Department of HEALTH, EDUCATION, AND WELFARE • Public Health Service
National Institutes of Health • Bethesda 14, Md.

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THE CLINICAL CENTER
DIVISION OF RESEARCH GRANTS

Oct 10

Dear Joshua

We have not yet received Morse's* comments on Kipps's paper; we are otherwise ready to send them to Science. — We have a new lightning test for screening between Gal kin-less (= Gal thermo-less) and Gal uridyl transf-less (= 4-generation-less). The first category is not inhib. by having galactose present together with glucose whereas in the latter category the mix of the two sugars gives a very strong growth inhibition. The exp. was done partly with the purpose of throwing light on the pathological symptoms in Congen. galactosemia. It is almost evident now that it is gal-1-P^ace and not galactose ace. which is responsible for the growth inhibition. It could be due to gal-1-P being an enzyme inhibitor and that is to some extent the case. Ginsburg has shown that gal-1-P

in lieu of UDPG pyrophosphorylase. I believe, however that the growth inhibition is rather due to a 'bleeding out' of ATP, somewhat like dinitrophenol. Ishiba & Kurahashi have experiments which support this latter view.

We must have a discussion the 20th & 21st

Sincerely

H. Harris