Dr. R. K. Mortimer Radiation Laboratory University of California Berkeley, California

Dear Bob:

You were away in Europe when I tried to call you, so I thought I'd speed things up by a brief letter.

I have no intention of dabbling again in yeast genetics in any proper sense, but I would like to include a yeast system in some tests for chemical mutagenesis and allied phenomena. For use in just that way, I would appreciate it very much if you can send me a diploid strain, heterozygous for the pink adenine marker that would be advantageous for quantitative studies for response to rediation, in this case, of course, induced segregation. I don't know whether you recall that I had had a somewhat similar experience with diploid E. coli quite some years ago (see the Cold Spring Harbor Symposium for 1951). We are looking at these diploids too, but they are spontaneously unstable to a somewhat annoying degree, and for that reason may not be as sensitive indicators of low-level effects.

I haven't followed the story of DNA repair in yeast particularly closely. But if there should happen to be some repair-defective mutants that could be coupled with the adenine heterozygote, I would be particular to have the appropriate stock, together with the non-defective control. I take it for granted that the induced segregation is some side effect of repair of DNA lesions.

Please give me a call if any part of my request is obscure or unreasonable.

Sincerely yours,

Joshua Lederberg Professor of Genetics