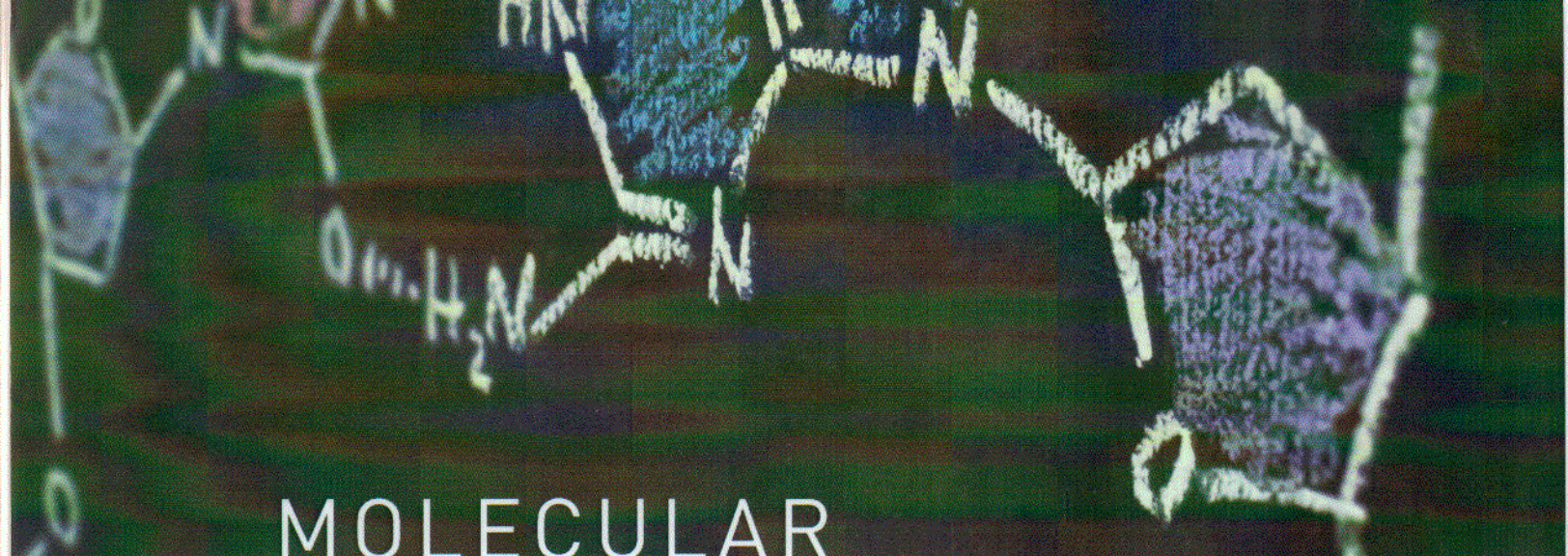




MOLECULAR BIOLOGY TECHNIQUES

A CLASSROOM LABORATORY MANUAL

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- Includes critical, up-to-date molecular biology laboratory skills to prepare students for independent research projects and/or employment
- **Student friendly:** provides introductory material for each lab session with explanations, and color figures to ensure that students understand the concepts behind the techniques so they can transfer the ideas to their own research
- **Instructor friendly:** includes pre-lab questions, open-ended discussion questions, and a prep-list appendix to support course development and learning

This new classroom laboratory manual uses the semester-long project concept introduced in *Manipulation and Expression of Recombinant DNA: A Laboratory Manual*, with laboratory sessions updated to reflect current cloning techniques. Students are walked through the process of cloning a gene by PCR, screening for positive clones, and expressing and purifying recombinant protein. The book also includes new sections on measuring mRNA levels to underscore the conviction that today's molecular biology students need to be confident working with RNA. The laboratory sessions in this book reflect the nature of modern science wherein scientists need the experience to work with macromolecules at each level of gene expression: DNA, RNA and protein.

Related Titles:

Farrell/ *RNA Methodologies*: 9780123747273; 744 pgs.; 2010

Clark/ *Molecular Biology – Academic Cell Update Edition*: 9780123785893; 784 pgs.; 2010

Stephenson/ *Calculations for Molecular Biology and Biotechnology*:

A Guide to Mathematics in the Laboratory, 2e: 9780123756909; 446 pgs.; 2010



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