

PREAMBLE: Recent years have seen a revival of concern about the relative importance of genes and environment in determining differences in intelligence among individuals, social classes, and races. The controversy and the extreme views expressed are not new. The excesses of the early eugenics movement show the pitfalls of naive hereditarian assumptions. Equally unsupportable is the doctrinaire environmentalism that denies any significant role of heredity in important human behavior traits. Since even well-meant social policies may be harmful if based on error or inadequate knowledge, we believe that the views of many geneticists should be considered in trying to resolve the current controversy.

#### STATEMENT OF GSA MEMBERS ON HEREDITY, RACE, AND IQ

##### Measurement of intelligence:

Because of their reproducibility, widespread use, and correlation with scholastic achievement, IQ scores have been the basis for most analyses of genetic and environmental contributions to intelligence. Nevertheless, their limitations as measures of intelligence are widely recognized. Indeed, intelligence has never been defined to the satisfaction of all social scientists. The interpretation of IQ scores is especially troublesome when comparisons are made between different cultural groups. These limitations must be borne in mind in any genetic analysis.

##### Factors influencing IQ:

IQ scores are attempts to measure the quantitatively varying character, intelligence; such characters are usually influenced by both genetic and environmental factors whose effects and interactions are often difficult to separate unambiguously. Although there is substantial agreement that genetic factors are to some extent responsible for differences in IQ within populations, those who have carefully studied the question disagree on the relative magnitudes of genetic and environmental influences, and on how they interact. Moreover, in general, even if the variation in a character is largely genetic, this does not mean that the degree of expression of that character cannot be significantly altered by environmental manipulation. Nor does a large environmental component in variation necessarily imply that we can easily change it.

##### Racial and class differences in IQ:

It is particularly important to note that a genetic component for IQ score differences within a racial group does not neces-

sarily imply the existence of a significant genetic component in IQ differences between racial groups; an average difference can be generated solely by differences in environments. Similar although less severe complexities arise in consideration of differences in IQ between social classes. It is quite clear that the environments of the rich and the poor and of the whites and blacks in our society are considerably different even where socioeconomic status appears to be similar. Furthermore the distributions of IQ scores for populations of whites and blacks show a great deal of overlap between the races, even in those studies showing differences in average values. In our view, there is no convincing evidence as to whether there is or is not an appreciable genetic difference in intelligence between races.

#### IMPLICATIONS FOR SOCIETY

All human populations have a vast store of genes in common; yet within populations, individuals differ in genes affecting many characters. Each population contains individuals with abilities far above and below the average of the group. Social policies, including those affecting educational practice, should recognize human diversity by providing the maximum opportunity for all persons to realize their potential, not as members of races or classes but as individuals. We deplore racism and discrimination, not because of any special expertise but because they are contrary to our respect for each human individual. Whether or not there are significant genetic differences among individuals in no way alters our ideal of political equality, nor justifies racism or discrimination in any form.

#### THE ROLE OF GENETICISTS

It is our obligation as geneticists to draw attention to the imperfect state of current knowledge on genetics, race and intelligence. The application of the techniques of quantitative genetics to the analysis of human behavior is fraught with complications and potential biases, but well-designed research on the genetic and environmental components of human psychological traits may yield valid and socially useful results, and should not be discouraged. We feel that geneticists can and must also speak out against the misuse of genetics for political purposes, and the drawing of social conclusions from inadequate data.