good old times of thirty to fifty years ago when (to quote Van Name), "a genus name had in those days a real meaning to some others besides the specialists in the class of animals to which the genus happened to belong."[8]

It is of course to be admitted that there are good genera and bad genera; that many groups have been proposed as subgenera or even full genera on inadequate grounds. Our synonymies show what has been the fate of many of them, and a like fate doubtless awaits many, of recent origin, that have still to be weighed in the balance of concurrent approval. As the value of characters is a question that can not, from its nature, be made the subject of rules, as can questions of nomenclature, there seems only the slow relief afforded by time and the concurrent judgment of the specialists of each field for the evils of too much subdivision.

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The Inheritance of Cancer

In a short note[1] I have recently commented on Dr. Maud Slye's work on the inheritance of cancer in mice. As to the credit due Dr. Slye for her careful and laborious experiments there can be no question. The importance of the subject, however, is such that it is essential to understand the exact distinction between the gathering of valuable data and the interpretation of such data when gathered.

The impression that Dr. Slye believed that cancer was inherited in a Mendelian fashion appears to have been more or less generally created by her paper already mentioned. Any one reading the editorial on her work in the *Journal of the American Medical Association* (Vol. 64, p. 1,326) can not fail to see that the "great laws" of heredity mentioned there are intended to be the Mendelian laws. The whole subject is treated from that standpoint and the optimism apparent must be considered to be chiefly due to the belief that Dr. Slye's work is an example of Mendelian inheritance.

So too, any one reading the review of recent work on cancer research by Dr. W. A. Dennis in the *St. Paul Medical Journal* (Vol. 17, pp. 494–500) can see that he believes that

> . . . the importance of her findings lies in the fact that hereditary transmission . . . is not fortuitous but that, given parents of pure breed the results of crossing may be confidently predicted.

After outlining correctly the basic principles of Mendelian inheritance, with the cross of albino and gray mice as an example, Dennis goes on to say:

> Maud Slye has taken advantage of this law [Mendel's] of heredity to study the transmissibility or inheritability of cancer in mice. . . . These studies [Slye's] have shown that the appearance and numerical value of the albino character can be predicted with certainty from the manner of mating the parents. The same is true of the whirling character of the Japanese waltzing mouse *and the same has been demonstrated to be true of cancer.*[2]

The fact that no correction of the impression so created was apparently forthcoming, and the fact that the diagrams in Slye's paper showing the inheritance of albinism represented a hitherto undescribed type of heredity led me to comment on her work.

Slye's recent denial of any desire or intention to apply a Mendelian interpretation to her experimental results is an extremely important postscript to her paper since it makes it virtually impossible to expect the exact numerical predictions in crosses which her reviewers have believed could be made.

Further than this, Slye's beliefs as to the inheritance of albinism are, as I have stated before, at sharp variance with the experimental results of Castle, Allen, Bateson, Durham, Cuénot, Plate, Davenport and others. The suggestion made by Slye[3] that the utilization of wild grays rather than "artificial laboratory" grays places her work in a position different from that of these other investigators is not significant, for I have repeatedly used wild grays in my crosses and have found that their hybrids obey Mendel's law in respect to the color characters which they inherit.

I have suggested that Dr. Slye's data show-

[8] *L. c.*, p. 187.

[1] Science, N. S., Vol. 42, pp. 218–219.

[2] *Italics mine.*

[3] Science, N. S., Vol. 42, pp. 246–248.

ing the non-Mendelian inheritance of albinism be published. To this she has replied that this data "in no way affects the transmission of cancer." I can only add that when one investigator suggests a revolutionary hypothesis which is contrary to the experimental results obtained by a large number of investigators in the same field, it is customary to present with the hypothesis the data on which it depends for its support.

Dr. Slye is right when she says in speaking of heredity,

> Exceptions to what was the canon have become so numerous as to be part of the rule.

One of the few points, however, on which all Mendelians, rabid or only semi-rabid, are agreed is that a homozygote forms one type of gamete in respect to the pair of factors for which it is homozygous. This is the principle which by diagrams and text Dr. Slye denies. Is it not fair to those who have not observed the type of inheritance mentioned by Slye to once more request the publication of the complete data on which this type of inheritance rests?

C. C. LITTLE

HARVARD MEDICAL SCHOOL,
September 7, 1915

THE HEREDITY OF STATURE

TO THE EDITOR OF SCIENCE: The undersigned is making a study of the heredity of the elements of stature and desires the cooperation of those who are in a position to give it.

The first requirement is a household with both parents and at least two children above the age of 16 years; the more children above this age the better. If one or more grandparents, uncles and aunts are available they should be included in the study. The second requirement is a tape, if possible, 6 feet long, but a yard tape will do.

The procedure is to rule columns on ordinary writing paper, one column each for father, mother, each child and also each grandparent or uncle or aunt who may be available. The first horizontal line will be for sex; the second for age and the following four for the four measures. Then measure and record for each person: 1, total stature (without shoes); 2, sitting height; 3, height of top of fibula above sole of foot and, 4, vertical distance from vertex of head to depression at upper end of sternum (between the collar bones). The only suggestions are: (1) The stature may be taken standing against a door frame; the subject looking straight forward, a book is placed, binding downward, against the top of the head and square with the wall; mark the level of the book on the door frame and measure down to the floor. (2) Place the chair by the door frame; place subject sitting upright in chair, his back against door frame; indicate level of vertex in same fashion as in standing height and measure from mark to the level of the seat of the chair. (3) The top of the fibula is easily felt on *outside* of knee as a bony prominence from which a tendon runs to the thigh. (4) The head-and-neck measurement is to be strictly vertical. Place the 0 end of tape in the book; close the book so that the 0 mark is flush with the binding. The subject standing by wall, place book square against wall; then measure down along side of the nose to the sternum. All measurements should be recorded in $\frac{1}{2}$ (or $\frac{1}{4}$) inches or in centimeters. Full names are desired for reference in case further correspondence is necessary but no names will be published.

It will be found interesting to preserve a copy of the record but please send one copy to me. If desired I will send ruled paper and a tape for the measurements.

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THE NATIONAL ACADEMY OF SCIENCES

IN SCIENCE of July 30, Professor Richards has made public a letter addressed by him to the secretary of the National Academy. In this letter he volunteers advice to that learned body. He appears to think that it should cease to exist, because it covers too wide a field. Astronomers, biologists, chemists, physicists, zoologists, etc., should not be provided with any opportunity to mix even if they desire to do so. A man who has been giving his entire attention to the abdominal parasites of the white ant, should present his results to a society covering that ground only.