

Statement to Genetics Department, Ad Hoc Committee on Plans

J. Lederberg May 4, 1957

My observations will be limited to the question of Medical Genetics, which is just one of the problems before you.

1. Until now, medical genetics has been virtually neglected on this campus. However, this is a field of growing importance, both in theory and in applications --the latter may ultimately rival even those of genetics in agriculture. There is a substantial unfilled demand for teachers and researchers in the field; there is a danger that this may be met by students who have been trained on too narrow a base, e.g. exclusively Human Genetics, to best further the science. Wisconsin has engendered a unique opportunity to fill this gap, owing to the proximity of our own strong group (already a nearly unique concentration of genetic science) to a now broadly research-minded medical school administration.
2. The sound development of genetics within the medical school requires its recognition as a body with a line of authority that is unambiguous and that should be on a par with other departmental activities. This is a self-evident axiom of administration; you need only to consider the requirements of a converse situation of a basic science that could make a unique contribution to Agriculture. The department is an organ of the college wherein it functions.
3. On the other hand, the organization of a Department of Medical Genetics can be thought to promote the dangers of divergence, duplication, even rivalry. Workable coordination, on the other hand, carries the very great advantages of a considerable overall expansion of genetics, on a sound scientific basis, with the additional direct support of another important school in the university.
4. Medical Genetics cannot be thought of, in the foreseeable future, as a self-sustaining program, but must and should rely heavily on the intellectual resources of the Genetics Department. Conversely, we cannot retain our position of leadership in academic genetics if we continue to ignore its connections with medicine. Without the enthusiastic backing of the Genetics Group as a whole, Medical Genetics is unlikely to flourish. It would be tragic if this unique opportunity were to be frustrated because of inability to solve problems of organization.
5. By the existing hierarchy of administration, the Dean of each College has the weight of authority for its operations. He is, of course, responsible to the President and the Regents, and he could not function effectively without the advice of the respective departments. Without far-reaching reorganizations that should not be proposed lightly, our plans will have to respect these lines of authority, and the fact that existing departmental policies are likewise 'advisory'. I therefore can see no workable alternative to the organization of the two departments, as organs of the respective colleges, but these are not necessarily the sole units of our own policy deliberations.

6. It would be wrong in principle to make a fundamental separation of theoretical vs. applied genetics. (This is a more considered view than some I have expressed earlier). The historical success of our College of Agriculture has been based on the unification of these programs. However both departments should avoid, in future, dilution by programs on the far fringes of basic science which can safely be left to the 'clinical' departments, e.g. Medicine or Agronomy or Animal Husbandry. This principle is reinforced by the damage that would be done to individual programs by too drastic surgery at this time.

7. How then to minimize the risks of divergent growth, risks that might be especially harmful so long as Genetics remains in a state of relative impoverishment, as compared for example with biological chemistry? If the premises enunciated so far are sound, there is hardly any alternative but to supplement the intra-college responsibility and authority of the Departments, with an inter-college vehicle for common policy, which we might call a Division of Genetics. (This proposal may differ only in terminology and emphasis from Professor Brink's onetime suggestion of a super-department.) Its membership would presumably be the faculty of the existing departments, though some more consideration of the requisite strength of affiliation may be in order.

8. The Division could be established either by simple departmental agreement, though assent of the deans, or higher officials, may be needed for its full development. Its functions would be the formulation of common policy on such matters as:

- a. Administration of advanced degrees.
- b. Its own membership, and the election of a chairman, as spokesman.
- c. Qualifications of proposed staff appointments and promotions to tenure.
- d. Proposals on the areas of genetic research that require expansion, and the means of financing them.
- e. Courses, including seminars.
- f. Joint research facilities, and the allocation of space therein.
- g. Related matters of common concern,

9. The Departments would retain their inescapable responsibilities in intra-college affairs, internal budgets and administration.

10. The Division may have to be construed as a Committee of the Whole of the two departments. It will still have to report to the respective deans. However, as a recognized deliberative body, it can be expected to have scarcely less influence in its own affairs than do the Departments now. There will conceivably be times when an overriding interest in one college will lead to actions contrary to the judgment of the Division. However, this is no less possible under existing arrangements, both within and between the colleges. The establishment of a working Division capable of moral suasion is the most that is within the legal powers of the departments.

11. As regards a), the Division would be responsible to the Graduate School. In relation to f) whether the Division could ever secure operating funds, outside the College budgets, is a touchy question on which the deans' advice should be obtained. A reasonable delegation of authority to an executive committee of the Division (plausibly the two chairmen and its own chairman or executive secretary) would keep the organization from becoming too elaborate for the implementation of its own policy and from impeding decisive action within the departments.

12. The coherence of the Division would be reinforced by its having a common building for basic genetic research. The ways and means for this should have a high priority. I would add that a proposal from the Division, representing two departments (and, we would hope backed by two deans) should make a stronger case in securing funds, e.g. from WARF or even the NIH, than one alone. Other devices should be considered as setting the tradition of Division action: it ought to be named as the formal sponsor of the forthcoming Symposium (which is already formally a joint enterprise). If it can be approved, we should think of a common stationery (see appendix) and of the Division as the laboratory-credit on publications. Such public-relations measures will have much to do with public impressions of our organization, and in turn influence the fact. Perhaps they will also test the willingness of our deans to give some formal recognition to the permeability of college boundaries.

13. The Division would mitigate the necessity of joint appointments between the departments, though wherever these are desirable, there should be no bar to them. The entire question of joint appointments may need to be reviewed, to be sure that sentiment and administrative soundness are not at odds. However, there should be a minimum of disturbance of existing relationships, for good personal reasons. I would not relish the severance of my own ties, responsibilities and privileges in Genetics, nor does there seem to be any sound reason in support of that suggestion, so long as the Division, not the Genetics Department, is the vehicle of inter-college policy.

14. The establishment of the Division would be an implicit endorsement of the principles of purpose and organization set forward here. With whatever amendments are appropriate, these should be embodied in a formal document.

15. The problems of scientific versus collegiate lines of organization are not unique to Genetics. We have an opportunity to set an example to the University on how these can be solved on principle. We have the advantage, not always so evident, of personal good will and common purpose.

16. Many of the postulated perils of separation are hypothetical, and such as might arise would likely be quickly taken care of on a personal rather than a formal basis. However, I agree that sound organization should not rest entirely on personalities, and it is easier to maintain a common channel than to build one to meet a crisis. The Division, at this moment would be a formality, not distinguishable in its membership from the Department of Genetics. Concern for the future should not obscure the realities of the present, and especially the tremendous potential that the Medical Genetics development has for the impact of genetics on research at this university. Nor should it obscure the history of my own cordial relationships within the department, and the corresponding likelihood of their continuation. The building of safeguards ought not to be misconstrued as a sign that the perils are imminent.

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College of Agriculture

Department of Medical Genetics
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