

Preface

Gene–environment ($G \times E$) interactions contribute to the development of complex diseases and phenotypic variation. They are a hot topic in human genetics, and analyses of $G \times E$ interactions are expected to have many potential applications. Despite the importance of $G \times E$ interactions in the etiology of complex diseases and phenotypic variation, insufficient attention has been paid to developing models for detecting these interactions. This textbook introduces different models of $G \times E$ interactions for use in the determination of human disease and phenotypic variation. Applying models of the complex interactions between genes and environment will lead to novel methods of disease detection and prevention, as well as new interventions in various fields.

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