

March 18, 1958

Dr. Robert S. Morison, Director
Biological and Medical Research
The Rockefeller Foundation
49 West 49th Street
New York, New York

Dear Dr. Morison:

This Medical School initiated a program in medical genetics with the appointment of Dr. Newton Morton as Assistant Professor of Anatomy. Subsequently, a separate Department of Medical Genetics was organized, comprising Dr. Morton and Professor Joshua Lederberg as Chairman. The joint appointment of its Chairman typifies the close liaison between the new department and its counterpart in the College of Agriculture. The combined resources of the two departments furnish an unexampled opportunity for the development of genetics in medical research and education.

With the combined support from the Wisconsin Alumni Research Foundation, the National Institutes of Health, and the State Legislature, a new research wing is being constructed at the Medical School at a cost of over one and one half million dollars. This will permit the housing of Medical Genetics in modern laboratory facilities, including space for the rounding out of its initial staff with a third member. After careful consideration, and on the recommendations of the Departments of Medical Genetics and Genetics, the Medical School has endorsed the appointment of Kimball C. Atwood, M.D., as Associate Professor of Medical Genetics.

The development of a new department has, of course, required the commitment of substantial funds, for the Medical School's share of Professor Lederberg's salary and for the complete assumption of Dr. Morton's by next year. We have been unable to finance Dr. Atwood's appointment out of current funds. We are therefore asking the help of the Rockefeller Foundation in developing our program in Medical Genetics by support over the next three years. After that time, we anticipate being able to transfer Dr. Atwood's salary to our regular budget.

Our anticipated requirements are listed below, and include \$37,500 for Dr. Atwood on the assumption of an average salary of \$12,500 (calendar year basis) which may be necessary to attract a scientist of Dr. Atwood's calibre and reputation. Dr. Atwood has indicated a possible preference for an academic year arrangement which would have to be worked out on the basis of university policy.

The space allotted to Medical Genetics in the new research wing amounts to 4,000 square feet net, about 10% of the new wing, and represents an investment of about \$160,000 from other sources. Unfortunately, financial problems have made it impossible to complete and equip the facility under the original budget, and we are requesting \$75,000 for this purpose. The other amounts listed represent the unused portion of existing grants for the programs already under way by Professors Morton and Lederberg, funds which are to be consolidated into this overall request.

In view of the possibility that grants for smaller amounts may become available for various aspects of the program on one hand, and that unexpected needs may arise on the other, we could make even more advantageous use of these funds if they were available without limit as to time, that is, as an unrestricted grant. They could then continue to be used as insurance to underwrite projects for which other financing would become available in due course, and in this way their effectiveness would be multiplied. However, we will be more than pleased to operate within a three year term, if that is more in line with the Foundation's policies.

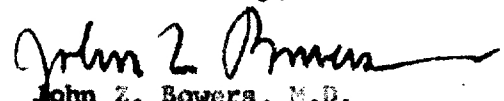
Dr. Atwood could not be formally approached until we could make him a concrete offer. He has, however, expressed a tangible interest in our program, and we are hopefully confident that he will accept a reasonable offer. At the present time, he is a Senior Biologist at the Oak Ridge National Laboratory, where, unfortunately, the research opportunities are not matched by the academic facilities for the collaboration with and training of graduate students.

The Department of Medical Genetics has been conceived primarily as a research unit, with the responsibility of collaborating with other members of the Staff in both research and teaching activity. Dr. Morton is already engaged in studies of muscular dystrophy and spherocytosis in man, both from a biometric and a physiological angle. Dr. Lederberg will continue his work on the genetics of bacteria and viruses. Dr. Atwood is well known for his work on the cellular lesion in radiation injury, having made a superb application of the technical properties of Neurospora spores for this purpose. He, as well as Dr. Morton and Dr. Lederberg, is also deeply interested in the genetics of somatic cells, and has studies well under-way of somatic mutation in human erythrocytes with respect to serological properties. His position at Oak Ridge has not furnished an opportunity to exploit his medical training, a qualification that adds to his aptitude for the present opportunity. In summary, it would be fair to characterize the theme of the Department of Medical Genetics as a primary concern for basic aspects of genetics, with diverse experimental materials, but an orientation towards medicine and the goal to encourage those applications of genetics to medicine as their theoretical work unfolds. The Medical School feels that this is the soundest base on which to build applied studies, and the training of graduate students, residents, and post-doctoral fellows as practitioners of the various aspects of medical genetics. One advantage at Wisconsin that permits the development of this program on a broader base of theoretical work than elsewhere is the integration of the Medical School in a University setting, and in particular, the cooperation of the Medical Genetics group with the Genetics Department. The latter Department has already expressed its vital interest in Dr. Atwood's appointment, to the extent of offering him a comparable rank should he be appointed in the Medical School.

Some additional information on Dr. Atwood's background is enclosed.

It would be most convenient for us if any grant could be made effective September 1, 1958, either for three years, or an indefinite term. We intend to proceed with an offer to Dr. Atwood as soon as we have assurance of the necessary starting funds.

Yours sincerely,


John Z. Bowers, M.D.
Dean

B U D G E T

Three Year Grant

September 1, 1958 to August 31, 1961

Salary, K. C. Atwood, M.D.	\$ 37,500.00
Equipment of research facility (includes apparatus and laboratory furniture not covered in construction budget)	75,000.00
Unexpended balances as of Sept. 1, 1958:	
Rockefeller No. 56088 (Dr. Morton)	7,500.00
Rockefeller No. 53108 ren. (Prof. Lederberg)	<u>7,000.00</u>
Total Program	\$127,000.00
Balance	<u>14,500.00</u>
Total this Request	\$112,500.00

Kimball C. Atwood

b. New York, N.Y. May 15, 1921. A.B. Columbia College 1942. M.D. New York University 1946. Intern (surgery), Bellevue Hospital 1946-47. Research associate in zoology, Columbia University, 1947-1950. Visiting assistant professor of microbiology, Columbia, 1950-51. Sr. Biologist, Oak Ridge Natl. Lab. 1951---

Some of his principal publications are:

- 1941 Hinton, T. and KCA. Terminal adhesions of salivary gland chromosomes in *Drosophila*. Proc. Nat. Acad. Sci. 27:491-496.
- 1951 KCA, L.K. Schneider and F. J. Ryan. Periodic selection in *E. coli*. Proc. Nat. Acad. Sci. 37:146-155.
- ib. Selective mechanisms in bacteria. Cold Spring Harbor Symp. Quant. Biol. 16:345-355.
- 1949 KCA and A. Norman. On the interpretation of multi-hit survival curves. Proc. Nat. Acad. Sci. 35:696-709.
- 1953 KCA and F. Mukani. Indispensable gene functions in *Neurospora*. Proc. Nat. Acad. Sci. 39:1027-1035.
- 1955 KCA and T. H. Pittenger. The efficiency of nuclear mixing during heterokaryon formation in *Neurospora crassa*. Am. J. Bot. 42:496-500.
- 1956 Pittenger, T. H. and KCA. Stability of nuclear proportions during growth of *Neurospora* heterokaryons. Genetics 41:227-241.

Some of Atwood's best and most complex work, on the detection and homology-mapping of lethals, and on the role of the nucleus as the principal target of radiation damage in *Neurospora*, has not yet been published in detail.

His current work is on the mechanism of radiation damage to cellular constituents (primarily nuclear) in *Neurospora*, *Drosophila* and mice.

He has also initiated a study of somatic mutation during erythropoiesis in man, and has obtained preliminary evidence for the occurrence of mutant AO and BO red cells in AB individuals.