, 877 (1994).
2. J. P. Kassirer and M. Angell, *ibid.* **325**, 1510 (1991).

EPA and Biotechnology Regulation

The Policy Forum "A need to reinvent biotechnology regulation at the EPA" by Henry I. Miller (16 Dec., p. 1815) gravely misportrays an approach to reviewing biotechnology products of which I am proud.

The contention on which the Policy Forum is based, that the Environmental Protection Agency (EPA) regulates or singles out for special treatment products be-

cause they are created using recombinant DNA, is wrong. EPA has had a functioning program addressing biotechnology products under the Federal Insecticide, Fungicide and Rodenticide Act and the Toxic Substances Control Act since 1986 (1). That regulatory program focuses on identifying and minimizing risks to public health and the environment. Early indications are that many biotechnology products provide lower-risk agricultural and industrial approaches. For example, biological pesticides may present lower risks than do older chemical pesticides. In general, EPA wishes to promote development of environmentally safer products and technology. EPA's accomplishments in the biotechnology area show that it is achieving this goal.

EPA has an established record of bringing a range of biotechnology products through field testing to commercialization while safeguarding public health and the environment. At the same time, EPA's activities reassure the public concerning biotechnology products.

Readers who would like additional information are referred to documents in the public domain (2) that describe the EPA program.

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References and Notes

1. *Fed. Regist.* **51**, 23302 (26 June 1986).
2. *ibid.* **59**, 45600 (1 September 1994); *ibid.*, p. 45524 (23 November 1994); *ibid.*, p. 60495; *ibid.*, p. 60519; *ibid.*, p. 60535; *ibid.*, p. 60542; *ibid.*, p. 60545; most of these documents may be accessed through the Internet at gopher.epa.gov under the rules and regulations (Toxics Program) entries for 1 September 1994 and (Pesticide Program) 23 November 1994. Readers may also contact my office at 202-260-6900 for further information.

Reading Disability, Attention-Deficit Hyperactivity Disorder, and the Immune System

The article "Quantitative trait locus for reading disability on chromosome 6" by Lon R. Cardon *et al.* (14 Oct., p. 276) describes a possible gene for a reading disability, dyslexia, localized to 6p21.3, a region within the human major histocompatibility complex (MHC). This finding accords closely with our observation (1) that

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