**Part** 

4

## **Endophenotypes**

Endophenotypes serve as intermediary measures that have the potential to provide an indirect link between genes, smoking behaviors, and nicotine dependence. Endophenotypes may help serve as a basis for future studies to identify genetic liability markers for nicotine dependence. Research to establish the validity, heritability, and reliability of such measures is a promising area for further study.

The first chapter of this part examines the evidence base for several candidate endophenotypes for nicotine dependence risk at or before initial nicotine exposure, including approach, avoidance, and control-related variables, as well as measures of initial response to nicotine exposure. A subsequent chapter explores endophenotypes for nicotine dependence in chronic smokers; aspects include motivational, sensory, and cognitive measures as well as craving and impulse control.