

THE UNIVERSITY OF WISCONSIN  
MADISON 6

DEPARTMENT OF MEDICAL GENETICS  
SCHOOL OF MEDICINE

Please Reply To  
GENETICS BUILDING

DEPARTMENT OF GENETICS  
COLLEGE OF AGRICULTURE

April 19, 1958

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

Dear Dr. Alway:

Thank you for calling last night. I am enclosing a copy of a prospective syllabus, which I mentioned during our conversation, though I see it needs some changes in emphasis, based on our experience of the last two years here. In particular, I would suggest that a first course in medical genetics would warrant at least two lectures a week for one quarter, viz. about 25 hours altogether. Before pressing this further, I would want to gauge the extent of the faculty's interest in revising the curriculum in this direction, and also to become better acquainted with the premedical preparation of your students. The items that warrant more time are the chemical basis of heredity, which speaks for a close integration of this teaching with that in Biochemistry, and in the genetics of somatic cells (tumors; transplantation; tissue culture) and of bacteria and viruses. Possibly these matters are dealt with sufficiently elsewhere in the curriculum, and wherever possible I am in fact rather against segregating a patch of biological knowledge to pigeonhole it under genetics.

You will not imagine that I can pose as an expert on every facet of the content of such a program. In particular, if the Genetics Department is to serve the vital function of training graduate and postdoctorate students, fellows and residents to furnish very badly needed leadership for the growth of medical genetics as a discipline, a broad base of expert competence will be absolutely essential. The integration of the Stanford Medical School into the University should bring the same advantages as pertain here, the opportunity of taking advantage of the academic strength in genetics and other related areas of biology. Indeed the main premise of my enthusiastic interest in Stanford at the present time is the likelihood of developing a research, teaching, and departmental program along the satisfactory lines that have been laid down here, with the added advantages of individual professional associations on the Stanford campus and the general intellectual climate of the whole Bay area.

Assuming, as I am certain we can, the wholehearted interest and cooperation of our colleagues in Biology, Biochemistry and elsewhere, I would look forward to the help of two colleagues with whom to constitute a Genetics Department. It is rather too soon to get down to specific names, though I would mention right away that I would like to try to persuade Professor J. F. Crow of the Genetics Department here to interest himself. The three main areas that ought to be represented are microbial genetics (e.g. myself); population or biometrical genetics (e.g. Prof. Crow) and some aspect of experimental mammalian genetics. While the first criterion must be scientific competence in genetics, we are certainly going to look for a background and interest that would further the functioning of the department in the medical school.

I think that I have already given both Arthur Kornberg and Henry Kaplan my hope or expectation that the university would furnish immediate backing for the recruitment of one senior colleague, and would underwrite efforts, which might be subsidized through applications to the NIH, etc., for our third member.

The space needs of a department of this composition might be met within a net area of 4000 ft<sup>2</sup>, if this were efficiently designed for our particular purposes. This is not an expansive estimate and certain potential programs might use more space to some advantage. It is a net figure (exclusive of passageway) and does not include space for animal maintenance which, at Wisconsin, is handled centrally.

If it is possible to do so, may I place even more stress than I did on the phone on the desirability of our setting in the main medical school building. The very novelty of genetics is one argument for minimizing any physical factors that may discourage the most convenient contacts with medical students, house staff and faculty. And I have already indicated the special importance to my wife and myself of close day-to-day working relationships in research with Biochemistry. If some arrangement on these lines does become possible, we would prefer to move to Stanford as soon as is convenient, possibly as early as September 1958 if temporary quarters are available. This is probably impractically soon from several standpoints, and January 1959 might be a more realistic target. This is a matter of preference (for the benefit of the program here, inter alii,) not necessity and we can discuss later dates as alternative possibilities.

On the question of the function of a genetics department in a medical school, we can probably save a good deal of time by observing the very close analogy with Biochemistry. Both are fields necessary for fundamental biological understanding; both have direct application in medicine; research in both is more conveniently focussed on experimental materials easier to manipulate than man. In fact, I am somewhat perturbed by the development which genetics is following at several other medical schools, in which the rather specialized techniques of human genetics are stressed to the effective exclusion of experimental work. I cannot (and do not) believe that such an organization furnishes the necessary depth of genetical insight to sustain the best possible progress either in research or in graduate training for research. At the present time, the leading figures in medical genetics in this country were themselves trained on a broader basis than are their contemporary students -- note for example Jim Neel-- but it is too soon to look for objective evidence on the shortcomings of a program which overstresses human genetics.

The roles which I envisage for the department are fairly obvious; of about equal importance they are: 1) collaboration and consultation with the research, service and pedagogic missions of other departments; 2) our own program of instruction both for medical and for graduate students; 3) our own research program. Without belittling that particular aspect, I would be disappointed if our primary or exclusive function were construed as the teaching of medical undergraduates. Unlike many other institutions, but in common with Wisconsin, Stanford should have the resources to be a leading center in the training of research workers (at the graduate and the medical postgraduate level) in medical genetics no less than in other areas of academic medicine. This objective is of course of one piece with the others.

At least for the present, I would not contemplate setting up a 'Heredity

Clinic', for genetic counseling. Our policy here has been to confine counseling to the answering of specific scientific questions which may be referred to us by physicians. Our long term policy on this matter will have to be worked out on the basis of the inclinations and qualifications of the members of the department. We consider that our own time here is better spent in indoctrinating our medical students to a level where they can as physicians cope effectively themselves with the most frequent situations that might arise in their own practice.

I see that I am rambling over questions that might better be deferred to a personal meeting. One last point, however; January 1959 is probably the earliest realistic target date for a move, and other things being equal we would probably prefer not to put it off much beyond that time. This is not compulsive, however, and the date may have to be revised in the light of our solution to the space problem.

I am also adding a checklist of some of the items that might be on our agenda.

My brother Seymour's Berkeley address is 1507A Arch Street, Berkeley 8. I will try to call Henry Kaplan at Sausalito sometime Sunday morning if I have not heard from him. Unless I hear otherwise, I will count on driving down to PA with him on Sunday afternoon, (May 11).

Yours sincerely,

Joshua Lederberg

Space & Facilities-- financing

Deptl. Organization: faculty appointments & secretary

Curriculum

Salary & moving expenses

Application for NIH training grant? ; continuity of existing grants

Arrangements for graduate students; tuition fellowships?; Ph.D. degree program

Tuition exemption privilege<sup>1</sup>

Employment of Dr. Esther M. Lederberg<sup>2</sup>

Other questions will doubtless come up. These should not be construed as being all vital to decision.

1) we have no children; however I have a primary obligation for the education of one younger brother Bernard who will be graduating from Central High School in Philadelphia in January 1959. Would I stand in loco parentis for him at Stanford? Would this apply at any other institution exchanging with Stanford?

2) We assume that our previous understanding would also hold in the medical school, that she would be eligible for appointment to a non-tenure position payable from grant funds.