

## /COMMENTARY

## What They Were Saying in '83

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**J**ust for once, I've selected some *other* people to write this column for me. All of the items below first appeared in print exactly ten years ago. Prescient pronouncements? Wise words? Embarrassing assertions? I leave it to our readers to decide which are which.

"Subsequent congressional hearings under Representative Albert Gore (D-TN) strongly supported the conclusion that gene therapy is a thoroughly legitimate goal. The problem has been handled in a much more sensible way than the emotional debate earlier over recombinant bacteria. Also encouraging is the restrained response of the major media to the recent announcement that the implantation of the gene for growth hormone into cells of mouse embryos had produced a giant strain."

*Bernard D. Davis, Science 219:1881.*

"The Brazilian Alcohol Program is a result of a combination of unique industrial, political, economic, and technical factors. It is a sterling achievement that a Third World nation has shown that they are able to pioneer the development and application of biotechnology to satisfy national economic and industrial needs on a scale yet unmatched elsewhere."

*Harry Rothman, Rod Greenshields, and Francisco Rosillo Calle, The Alcohol Economy--Fuel Ethanol and the Brazilian Experience. Francis Pinter, London.*

"After some years of increasing interest, rapid progress is now being made in the understanding of lignin biodegradation . . . To the molecular geneticist the field is now open . . . If 'ligninases' could be produced in large quantities by submerged culture, lignin research would have made the leap into the biotechnological age."

*Paul Broda and Alister Paterson, Nature 306:737.*

"Field testing of bacteria genetically engineered to reduce frost damage has been set back. The University of California at Berkeley announced last week that an experiment involving the release of genetically engineered bacteria into the environment would be postponed until next year. The announcement came after Jeremy Rifkin . . . threatened to seek a temporary restraining order against the University."

*Stephen Budiansky, Nature 305:564.*

"The scientific community became skeptical of the reality of biohazards in recombinant DNA work when it was revealed that eukaryotic genes are generally interspersed with introns and hence cannot be expressed in prokaryotes. However, the frequency of

processed genes without introns in higher animals clearly indicates that we are back at the point of departure."

*Ditta Bartels, Hiroto Naora, and Atuhiro Sibatani, Trends in Biochemical Sciences 8:78.*

"The production of clonal oil and coconut palms have been major achievements . . . Commercial interests will ensure that clonal plants of the oil palm are successfully exploited, but it will need government support to ensure that benefits from clonal coconuts reach the millions of smallholders whose lives depend on the success of their palms."

*Richard Branton and Jennet Blake, New Scientist, 26 May, 555.*

"Science must begin to develop a coherent body of knowledge about bisexuality, for current development in biomedical engineering, especially genetic engineering, make it quite likely that one day people will be able to spend part of their lives as men and part as women. Nature has already solved this problem, for in certain species of fish breeding males can change into females, and vice versa."

*John Money, British Journal of Sexual Medicine 10:5.*

"In its creation of new major products, Genentech has a record that no other company in the pharmaceutical business has matched in recent years . . . In part success has arisen from its judicious choice of projects to tackle. But probably most important have been the company's policies with respect to personnel, which enable it to attract and retain high-quality people."

*Philip H. Abelson, Science 219:609.*

"There is now a serious danger that alarm about the disease physicians call acquired immune deficiency syndrome (unhelpfully, AIDS for short) will get out of hand. For the characteristics of this previously unrecognized and perhaps non-existent condition are so alarming that the temptation to portray it as a disease invented by a decadent civilization—a kind of latter-day version of the fate of Sodom and Gomorrah—is almost irresistible."

*John Maddox, Nature 302:749.*

"You can't do genetic engineering without being into eugenics. When scientists say 'Here is a good gene to engineer into this organism,' they are making eugenic decisions . . . The ethicists keep a look out at the front door for Hitler, but the eugenics came in the back door via the market place in Genex, Genentech, Biogen, and all the other biotechnological corporations."

*Jeremy Rifkin, The Ecologist 13:150.*