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Experiments in Cell and Molecular Biology

A Laboratory Manual for Undergraduate Instruction or Concepts and Techniques for the Undergraduate Laboratory

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Experiments in Cell and Molecular Biology invites students beyond observation and into discovery. Designed for advanced-freshman/sophomore-level and above, this laboratory manual offers ten carefully scaffolded experiments that build from foundational concepts to more advanced investigative techniques in modern cell and molecular biology.

Through hands-on experimentation and guided experimental design, students explore the chemical components of the cell, subcellular structure, metabolism, membrane biology, signal transduction, and the molecular basis of gene expression and regulation using eukaryotic model systems. Suitable as a companion to a lecture course or as a stand-alone laboratory experience, this manual emphasizes critical thinking, data interpretation, and hypothesis-driven science.

Ideal for students preparing for advanced coursework and careers in the life sciences, *Experiments in Cell and Molecular Biology* endows learners with the conceptual understanding and practical skills essential for studying the cell from a molecular perspective.

TABLE OF CONTENTS

Description, Prerequisites, Mission Statement

Learning Goals

Learning Objectives

General Laboratory Instructions

- Laboratory Safety Rules
- Procedures for Emergency Medical Care
- Guidelines for Keeping Laboratory Notebooks
- Guidelines for the Preparation of Laboratory Reports
- Citation Style Guide
- Pipetting

Laboratory No. 1: Bioinformatics: Self-guided Internet-based Exercise on Databases for

the Storage and Data Mining

Laboratory No. 2: Biological Buffers I. Titration of the Amino Acid Glycine

Laboratory No. 3: Biological Buffers II. Preparation of a Phosphate Buffer

Laboratory No. 4: Determination of Protein Concentration using the Bradford Method

Laboratory No. 5: Enzyme Kinetics

Laboratory No. 6: Assay of Cytochrome *c* Oxidase in Potato Tuber Mitochondria

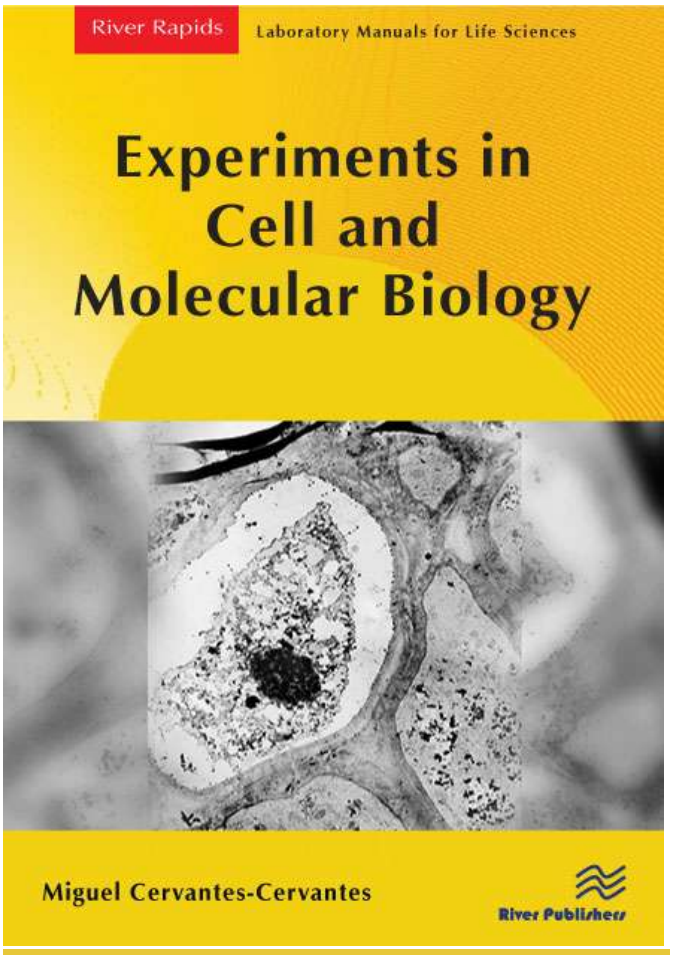
Laboratory No. 7: Molecular Evolution: Separation of Fish Proteins Using Polyacrylamide Gel Electrophoresis

Laboratory No. 8: Genetic Fingerprinting

Laboratory No. 9: Molecular Biology of Sickle-cell Anemia

Laboratory No. 10: Signal Transduction: Antagonistic effects of Gibberellin

and Abscisic Acid on the Production of a-Amylase in Barley Seeds



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