

May 8, 1980

Dr. Howard Raiffa  
c/o Mr. John D. Graham  
CORADM/JH-818  
National Academy of Sciences  
2101 Constitution Avenue, N.W.  
Washington, D.C. 20418

Dear Dr. Raiffa:

Your letter and request concerning the work of the Committee on Risk and Decision Making is in front of me. I am tempted to pack up documents that now consume over 10 feet of precious book shelf space in my office and send them off. They are the accumulation of almost seven years of involvement in the recombinant DNA issue. But I noticed that recombinant DNA is not on the list of recent and widespread concerns noted in the description of the Committee's purpose. If that omission was purposeful then you are perhaps not interested in this subject. If you are interested, I would be willing to have someone from the Committee staff look through the material here. Of course much of it is summarized in the public documents published by the NIH and a great deal of relevant material is deposited in the Oral History program at MIT.

You have also asked for comments on several points and I outline a few briefly here.

I admit to being puzzled about the nature of research the Committee has in mind when it talks about research topics to be funded. You make it clear that this will not involve studies of specific risks. Yet, each situation is unique and its parameters are defined by different considerations. Thus I am puzzled by references to "an adaptive strategy" and "a systematic program of research to support that strategy".

In the recombinant DNA issue, and in many others (most notably the after effects of the Three Mile Island incident) fear generated by ignorance became a critical matter. Such fear impinges and indeed can destroy honest efforts to deal rationally with risks or the perception of risks. All the reasonable and careful approaches to decision making can come to nought if public fear becomes the overriding issue. Considerable attention might be paid to ways of minimizing irrational fear, particularly education of public. Such education needs to be on two levels. One is an ongoing effort to improve understanding of the scientific and technical considerations that give rise to the

fearsome situations. Such an effort will not have immediate results but may provide the citizenry with increased ability to think and talk about the problems of the future. Short run educational efforts are also needed when a crisis situation arises. It is my belief that intensive public education on the matter at hand must always be one of the first responses to a perceived risk. Ideally this should be offered by persons who are both expert and disinterested, and in a readily accessible manner at the local level. Properly done, television could be a successful medium for such educational efforts. However, I do not mean by this television as used by the television industry. The current commercial formats generally require very short and thus usually inadequate discussions. Further, the short times can too easily result in distortion of the facts by selection and omission of material.

Although my vision may be clouded by closeness, I would recommend to you for study the procedures by which the NIH handled the recombinant DNA issue. The efforts of the Director, NIH, were marked by openness, scientific objectivity, and a willingness to share responsibilities with local institutions rather than concentrate them all in the federal government. I recognize that much has been written about the recombinant DNA issue. But to my knowledge there has not been a serious outside analysis of the way the Federal government (the NIH) handled this matter, in comparison with the handling of analogous issues by other federal agencies.

I hope that this has been helpful in some way. If there are any matters that you deem worth further discussion please let me know.

Sincerely yours,

Maxine Singer, Ph.D.  
Chief, Laboratory of Biochemistry