Cognitive genetics and imaging genetics are emerging fields that seek to combine and integrate advances in capturing the implications of the sequence of the human genome with advances in understanding the neural underpinnings of cognitive architecture, personality dimensions, and affective regulation. This edited, multichaptered volume is designed to give the reader a working understanding of the influence of specific genetic variants on cognition, affective regulation, personality, and CNS disorders. The book can be read as a primer with sections on molecular genetics, statistical approaches, and heritability of cognitive and personality traits, with up-to-the-minute reviews of promising candidate genes for cognition and affective regulation, neurologic and psychiatric disorders, and pharmacogenetic response. We view the book as a how-to manual that should provide a set of principles or “tools” for critically evaluating recent studies and as a compendium of “what’s out there” for thinking about and planning one’s own studies.