

Contents

Preface	ix
About the Editors	xi
Contributors	xiii
Chapter 1: Metabolomics in a Nutshell.....	1
Sastia Prama Putri and Eiichiro Fukusaki	
Chapter 2: Design of Metabolomics Experiment.....	9
Sastia Prama Putri, Fumio Matsuda, and Takeshi Bamba	
Chapter 3: Sample Preparation.....	37
Yoshihiro Izumi, Walter A. Laviña, and Sastia Prama Putri	
Chapter 4: Gas Chromatography/Mass Spectrometry Analysis: Nontargeted Metabolomics Based on Scan Mode Analysis.....	103
Hiroshi Tsugawa and Arjen Lommen	
Chapter 5: LC/QqQ/MS Analysis: Widely Targeted Metabolomics on the Basis of Multiple Reaction Monitoring	137
Fumio Matsuda and Hiroshi Tsugawa	
Chapter 6: Statistical Analysis	171
Hiroshi Tsugawa and Takeshi Bamba	
Chapter 7: Case Studies	217
Walter A. Laviña, Yusuke Fujieda, Udi Jumhawan, Sastia Prama Putri, and Eiichiro Fukusaki	
Index	269