

# Letters

## Nucleic Acid Sequence Bank

We have created a demonstration system (1) that includes a computer data bank of DNA and RNA sequences with more than 200,000 residues reported in the literature. It is clear that dissemination in computer-readable form is essential to make the new, detailed genetic information accessible. Our demonstration system will be available without charge by telephone to the scientific community starting on 15 September. Each of the more than 200 entries includes a sequence, a sequence name, a species name, a source in the literature, and a table showing the location of genes and other important features. The number of nucleotides covered by the bank is increasing at a rate of about 15 percent per month. We have also set up a retrieval system so that information such as the name of all entries referencing a given author; all similarly named genes such as hemoglobin, or all sequences from a given species can be found. Portions of sequences can be displayed and translated into their complements or into proteins. Entries or retrieved lists can be copied by the users into their own computers. We plan to update the collection and retrieval files frequently to keep the information current. We solicit the aid of users in making improvements. Please contact us if you are interested in using the system.

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### Notes

1. Supported by the Institute for General Medical Sciences of the National Institutes of Health, the National Aeronautics and Space Administration, and Pfizer Medical Systems.

## Dismissed Australian Scientist

The environmental mutagens testing unit at the Institute of Medical and Veterinary Science (IMVS) in Adelaide, South Australia, has been closed as of 30

June (1). In addition, the head of the unit, John Coulter, has been dismissed from the institute. These events are of serious concern for several reasons.

The environmental mutagens testing unit provided a cheap and effective procedure for determining the mutation-causing, and hence the potentially cancer-initiating, properties of environmental agents. It is the only such unit in South Australia and one of only three in Australia.

It has been alleged that there is little need for such a service, since many drugs and chemicals are now tested by or for their manufacturers (2). However, the results of such testing by or for manufacturers may be unavailable, poorly publicized, inadequate, or misleading (3). For example, work at the environmental mutagens testing unit showed the mutagenic properties of tinidazole (4). This drug had been introduced into the Australian market without any reference to mutagenic or carcinogenic risks.

Coulter has worked for the IMVS since 1959. He has also been publicly outspoken on numerous and diverse environmental issues, such as the effects of environmental chemicals, since the 1950's. On occasion this has resulted in letters of complaint being sent to the IMVS from chemical or drug companies, although Coulter has consistently made it clear when his public statements are made in a private capacity.

On 16 April 1980, Coulter submitted a report on the mutagenic and potentially carcinogenic properties of ethylene oxide to the Fire and Safety Committee of the IMVS. Coulter at the same time provided copies of the report to the workers at a laboratory using the chemical (5). The director of the IMVS rebuked Coulter for releasing the report to the workers. As a result of stories circulating in the IMVS about the ethylene oxide report, Coulter posted the report and related correspondence on noticeboards of the IMVS. The director of the IMVS then instructed Coulter not to make available to any staff member of the IMVS any material dealing with the affairs of the IMVS without express approval of the director.

These events clearly raise the issue of freedom of information in scientific re-

search and in cases when issues affect the public. It is also of concern that there are no formal avenues for appeal or adjudication within the IMVS or in the South Australian government for those opposed to the closing of the environmental mutagens testing unit or to Coulter's dismissal.

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### References

1. B. Hailstone, *Advertiser* (Adelaide), 31 March 1980, p. 12.
2. ———, *ibid.*, 1 April 1980, p. 8.
3. R. Scott, *Muscle and Blood* (Dutton, New York, 1974); S. S. Epstein, *The Politics of Cancer* (Sierra Club, San Francisco, 1978); R. J. Smith, *Science* 198, 1227 (1977).
4. J. R. Coulter and J. V. Turner, *Mutat. Res.* 57, 97 (1978).
5. J. R. Coulter, "Memorandum re use of ethylene oxide as a sterilant in the S.P.F. laboratory at Northfield," 16 April 1980.

## Cocoa, Not Cocaine

On page 257 of the 11 July issue of *Science* (News and Comment, p. 256), I am identified as a "psychiatrist and mind-researcher" who "has proposed the inclusion of cocaine in a number of licit products."

I am not a psychiatrist, and I have never proposed such a use of cocaine. I have advocated research on the therapeutic properties of whole cocoa leaf. Cocaine and cocoa are quite different substances with very different potentials for abuse and benefit. Continuing confusion of them by physicians and scientists, as well as laymen is a major reason for our failure to exploit the medical value of a safe and beneficial plant.

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*Erratum:* In the report by T. Kakunaga and J. D. Crow (25 July, p. 505), Fig. 1 on page 506 should have been printed as follows:

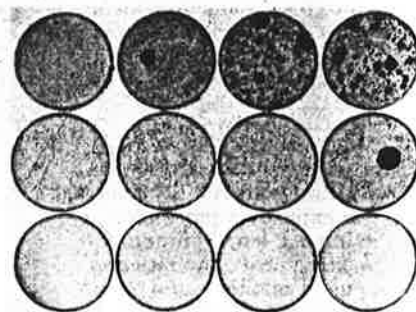


Fig. 1. Photograph, after fixation and Giemsa staining of dishes, showing the different frequencies of focus formation in (top) A31-1-13, (middle) A31-1-1, and (bottom) A31-1-15 cells after exposure to UV at doses of (left to right) 0, 25, 50, and 75  $\text{erg}/\text{mm}^2$ , respectively.