

system for the review and authorization of releases into the environment of genetically modified organisms and promoted research into, and collection of data regarding, the effects of such releases. The bill would have provided the Environmental Protection Agency (EPA) and the Department of Agriculture (USDA) with clear legal authority to review the environmental effects of genetically modified organisms before granting permits for their research or commercial use. The bill used the definition of "genetically modified organisms" adopted by the science advisory committees of EPA and USDA (7). Under the bill, the regulations would have expired in 7 years—a sufficient time for more to be learned about the risks involved and for public confidence in the biotechnology industry to be garnered.

Risk-based oversight has always been the goal of regulation, but it cannot be achieved through the decree of "experts." By advocating self-regulation that would limit the data available to regulators and the public, Miller *et al.* propose that we substitute assumptions for data and theory for experience. That is not the way to win the biotechnology race.

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6. Ecological Society of America, *Ecology* 70, 298 (1989).
7. A genetically modified organism was defined as an organism deliberately modified by the introduction of new genetic material into its genome, or the manipulation (including deletion) of the genetic material in its genome except by traditional methods such as selection of spontaneous mutants, and the breeding of plants, animals and other organisms by artificial insemination, hand pollination, or other methods designated as exceptions by the agencies.

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Westinghouse Winners

I read with great interest a recent piece about the statistics of recent winners of the Westinghouse Science Talent Search (STS) (Briefings, 22 Feb., p. 871). I was a 1969 STS winner. I did not fit the profile then, and I would not fit it now. I went to an ill-equipped Alabama high school (at the time I won, no one in the state could remember an Alabama winner; I do not know whether I was really the first). But I did have an enthusiastic science teacher always there pulling for me. Not only were neither one of my parents identified as "Doctor," neither had even a high school diploma. But they were also there encouraging, supporting. I sincerely believe that wherever an inquisitive, determined student is, there is a way of pursuing science, although it may mean literally knocking on doors in the pursuit. From my experiences as a Peace Corps Volunteer and a AAAS Science and Diplomacy Fellow, and now as a development professional working in India, I am indeed convinced that life is not fair. But science fair judges (and I have done some of this myself) can ferret out the understanding from the merely rote and the true pursuit of science from the merely

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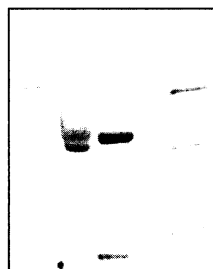
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departments. We find this advantageous over arrangements at some other institutions where the molecular facility is off-site and less accessible to much of the museum staff.

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Molecular Structure of Charybdotoxin: Retraction

Museum Molecular Lab

I was pleased to see treatment of an important trend in museum research toward molecular systematics ("Systematics goes molecular" (Research News, 22 Feb., p. 872). I must point out, however, that the discussion of the facility at the American Museum of Natural History does not fully reflect this institution's commitment to molecular systematics. The new laboratory is a \$1.8-million state-of-the-art facility for DNA sequencing, with bench space for more than a dozen researchers. Contrary to a statement in the article, our molecular lab is the essence of centralization. It is placed within the museum at the crossroads of three scientific

departments. We find this advantageous over arrangements at some other institutions where the molecular facility is off-site and less accessible to much of the museum staff. Shortly after our paper of 3 August 1990 on the molecular structure of charybdotoxin (1) was published, two independent determinations of the structure of this molecule appeared (2) that were similar to each other and in strong disagreement with ours. We have obtained new data and find that some spectral features depend on solvent conditions, which explains some differences between our data and those of the other groups. More important, we conclude that we most probably misassigned an important sequence of amino acids, as suggested by Bontems *et al.* (3). Therefore, we withdraw our previously reported structure (1) and regret any inconvenience it may have caused. We thank F.

Toma for sending us a copy of his paper before publication and for discussions.

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Erratum: In the report "Free energy and temperature dependence of electron transfer at the metal-electrolyte interface" by C. E. D. Chidsey (22 Feb., p. 919), the axis label in figure 3B should have been "Time (s)," not "Time (ms)." Also, the text following equation 8 should have read, "where $C = (k_B T / 4\pi\lambda)$ and $g(x) =$

$$\exp \left\{ -C\pi \left[x - \frac{\lambda \pm e(E - E^0)'}{k_B T} \right]^2 \right\}$$

1 + exp(x)

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