
Contents

<i>Preface</i>	<i>v</i>
<i>Contributors</i>	<i>ix</i>
1. Introduction: Cell-Based Assays for High-Throughput Screening <i>W. Frank An and Nicola J. Tolliday</i>	1
2. High-Throughput Screening of Model Bacteria <i>Soumaya Zlitni, Jan E. Blanchard, and Eric D. Brown</i>	13
3. Cell-Based Assays to Probe the ERK MAP Kinase Pathway in Endothelial Cells <i>Michael R. Wyler, Deborah H. Smith, Eftibia Cayanis, Udo Toeppen, Nathalie Aulner, and Thomas Mayer</i>	29
4. Large-Scale Small-Molecule Screen Using Zebrafish Embryos <i>Charles C. Hong</i>	43
5. Whole-Animal High-Throughput Screens: The <i>C. elegans</i> Model. <i>Eyleen J. O'Rourke, Annie L. Conery, and Terence I. Moy</i>	57
6. Whole-Organism Screening: Plants <i>April Agee and David Carter</i>	77
7. Fluorescence-Based Assays <i>W. Frank An</i>	97
8. Reporter Gene Assays <i>Andy M.F. Liu, David C. New, Rico K.H. Lo, and Yung H. Wong</i>	109
9. Screening for Chemical Inhibitors of Heterologous Proteins Expressed in Yeast Using a Simple Growth-Restoration Assay <i>Aruna D. Balgi and Michel Roberge</i>	125
10. Assay for Isolation of Inhibitors of Her2-Kinase Expression <i>Gabriela Chiosis and Adam B. Keeton</i>	139
11. High-Content Screening: Flow Cytometry Analysis <i>Bruce S. Edwards, Susan M. Young, Irena Ivnitky-Steele, Richard D. Ye, Eric R. Prossnitz, and Larry A. Sklar</i>	151
12. High-Throughput Real-Time PCR for Detection of Gene-Expression Levels <i>Bridget K. Wagner and Zoltan Arany</i>	167
13. Interpretation of Uniform-Well Readouts <i>Serene Josiah</i>	177
14. Extracting Rich Information from Images <i>Anne E. Carpenter</i>	193
<i>Index</i>	<i>213</i>