

Comments and Communications

Resignation of Professor Muller From Academy of Sciences of the USSR

The following letter, dated September 24, 1948, was sent by H. J. Muller, of Indiana University, Nobel Prize winner and past president of the Genetics Society of America, to the President, the Secretary, and the Membership of the Academy of Sciences of the USSR:

"In February 1933 the Academy of Sciences of the USSR sent me a diploma, signed by its venerable President, Karpinsky, and its Secretary, Volgin, stating that I had been elected a 'Corresponding Member.' In accepting this election, I realized that it was a signal honor, inasmuch as your Academy had a long and most distinguished tradition of scientific achievement and integrity, and was still maintaining its high standards and, in fact, greatly expanding its valuable work. Although for nearly a decade I have not been sent your publications, I must presume that I am still on your rolls, since I have received no information to the contrary.

"The deep esteem in which I have held your organization in the past makes it the more painful to me to inform you that I now find it necessary to sever completely my connection with you. The occasion for my doing so is the recently reported series of actions of your Presidium in dropping, presumably for their adherence to genetics, such notable scientists as your most eminent physiologist, Orbeli, and your most eminent student of morphogenesis, Schmalhausen, in abolishing the Laboratory of Cytogenetics of your most eminent remaining geneticist, Dubinin, in announcing your support of the charlatan, Lysenko, whom some years ago you had stooped to take into your membership, and in repudiating, at his insistence, the principles of genetics. These disgraceful actions show clearly that the leaders of your Academy are no longer conducting themselves as scientists, but are misusing their positions to destroy science for narrow political purposes, even as did many of those who posed as scientists in Germany under the domination of the Nazis. In both cases the attempt was made to set up a politically directed 'science,' separated from that of the world in general, in contravention of the fact that true science can know no national boundaries but, as emphasized at the recent meeting of the American Association for the Advancement of Science, is built up by the combined efforts of conscientiously and objectively working investigators the world over.

"In Germany too it was the field of genetics, that of my own specialization, which was subjected to the greatest perversion, as I pointed out in publications and lectures gotten out both shortly before and during several years after the Nazi coup. And in the USSR the pre-scientific obscurantism of Lysenko, supported by the so-

called 'dialectical materialism' represented by Prezent, with their faith in the inheritance of acquired characters, must lead inevitably, and indeed by the admission of some of their adherents, to the same dangerous Fascistic conclusion as that of the Nazis: that the economically less advanced peoples and classes of the world have become actually inferior in their heredity. The Nazis would have the allegedly lower genetic status a cause, while the Lysenkoists would have it an effect, of the lower opportunity of the less fortunate groups for mental and physical development, but in either case a vicious circle is arrived at, which objective geneticists do not concede. Objective geneticists, on the contrary, having established the existence of a separate material of heredity, which is not influenced in any corresponding way by modifications of the phenotype, or bodily characteristics of organisms, recognize the fallacy of judging the hereditary endowments either of individuals or of whole groups simply by outward appearances. Especially is this the case when, as with human mental traits, there are very variable environmental influences, such as differences in tradition, education, nutrition, etc., which have pronounced and systematic effects upon the development of these characters.

"In truth, genetics is so fundamental and so central to all fields of biological science, and even of social science and philosophy, that the excision of its established principles from the body of science as a whole cannot but result in the eventual debilitation and falsification of our understanding of things in general. Even the physical sciences must in the end be adversely affected by the admission of the naive and archaic mysticism of Lysenko, Prezent, and their group into the vacuum left by the removal of genetics, for processes must then be invoked which are contradictory to the workings of matter.

"Under the circumstances above set forth, no self-respecting scientist, and more especially no geneticist, if he still retains his freedom of choice, can consent to have his name appear on your list. For this reason I hereby renounce my membership in your Academy. I do so, however, with the ardent hope that I may yet live to see the day when your Academy can begin to resume its place among truly scientific bodies.

"The importance of the matters here at issue—including that of the authoritarian control of science by politicians—is in my opinion so profound that I am making this letter public."

On "Animal Hypnosis"

In reference to W. T. Liberson's paper, "Prolonged Hypnotic States With 'Local Signs' Induced in Guinea Pigs" (*Science*, July 9, pp. 40-41) I would like to call attention to the following points:

The basis of the theory of animal hypnosis is the fact that many animals may be "hypnotized" by retaining them in uncomfortable positions. Granted that there are many phenomena that may be reproduced in the lower animals that closely resemble hypnosis, the fact remains that this theory is quite generally accepted as being erroneous. Both Verworn and Hull have *proved* quite