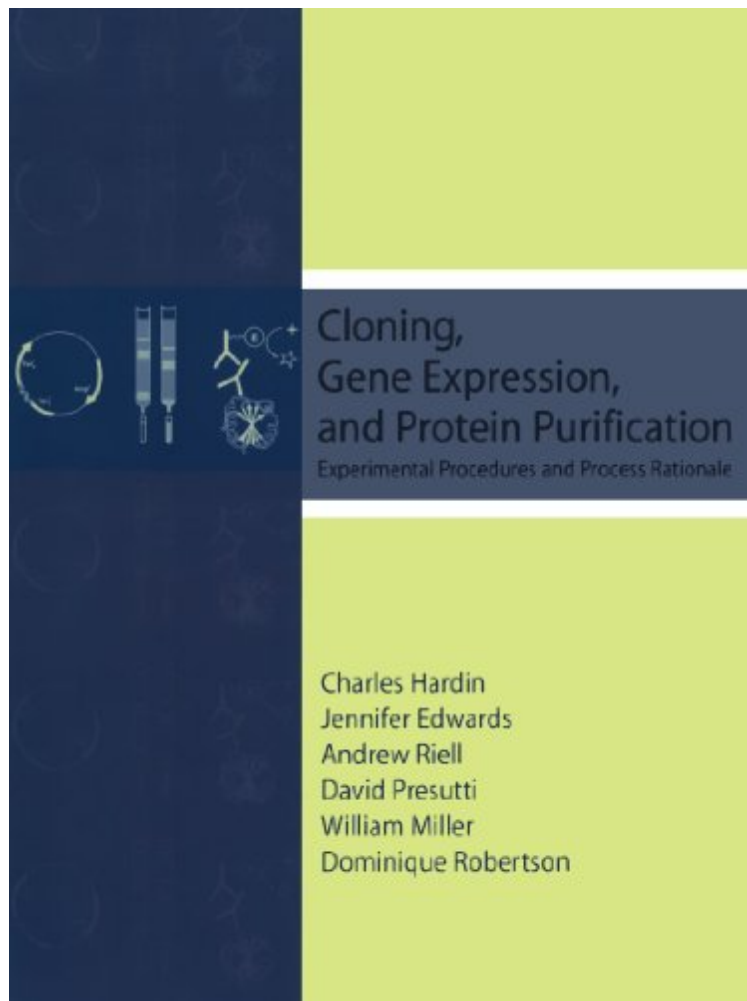


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# Cloning, Gene Expression, and Protein Purification: Experimental Procedures and Process Rationale

*Charles Hardin, Jennifer Edwards, Andrew Riell, David Presutti, William Miller, Dominique Robertson*  
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**Charles Hardin, Jennifer Edwards, Andrew Riell, David Presutti, William Miller, Dominique Robertson :** **Cloning, Gene Expression, and Protein Purification: Experimental Procedures and Process Rationale** before purchasing it in order to gage whether or not it would be worth my time, and all praised Cloning, Gene Expression, and Protein Purification: Experimental Procedures and Process Rationale:

2 of 2 people found the following review helpful. Experimentally UnsuccessfulBy NoodlepooperI actually have Presutti as my instructor for this course and man I'll tell you, he's quite the character. Dave tends to skip some parts of the procedures and has his own organization of how he wants us to go through it. Sometimes he'll even create side

procedures to "update" parts of the original manual's procedures since he's using a newer or cheaper chemical or material for that part. When looking through it this manual is in serious need of an update when compared to other lab manuals but overall it's still an impressive procedural manual. It provides very straight forward lab procedures that along with instructor background information and some individual external learning, should educate any opportunistic students dreaming of becoming an awesome future researcher, such as Dave. Personally going through many of these experiments it's obvious that results won't be as expected but as Dave always reminds us, you wouldn't learn anything if it was perfect. So gear up with this awesome lab manual and tackle that lab class down for an A.0 of 0 people found the following review helpful. Five Stars By N M Great

On the forefront of modern scientific innovation, *Cloning, Gene Expression and Protein Purification: Experimental Procedures and Process Rationale* effectively doubles as a laboratory manual for students and a reference book for professional researchers. Designed for advanced undergraduate and beginning graduate students in molecular biology, this unique combination lecture/laboratory resource presents detailed protocols for the multi-step process involved in isolating a gene, cloning and characterizing it, expressing its encoded protein, and purifying and characterizing the protein's basic physical properties. This manageable volume includes both theoretical background and practical procedures and is structured around twenty experiments that demonstrate how to prepare, manipulate, and analyze plasmids, produce fusion proteins in bacteria, and purify these proteins based on unique chemical properties or substrate affinities. The book describes advanced topics such as the use of antibodies and the techniques developed to transform their structures, as well as combinatorial approaches designed to manipulate the structure and functions of proteins and nucleic acids. Supplemental literature provides a variety of theoretical explanations encouraging a more intuitive understanding of the experimental mechanisms and behaviors of the chemical participants, while also giving students the tools needed to become "capable proactive researchers." Features: Emphasizes electrophoresis, Southern and Western blotting, and combinatorial techniques Defines clear reaction mechanisms; stipulates the functions of reagents; and helps students think about the precise consequences of solution and procedural manipulations Discusses fluorophores, and solvent effects on protein structure Characterizes plasmids, cDNAs, and antibody probes (available from ATCC) in research literature Includes carefully selected primary source research literature and articles from current vendor literature Contains a glossary of unfamiliar phrases and jargon; important summary statements and conclusions are italicized Provides an alphabetized list of common reagents for rapid reference Offers an extensive index of concepts and terms Categorizes helpful and distinctive information into five types of supplemental literature: Innovation/ Insight, Theory/Principle, Process Rationale, Vendor Literature, and Alternative Approaches

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