April 23, 1958

Dr. Robert Alway
Acting Dean
School of Medicine
Stanford University, California

Dear Dr. Alway:

Further to our telephone conversation of the 18th.

I am enclosing a tentative syllabus for a course in medical genetics. It is based on the likelihood that most of your students will not have had previous training in genetics, and that the faculty would support a rather more extensive offering in genetics than is now available at most institutions. The syllabus does not take account of the possible need to compromise the scope of genetic training in the light of the severe competition for the students’ time, as this is a question that deserves the judgment of the whole faculty. Broad as it is, I do not think this syllabus exceeds the needs of the students, especially those who are likely to go into academic medicine. On the other hand, to the extent that some topics are adequately dealt with in other courses, I would prefer that they be deleted from this syllabus. After the student has been exposed to the main principles and terminology it would be better to bring out the genetic factor in various diseases in Pathology, Medicine, Pediatrics etc., rather than crowd this syllabus with specific examples.

The syllabus attempts to furnish some balance as between the fundamental aspects of genetic science and its practical applications in diagnosis and counseling, and also between the experimental and observational (biometrical) methodologies in genetics.

As to the general functions of a genetics department in a medical school, they are so closely parallel to those of Biochemistry that I hardly need waste many words. We recognize several roles all of which are important: our own research program; consultation and collaboration with colleagues in other departments; the training of medical students; the training of graduate and medical-postgraduate students. I believe a number of other problems have to be settled before we can consider whether to set up a genetic counseling service comparable to, say, the Heredity Clinic at the University of Michigan. I would not recommend this as a primary objective and would prefer to stress the training of physicians who can cope with most such problems themselves; however, as we have done here, we would give whatever technical advice we could in response to professional requests.
The attitudes expressed so far by Art Kornberg and Henry Kaplan in conversation have encouraged my hope that Stanford could furnish an opportunity for a program in medical genetics of a scope comparable to here. I do not visualize our role as merely that of furnishing auxiliary course material to genetic students, but rather of developing an important center of genetic research and postdoctoral and graduate training to generate the workers who are in such short supply now for the demands of medical schools and research institutes throughout the country. Fortunately, the other biological departments already furnish a solid base for such an objective. For the medical school Genetics Department, I would visualize that we need two appointments in addition to myself. I think this is precisely what you already understand, and that I could look forward to support from Stanford for one other senior appointment from university funds, and the underwriting of another junior appointment to be funded from such sources as an NIH training grant. The fields I would hope to see represented in these appointments are (1) biometrical or population genetics and (2) experimental genetics of mammalian (including human) somatic cells—the general field encompassed as item 12. of the syllabus. It would be advantageous, but not actually obligatory, that one of these colleagues have an M.D. qualification. It is too early to detail specific candidates; either of my colleagues here, J. F. Crow or N. E. Morton would serve very well for (1), and I would in fact like to sound Crow out on his possible interest as soon as possible. The specifications for (2) are harder to fill; an outstanding possibility would have been K. C. Atwood, but he has just accepted a position as medical geneticist in the Obstetrics (sic) Department at Chicago, though I would not exclude the possibility of luring him to Stanford after he has had a year's experience there.

The immediate space needs of such a department would be about 4000 ft² net (excluding passageway) assuming it were designed efficiently for our particular purposes. I am enclosing the planned layout for our new wing here to illustrate. An isolated facility for my own group (microbial genetics) would take about 2700 ft². These are very rough estimates, and probably too low except for a unit specifically designed. They do not include provision for extensive participation of medical students and casual collaborators, but I understand your general student labs are designed to include the possibility of student research activity. As you know there may be a considerable range of accommodation, depending on whether space or personal efficiency is at a premium, and we will have to look at the specific proposals to judge their feasibility. All this notwithstanding, I would place even more stress than I did during our phone talk on the desirability of moving into the main building. Aside from the research angle, the very novelty of genetics may put a special burden on us to maximize our day-to-day contacts with the medical students, house staff and faculty.

It seems unlikely that we can solve all the problems on both sides by September and a more realistic target date is perhaps January 1959. If there are too many difficulties in arranging temporary quarters, a later date is by no means out of the question.

My brother Seymour's address in Berkeley is 1507A Arch Street, Berkeley 8. I will try to call Henry Kaplan at Sausalito sometime Sunday morning (May 11) if he does not reach me first. I don't have Seymour's phone number. If he can't reach me there it will be possible because we will have driven right down to Palo Alto from the airport to save doubling back. Would you let me know where I will be staying in P.A. Sunday night? (At the moment, it is still uncertain whether my wife will be joining me on this occasion, but as you know she is well acquainted with Stanford.)

Yours sincerely,

Joshua Lederberg