

Chapter 1.	Approaches to Novel Research.....	1
Chapter 2.	Rapid Isolation of Specific cDNAs or Genes by PCR	15
Chapter 3.	Construction and Screening of Subtracted and Complete Expression cDNA Libraries	29
Chapter 4.	Subcloning of Genes or DNA Fragments	67
Chapter 5.	Nonisotopic and Isotopic DNA or RNA Sequencing.....	89
Chapter 6.	Information Superhighway and Computer Databases of Nucleic Acids and Proteins	123
Chapter 7.	Characterization of DNA or Genes by Southern Blot Hybridization.....	153
Chapter 8.	Gene Overexpression by Sense RNA in Mammalian Systems	179
Chapter 9.	Gene Underexpression in Cultured Cells and Animals by Antisense DNA and RNA Strategies.....	205
Chapter 10.	Analysis of Gene Expression at the RNA Level	225
Chapter 11.	Analysis of Gene Expression at the Protein Level.....	241
Chapter 12.	Analysis of Cellular DNA or Abundance mRNA by Radioactive <i>In Situ</i> Hybridization (RISH)	259
Chapter 13.	Localization of DNA or Abundance of mRNA by Fluorescence <i>In Situ</i> Hybridization (FISH)	279
Chapter 14.	<i>In Situ</i> PCR Hybridization of Low Copy Genes and <i>In Situ</i> RT-PCR Detection of Low Abundance mRNAs.....	291
Chapter 15.	Isolation and Characterization of Genes from Genomic DNA Libraries	307
Chapter 16.	Culture of Mouse Embryonic Stem Cells as a Model Mammalian Cell Line for Gene Expression	329
Chapter 17.	New Strategies for Gene Knockout	339
Chapter 18.	Large-Scale Expression and Purification of Recombinant Proteins in Cultured Cells.....	367
Index		399