THE BIOLOGICAL BASIS OF INDIVIDUALITY

By Dr. LEO LOEB

DEPARTMENT OF PATHOLOGY, WASHINGTON UNIVERSITY SCHOOL OF MEDICINE, ST. LOUIS

We apply the term "individual" to a living organism to emphasize the distinctive, unique features which such an organism possesses. In individual human beings we note their appearance, motor reactions and psychical expressions and certain inherited or acquired structural or functional peculiarities, such as nevi, allergies. There are in addition two very fine modes of distinguishing one human individual from every other one. These are the individual scents attaching to different areas of the body, representing in their totality a characteristic by means of which a dog can distinguish one individual from every other one; and there are the patterns of the skin ridges in the palms of the hands and in the fingers, which are now so commonly used for identification. Recently it has been stated that also the changes in electrical potential in certain areas of the brain are characteristic of an individual and are relatively constant in him (Hallowell Davis).

All these individual characteristics which we have mentioned so far are localized in certain areas of the organism, in special organs or tissues; they are either structural or functional peculiarities of these tissues and organs. If we consider the individual as a mosaic of many tissues and organs, each one functioning and metabolizing in its own peculiar way, we may consider this mosaic of separate parts as the biological basis of