

Required and Suggested Readings

General Required Readings for All New Lab Members:

Lab Manual and attachments (available on the Internal Lab page)

At the Bench: A Laboratory Navigator, by Kathy Barker

Chapter 1: General Lab Organization and Procedures

Chapter 5: Lab Notebooks

Chapter 8: Storage and Disposal

Chapter 9: Working without Contamination

Chapter 11: Bacteria

Calculating What You Need p.136-141 (**make a copy for your use**)

Required Readings for Specific Situations:

Before working with *Listeria*, you must read:

Biological Agent Reference Sheet (BARS) for *Listeria monocytogenes* from EH&S (included with orientation materials)

https://sp.ehs.cornell.edu/lab-research-safety/bios/bars/Documents/BIO_BARS_Listeria_monocytogenes.pdf

Listeria Pathogenesis and Molecular Virulence Determinants

Vazquez-Boland et al., Clinical Microbiology Review, July 2001

p. 584-640. (Make a copy for your use.)

Before working with *Salmonella*, you must read:

Biological Agent Reference Sheet (BARS) for *Salmonella enterica spp.* from EH&S (included with orientation materials)

https://sp.ehs.cornell.edu/lab-research-safety/bios/bars/Documents/BIO_BARS_Salmonella_enterica_spp.pdf

Before doing Tissue Culture, you must read:

Tissue Culture Techniques, by Bernice M. Martin (available in our lab library)

Introduction

Chapter 2: Sterility
Chapter 3: Routine Cell Culture
Appendices A: The Cell Cycle and B: Media and Salt Solutions

Before doing Restriction Digests, you must read:

New England Biolabs catalog: “Endonucleases: An Overview” in the appendix of the catalog.

Before running Agarose Gels, you must read:

Molecular Cloning: A Laboratory Manual, by Sambrook, Fritsch & Maniatis (Familiarly known as “Maniatis”)

“Agarose Gel Electrophoresis” 6.3-6.15

OR:

Current Protocols “Agarose Gel Electrophoresis” 2.5A.1-2.5A.8

Before PCR, you must read:

Current Protocols: Polymerase Chain Reaction 15.0.1-15.1.13

Milk Quality Improvement Program Required Reading:

Standard Methods for the Examination of Dairy Products (17th edition)

Chapter 3: Sampling Dairy and Related Products

Chapter 6: Microbiological Count Methods

Chapter 8: Tests for Groups of Microorganisms

Chapter 9: Microbiological Methods for Dairy Products

Suggested Readings:

At the Bench:

“How to Spin” - a good introduction to centrifuges p. 355

“Sterile Technique” p. 187

“Presenting yourself and your Data” p. 101

“For nonnative English speakers” p. 104

“Journal Clubs” p. 116-118

Current Protocols:

“Digestion of DNA with Restriction Endonucleases” 3.1.1-3.1.2
“DNA ligases” (for T4 DNA ligase) 3.14
“Phosphatases & Kinases” (for CIP) 3.10
“Constructing Recombinant DNA Molecules by the Polymerase Chain Reaction” 3.17.1