

CONTENTS

Contributors	vii
1 Embryonic Stem Cells	1
<i>Crystal L. Sengstaken, Eric N. Schulze, and Qi-Long Ying</i>	
2 Adult Stem Cells	27
<i>Lief Fenno and Chad A. Cowan</i>	
3 Genomewide Expression Analysis Technologies	59
<i>John R. Walker</i>	
4 Genomic cDNA and RNAi Functional Profiling and Its Potential Application to the Study of Mammalian Stem Cells	83
<i>Jia Zhang, Myleen Medina, Genevieve Welch, Deanna Shumate, Anthony Marelli, and Anthony P. Orth</i>	
5 Chemical Technologies: Probing Biology with Small Molecules	109
<i>Nicolas Winssinger, Zbigniew Pianowski, and Sofia Barluenga</i>	
6 Protein Characterization by Biological Mass Spectrometry	145
<i>Venkateshwar A. Reddy and Eric C. Peters</i>	
7 Large-Scale Genomic Analysis of Stem Cell Populations	169
<i>Jonathan D. Chesnut and Mahendra S. Rao</i>	

8 Exploring Stem Cell Biology with Small Molecules and Functional Genomics	187
<i>Julie Clark, Yue Xu, Simon Hilcove, and Sheng Ding</i>	
9 Regeneration Screens in Model Organisms	207
<i>Chetana Sachidanandan and Randall T. Peterson</i>	
10 Proteomics in Stem Cells	223
<i>Qiang Tian and W. Andy Tao</i>	
Index	243