Contents

	facentributors	v ix
1	Detecting Protein–Protein Interactions/Complex Components Using Mass Spectrometry Coupled Techniques Zhibin Ning, Brett Hawley, Cheng-Kang Chiang, Deeptee Seebun, and Daniel Figeys	1
2	Analysis of Transcription Factor Networks Using IVV Method Hiroyuki Ohashi, Shigeo Fujimori, Naoya Hirai, Hiroshi Yanagawa, and Etsuko Miyamoto-Sato	15
3	Next-Generation Sequencing Coupled with a Cell-Free Display Technology for Reliable Interactome of Translational Factors <i>Etsuko Miyamoto-Sato</i>	23
4	Chromatin Immunoprecipitation Protocol for Mammalian Cells Makiko Komata, Yuki Katou, Hiroshi Tanaka, Ryuichiro Nakato, Katsuhiko Shirahige, and Masashige Bando	33
5	Detecting Protein–DNA Interactions Using a Modified Yeast One-Hybrid System	39
6	RNA Sequencing: From Sample Preparation to Analysis Sho Maekawa, Ayako Suzuki, Sumio Sugano, and Yutaka Suzuki	51
7	Detecting Expressed Genes Using CAGE Mitsuyoshi Murata, Hiromi Nishiyori-Sueki, Miki Kojima-Ishiyama, Piero Carninci, Yoshihide Hayashizaki, and Masayoshi Itoh	67
8	A Tutorial to Identify Nonlinear Associations in Gene Expression Time Series Data André Fujita and Satoru Miyano	87
9	Inference of TFRNs (2) Hideo Matsuda	97
10	Identification of the Minimal Connected Network of Transcription Factors by Transcriptomic and Genomic Data Integration	109
11	Modeling and Simulation Using CellDesigner Yukiko Matsuoka, Akira Funahashi, Samik Ghosh, and Hiroaki Kitano	121
12	Human Genome Network Platform: A Resource for TFRN Analysis Norikazu Monma, Takashi Gojobori, and Kazuho Ikeo	147

viii	Contents
VIII	Contents

13	Identification of Transcription Factors Activated in Thymic Epithelial Cells During Embryonic Thymus Development	163
14	Analysis of NFATc1-Centered Transcription Factor Regulatory Networks in Osteoclast Formation	171
15	Transcriptional Regulation in Adipogenesis Through PPARγ-Dependent and -Independent Mechanisms by Prostaglandins	177
16	Analysis of TFRNs Associated with Steroid Hormone-Related Cancers Kazuhiro Ikeda, Kuniko Horie-Inoue, and Satoshi Inoue	197
17	Repositioning Monocyte TFRN into Fibroblasts	211
Ind	lex	219