

# Neurobehavioral Genetics

A complete background to concepts and principles of behavioral genetics, *Neurobehavioral Genetics: Methods and Applications, Second Edition* features a broad spectrum of the most current techniques in neurobehavioral genetics in a single source.

International researchers incorporate several new developments in the field, including:

- Developmental neurobehavioral genetics
- Gene-gene interaction
- New approaches in bioinformatics
- Gene expression
- Single gene techniques

Based on various studies of living organisms ranging from primates to rodents to invertebrates, this edition offers a contemporary approach to examining the relationship between the genetic mechanisms in the brain and behavior. The authors examine how past and recent advances in methods and knowledge come together in the comparative genetics of behavior. They introduce the reader to experimental approaches available for the genetic study of emotionality, the focus being on the use of animal models.

This edition explores studies in neurogenetic disorders, including schizophrenia and bipolar disorders, examines genetic traits in personality, such as altruism, and evaluates aggression in mice and humans. It also discusses the applications of quantitative methods and molecular genetics in basic and clinical research.

## Features

- Introduces genetic correlation analysis and complex traits analysis
- Provides current animal models including nematodes, fruit flies, and rodents
- Covers the concepts and statistical techniques used in neurobehavioral genetic research
- Discusses quantitative and molecular genetic approaches
- Explores personality genetics in humans and chimpanzees

The front cover image is a schematic representation of *Drosophila* olfactory system from Comas et al., Chapter 23.



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