

# IMPERIAL CANCER RESEARCH FUND LABORATORIES

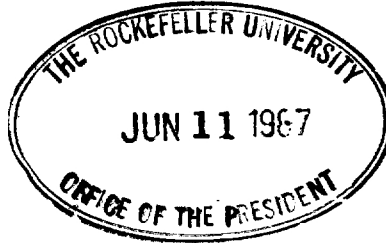
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Dr Joshua Lederberg,  
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Dear Josh,

I do of course recall very well the phenomenon of affinity, a term which I think Fisher coined for the observations which Margaret Wallace and Donald Michie made of apparent non-random assortment that looked like pseudo-linkage of markers on different chromosomes. The mouse was really a very difficult organism to use for this, especially since so little was known at that time about where genes were and the relationship of the karyotype. Certainly I do not think that data was ever confirmed but I am not sure whether there were any subsequent studies either in drosophila, or neurospora or yeast, where more precise studies could have been done that corroborated this possibility. I rather suspect not. I remember well the paper that you wrote with Gene Nester, but had not recalled the use of the term, "congression". Interestingly the shorter Oxford English Dictionary only lists congress and congressional. I suppose that the phenomenon is analagous although it is more related presumably to the distribution of competent cells together with the probability that two independant molecules will be taken up by one cell. Nowadays with co-transfection into mammalian cells the notion that, because the effective "competence" is low, whereas the uptake probability is high, there is therefore a relatively high frequency of what you would call congression, has become more or less accepted. I suppose that under those circumstances the detection of linkage in subtilis might have been more difficult although I suppose this could always be dealt with by titering down the concentration of DNA.

All the very best,

Yours,

pp  
Walter

*Walter Bodmer*  
eo  
(Dictated by Sir Walter Bodmer  
and signed in his absence)