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DEPARTMENT OF BIOCHEMISTRY

PAUL BERG  
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December 17, 1979

Dr. Donald Fredrickson, Director  
National Institutes of Health  
Building 1, Room 124  
Bethesda, Maryland 20014

Dear Don,

One of the principal recommendations in The Asilomar Conference Report on Recombinant DNA was that the guidelines for containment and administrative procedures governing recombinant DNA research should be reviewed continuously. We expected that with growing experience our views about the nature of the risks would change and this would be translated into corresponding changes in the detailed recommendations in the NIH Guidelines. It is to your credit that you prevailed in incorporating a procedure for orderly changes and this procedure, though time consuming, is working.

I want to take this opportunity to comment on the proposed change governing cloning experiments in E. coli K-12 host-vector systems. When the group of which I was a member expressed our concern about potential risks associated with recombinant DNA research, we had in mind the possibility that such experimentation might employ a wide variety of E. coli strains and transmissible vectors as host-vector systems. We imagined that some of these would be able to establish themselves in nature or in the intestinal tracts of man and animals. Had we known then that E. coli strain K-12 and non-transmissible plasmids or phages would be widely adopted as the preferred host-vector systems, and that this system would be as secure as current expert opinion and all the risk-assessment experiments have shown, I doubt that we would have raised the issue in the manner we did. I am persuaded by the evidence I have seen that molecular cloning of any DNA segments in E. coli K-12 using the array of present day cloning vectors is no longer of any real concern, certainly not enough to warrant the containment requirements or the bureaucratic, confusing and time consuming reporting procedures demanded by the present Guidelines.

I believe that your recommendation to retain the requirement for containment for virtually all cloning in E. coli K-12 and to modify the reporting procedures for such experiments is prudent, warranted and a step in the right direction. Moreover, I believe it would speed progress in this field without compromising the safety of the investigators, the public or the environment.

With best personal regards,

Sincerely,

