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DEPARTMENT OF AGRONOMY  
BRADFIELD & EMERSON HALLS

August 14, 1969

Dr. Dennis W. Watson, Head  
Department of Microbiology  
University of Minnesota  
1060 Mayo Memorial Building  
Minneapolis, Minnesota 55455

Dear Dr. Watson:

I must admit my profound embarrassment because I missed entirely the point of your letter to Dr. Langlykke.

I believe that both Dr. Lederberg and I have been concerned with a real issue, at least one that professional microbiologists ought to be aware of and become concerned about. Disagreement with the expressed viewpoints ought to be on a professional level---not by government administrators, reporters or the public at large---and a final decision made by individuals in this and other societies and scientific groups competent in the relevant areas.

Dr. Lederberg and I are basically not in disagreement. He has questioned the necessity of the lunar quarantine. This is a matter that I do not feel competent to discuss. My concern has not been with the necessity of the quarantine, but given the fact that NASA has decided to institute one, rather with the adequacy of the quarantine that has been initiated. Begging the question of whether life exists on the moon, or on Mars, I feel that NASA has demonstrated, in a matter where it felt the quarantine was needed, its inability to mount a meaningful program.

Dr. Lederberg and most others competent in the area feel that there is a reasonable probability that life exists on Mars. Accepting the validity of that belief and also NASA's failure to sponsor research on the detection of microorganisms that might be of concern in matters of back contamination, to support work on problems of exobiological quarantine and to seek a broad-based scientific review of its plans for the Lunar Receiving Laboratory, I believe that the Council Policy Committee of the ASM ought to indicate strongly its feeling that medical, veterinary, phytopathological and ecological microbiologists must be involved in the formulation of a sensible quarantine protocol program, if indeed manned exploration of Mars is contemplated.

Speaking for myself only, I believe that the Interagency Committee on Back Contamination has not done that which was necessary. The individuals are all competent and devoted to the effort, but the restrictions and constraints

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Dr. Dennis W. Watson, Head

-2-

August 14, 1969

under which they were working and the government's commitment to a manned space program were such that no scientific group could have worked effectively. I believe that, as professional microbiologists, we are obliged to make our opinions known to NASA at this time and not shortly before the initiation of a manned voyage to Mars.

Unfortunately, and I speak personally in this regard, NASA never released to the scientific community at large the details of its quarantine. I received the protocol only very shortly before the Apollo 11 launch date. Consequently, I felt most embarrassed in raising the matter, essentially because nothing could have been done at that late date, but I hope that the resulting outcry was sufficiently loud that NASA will not again engage in such an activity without seeking scientific opinion from among the relevant professional disciplines.

I urge the Council Policy Committee to consider this matter from the viewpoint of the long term needs in regard to planetary exploration and to come up with a solid recommendation for action. The recommendation, it seems to me must be for either no quarantine or one which is scientifically defensible.

Sincerely yours,



M. Alexander  
Professor  
Soil Microbiology

MA/dm

cc: A. F. Langlykke  
J. Lederberg ✓