

portionately large number of students who have gone on to earn doctorates in the sciences and which continue to provide leadership in the design and implementation of the most effective undergraduate teaching methods. If \$5 million spent to support science teaching at second-tier universities would have a significant impact, imagine how powerful would be the results of those same dollars spent at liberal arts and sciences colleges to support and reaffirm the outstanding job they are already doing. Just one small portion of those dollars provided to increase support for student-faculty collaborative research-typical at our colleges, but rare except at the graduate level in the firstand second-tier universities—would have an impact far beyond its "drop-in-the-bucket" significance for the big research universities. David B. Seligman

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Exposure to Methylene Chloride

James Huff, John Bucher, and J. Carl Barrett state in their letter of 24 May (p. 1083) that new, possibly exculpating, evidence (Meeting Briefs, 12 Apr., p. 200) should not be taken into account in reassessing the potential cancer risk posed by methylene chloride. This research was thought sufficiently important that the Occupational Safety and Health Administration reopened the record in its methylene chloride rulemaking (1), and the Environmental Protection Agency (EPA) is considering a reassessment of methylene chloride under its revised guidelines for carcinogen risk assessment. This is significant because EPA's Science Advisory Board and other reviewers have considered the rat results discussed by Huff et al. to be largely irrelevant to assessing methylene chloride's potential risk to humans (2).

As for the criticisms of research showing that mice are unusually susceptible to this chemical, the results of experiments cited by Huff *et al.* do not show that the increase in lung tumors observed in the mice occurred by a mechanism that would also be operating in humans, as one of the authors (R. R. Maronpot) of a paper by F. W. Kari *et al.* (3) acknowledged at the summer 1993 Toxicology Forum (4).

Huff et al. [paraphrasing the results of Kari et al. (3)] state that "mice exposed to only 2000 parts per million of methylene chloride . . . showed eventual lung and liver cancers . . . ," implying that this is a low

exposure. In fact, 2000 parts per million is a very high exposure that far exceeds the saturation limits of the P450 pathway.

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References and Notes

- 1. Fed. Regist. 60, 54462 (1995).
- For example, letter from EPA's Science Advisory Board and report to William D. Ruckelshaus, EPA Administrator (18 July 1984).
- F. W. Kari, F. J. Foley, S. K. Seilkop, R. R. Maronpot, M. W. Anderson, *Carcinogenesis* 14, 819 (1993).
 "Methylene chloride mechanistic and bioassay stud-
- "Methylene chloride mechanistic and bioassay studies," Toxicology Forum, National Institute of Environmental Health Sciences, Aspen, CO, summer 1993, transcript, p. 350.

California Civil Rights Initiative

In her letter of 23 August (p. 1031), Lucy Johns repeats the charge that a clause in the California Civil Rights Initiative (CCRI) "drastically dilutes protection against discrimination by gender." This charge, an effort to defeat the CCRI, is simply untrue. In an open letter to the people of California, 26 of the most distinguished constitutional lawyers in the country, some in favor



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The *p53* gene from 316 breast cancer patients was sequenced using ALF automated sequencing technology. (Bergh J., Norberg, T., Sjögren, S., Lindgren A., Holmberg, L. "Complete Sequencing of the *p53* Gene..." *Nature Medicine* 1995; 10:1029-1034.)

