Dr. Franz Rosa, Acting Director Parimetal Biology Program Mational Institute of Child Health and Human Development National Institutes of Health Bethesda 14, Maryland

Dear Franz:

Thank you for your letter of February 24.

By coincidence I was just (tardily) answering Rosenberg on the role of fetal mortality in seasonal matality, so I'll just pass on a copy herewith.

Have you seen Yerushalmy's data on smoking as it influences birthweight and neonatal viability? I think he distorts correct inference by suggesting that smoking improved child health! What he does help to show is that birthweight is to some extent independent of viability, though weight-deficiency is often enough a response to maternal or fetal disease or untimely delivery to be a useful symptom. Still, I think the whole concept of prematurity needs to be carefully reexamined, i.e. That fraction of "premature" deliveries are only premature labor and not more comprehensive disease.

The California perinatal mortality study (1959 births) also showed that Negroes had a <u>higher</u> weight-specific viability for the under 2500 gramm class, i.e., lighter babies still viable. I should think that weight should also be classified by sex in such studies.

Some comments on reading your study on the Indians:

Where do you get the 96% figure for attended births? Aren't premature and still births most likely to be unrecorded, and these be the source of the discrepancy?

Maternal age: I have an impression of an unusually long reproductive span among Indians. You might want to look again at the 30-45 year cohorts.

It's an interesting idea that Indians are "biologically" better adapted than Negroes to their present niches. But I would have to be skeptical of any showing of a racial-genetic factor here rather than racial-cultural. I don't see how one could really test this point, though. How do the Indians stand up to epidemic mortality - e.g. flu - which would also be sensitive to accessibility to infection as well as resistance.

A propos our grant and relations with Census, can you suggest a mechanism to use NIH grant funds to reimburse Census for the salary of the resident staff-member we are discussing with Beresford? We could probably direct some private funds for this if necessary, but this is not easily come by.

Sincerely yours,

Joshua Lederberg Professor of Genetics