Dr. Esko Orma Institute of Occupational Health Haartmaninkatu l Helsinki, FINLAND

Dear Esko:

Pentti mentions I should be hearing from you, but I haven't. We are now systematically handling the initial clinical data in all areas, the objects being:

- 1) To audit all area history and physical forms and punch items comparably
  - 2) Print out and return to areas the frequencies of history and physical items for whatever disposition they wish
  - 3) Identification, by clinical criteria, of a group of "normals" for follow-up, as well as various clinical classes of abnormals

I know you went to the trouble to translate your clinical forms into the clinical code devised by Dr. Keys. We would like, however, to punch individual items and need the originals or microfilmed editions as soon as possible.

For the follow-up exams, I suggest you let us punch from the originals which we then will return to you with tabulations. This sort of thing goes very efficiently here now and will not delay any studies you might have in mind.

Shortly Pentti and I will have the ECG routine clearly enough in mind to write you our specific needs. He mentioned you planned bicycle exercise. I hope, for the sake of consistency, we can have a conventional ECG routine exactly as before with paper 12 lead rest ECG supine, 3 minute step test, supine 8 lead I, II, aVL, aVF, V<sub>3-6</sub>, post-exercise ECG. Imbimbo or Mohacek can be responsible for this. At that station we will probably add radiotelemetry during exercise with a single bipolar lead and recording on a small tape deck.

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The operation of Pentti and myself, should be a separate station, and hopefully Blomqvist later, in which we will record 2 types of orthogonal leads, McFee and Frank. Here, if you agree to the double exercise, you could do the bicycle work and we could record one system of orthogonal leads during and after work, which we are most anxious to evaluate. Depending on whether you use a single load or step-up load, that station would require slightly more time than the conventional ECG operation.

Keep in touch.

Regards,

Henry Blackburn, M.D.

HB/cjh

cc: Dr. Keys Dr. Karvonen

P.S. On discussing this with Henry Taylor he suggests you let us know promptly the condition of the bicycle exercise you desire and we will reproduce them here to see whether a preceding 3 minute single step test (20 to 30 minutes) before the bicycle test significantly affects the work pulse rate.