

November 20, 1951

Dear Gunny and Roger:

I was somewhat chagrined at your negative experience with the silica tubes. Perhaps they would have grown out in 48 hours, but your result conflicts with all my previous experience. I have prepared another set of PF-11 and PF-20, together with nutrient agar slants. Would you test the silica tubes as well as the slants for viability, and let me know the result? If they don't work for you, I have a duplicate set here for confirmation.

I happened not to have PF-12 on hand on a slant, so sent you PF-20 instead. This is a diauxotroph, leuc- trypt- S<sup>r</sup>, one step removed from PF-12. The S<sup>r</sup> marker should be convenient to you in standardizing your selection procedure, as it may be somewhat easier to follow when the auxotroph:prototroph ratio is low. Nutrient agar with 100 ug/ml scores S<sup>r</sup>/S<sup>s</sup> very nicely.

Roger: *S. griseus* behaved very nicely for production of auxotrophs, and in what was supposed to be a preliminary experiment to calibrate the UV survival, and check on the possibility of replica-plating, two auxotrophs (different?) were obtained. They are being tested now for difference, heterokaryon formation, etc., and more are on the way. Technically, this problem is turning out much easier than I had anticipated.

Nothing more from Oginsky. Her cultures, both S and R, are very heterogeneous on EMB agar: what this might have to do with the results, I don't know.

Sincerely,

Joshua Lederberg