

The Genetics of African Populations in Health and Disease

The birthplace of modern humans, Africa has the highest genetic diversity in the world, yet it remains vastly understudied. With biomedical research increasingly focused on human variation, studying the large population size and number of mutations in African genomes could unravel the complexity of phenotypic traits underlying the biology of our species and hold huge potential for scientific and medical advances. An initial chapter “conceptualizes Africa,” providing relevant terminology. The first part of the book covers genetic history and population structure. The next part looks at the genetic basis of common infectious diseases, such as leishmaniasis, malaria, and tuberculosis, with a final part considering common non-communicable diseases, such as diabetes, hypertension, obesity, heart disease, and cancer. Gene–environment interaction under globalization and the burden of diseases of lifestyle are included. This book is suitable for researchers and graduate students in biological anthropology, genetic anthropology, human and population genetics, and public health.

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