

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER MOFFETT FIELD, CALIFORNIA 94035

REPLY TO ATTN OF: LPE: 239-9

November 28, 1973

Professor Joshua Lederberg Department of Genetics School of Medicine Stanford University Stanford, CA 94305

Dear Professor Lederberg:

I was delighted to learn of your proposed plans to upgrade your mass spectrometry capabilities by providing routine high resolution mass spectrometry (HRMS) and combined gas chromatography/ high resolution mass spectrometry (GC/HRMS). Such a service could be of inestimable value to our program. As you know we are developing gas chromatography/high resolution mass spectrometry facilities for NASA's interests. In particular we are modifying our equipment in order to determine carbon and nitrogen isotopic compositions of organic molecules. If available we would use your proposed facilities for our routine GC/HRMS analysis of biologically significant molecules which are sought in our program. Most of our work requires GC/HRMS as opposed to HRMS. In addition, we are also most interested in computer programs which aid in mass spectral interpretations. Although we have a few of our own programs, we would be most eager to upgrade our own interpretation capabilities through use of programs from your facility.

Our work thus far has been supported solely by NASA; we are not supported at present by NIH.

I hope that our expression of interest will be of use to you in obtaining funding for a potentially most useful analytical facility.

Sincerely yours,

Keith A. Kvenvolden

Chief, Chemical Evolution

Bur C. France Co.

Branch