## **Acronyms and Abbreviations**

5CSRTT five-choice serial reaction time task

5-HT2A serotonin 2A (receptor) 6-OHDA 6-hydroxydopamine

A2A adenosine 2A

Abeta 25-35 amyloid beta-peptide 25-35

AD Alzheimer's disease

ADA Americans with Disabilities Act ADHD attention deficit hyperactivity disorder

AIC Akaike Information Criterion

ANOVA analysis of variance

ATBC Alpha-Tocopherol, Beta-Carotene (Cancer Prevention Study)

ATR Australian Twin Registry
AUD alcohol-use disorder

BDNF brain-derived neurotrophic factor
BIC Bayesian Information Criterion

CB1 cannabinoid

CHRNA7  $\alpha$ 7 nicotinic receptor

CIDI Composite International Diagnostic Interview

cM centimorgan

CNS central nervous system CO carbon monoxide

COGA Collaborative Studies on Genetics of Alcoholism

*COMT* catechol-*O*-methyl-transferase (gene)

COT children of twins

CPD cigarettes per day/cigarettes smoked per day

CPP conditioned place preference
CPS Current Population Survey
CPT continuous performance task

CPT-IP continuous performance task identical pair

CS conditioned stimulus CYP cytochrome P-450

*CYP2A6* cytochrome P-450 2A6 (gene)

CREB cyclic AMP-response element binding

dB decibel

DHβE dihydro-beta-erythroidine DHEA dehydroepiandrosterone

DIS Diagnostic Interview Schedule (NIMH)

DRD2 dopamine receptor D2 (gene)

DSM Diagnostic and Statistical Manual of Mental Disorders

DSM-III-R DSM (third edition, revised)
DSM-IV DSM (fourth edition)

EEA equal environments assumption

EEG electroencephalogram

EM Expectation maximization

EMA ecological momentary assessment

ERP event-related potential
FF female-female twin pairs
FHS Framingham Heart Study

fMRI functional magnetic resonance imaging

FMM factor fixture model

FTND Fagerström Test for Nicotine Dependence FTQ Fagerström Tolerance Questionnaire

GABA γ-aminobutyric acid

GAW Genetic Analysis Workshops
GIS geographic information system

GGMM general growth mixture modeling/models

GMM growth mixture modeling/models HSI Heaviness of Smoking Index

HPA hypothalamic-pituitary-adrenocortical

Hz hertz

IBD identical by descent ICC item characteristic curve

ICD International Statistical Classification of Diseases and Related

Health Problems

ICD-10 ICD, tenth revision

ICR mice (some kind of outbred mice)
ICSS intracranial self-stimulation

IP intraperitoneal

IRT item response theory

IV intravenous kg kilogram L liter

LCGA latent class growth analysis

LGC latent growth curve
LOD log (or logarithm) of odds
LRT likelihood ratio test
MAO monoamine oxidase
MAOA monoamine oxidase A

mg milligram mL milliliter

MLA methyllycaconitine citrate

MMMF male-male and male-female twin pairs

MSTF Mid-South Tobacco Family MTFS Minnesota Twin Family Study

μg microgram

nAChR nicotinic acetycholine receptor

NETSAD Netherlands Twin Study of Anxious Depression

NDSS Nicotine Dependence Syndrome Scale

NEAD Nonshared Environment in Adolescent Development (Project)

ng nanogram

NHANES-III Third National Health and Nutrition Examination Survey

NMDA N-methyl-D-aspartic acid
NRT nicotine replacement therapy
PDA personal digital assistant
PET positron emission tomography
PNS peripheral nervous system
PPI prepulse inhibition
PR progressive ratio

QSU Questionnaire on Smoking Urges

phenylthiocarbamide

RNA ribonucleic acid

RSA respiratory sinus arrhythmia

RTU regular tobacco use

RVIP Rapid Visual Information Processing

S allele short allele

PTC

SAS Statistical Analysis Software

SC subcutaneous

SEM structural equation model SES socioeconomic status

SNP single nucleotide polymorphism *TH* tyrosine hydroxylase (gene)

TI tobacco initiation
TTFC time to fi rst cigarette

TTURC Transdisciplinary Tobacco Use Research Center

TUS-CPS Tobacco Use Special Cessation Supplement to the Current

Population Survey (U.S. Census Bureau)

VLMR Vuong-Lo-Mendell-Rubin (test) VNTR variable number tandem repeat

VTA ventral tegmental area
WCST Wisconsin Card Sorting Test

WISDM Wisconsin Inventory of Smoking Dependence Motives