

book spotlights

A-Z of Quantitative PCR

S. Bustin, 2004, Hard Cover, 830 pages

This is not just a cookbook for real-time quantitative PCR (qPCR). However, this book also sets out to explain as many features of qPCR as possible, provide alternative viewpoints and methods, and aims to stimulate the researcher into generating, interpreting and publishing data that are reproducible, reliable, and biologically meaningful.

Table of Contents (Partial):

PART I: REVIEWS

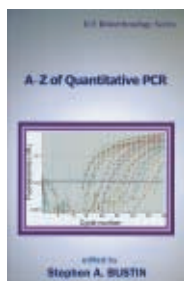
1. Quantification of nucleic acids by PCR
2. Real-time RT-PCR: what lies beneath the surface?
3. Quantification strategies in real-time PCR

PART II: REAL-TIME PCR – THE BASICS

1. Good laboratory practice
2. Sample acquisition, template preparation, quantification and quality assessment
3. Principles of fluorescence and real-time chemistries
4. Probes and primers
5. Principles of real-time detection and instrumentation
6. Basic RT-PCR considerations
7. The PCR step
8. Data Analysis and interpretation
9. Troubleshooting

PART III: PROTOCOLS

PART IV: APPENDIX



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Z70,243-9	A-Z of Quantitative PCR	1 ea

Lateral DNA Transfer: Mechanisms and Consequences

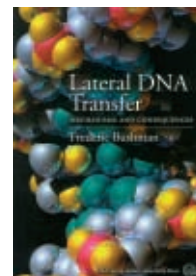
F. Bushman, 2002, Soft Cover, 288 pages

This book is about mobile genes – the transfer of DNA between unrelated cells. It discusses the machinery of gene transfer and its wide-ranging biological and health consequences. Mobile DNA makes possible the development of antibiotic resistance in microbes, the conversion of harmless to pathogenic bacteria, and the triggering of cancerous growth in cells. It also contributes to human evolution.

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- Chapter 1: Introduction
- Chapter 2: DNA and Lateral Transfer
- Chapter 3: Conjugation, Transposition, and Antibiotic Resistance
- Chapter 4: Phage Transduction and Bacterial Pathogenesis
- Chapter 5: Microbial Genomes and DNA Exchange
- Chapter 6: Gene Transfer by Retroviruses
- Chapter 7: Lateral DNA Transfer and the AIDS Epidemic
- Chapter 8: Genes Floating on a Sea of Retrotransposons
- Chapter 9: The DNA Transposons of Eukaryotes: Mariners Sailing to Survive?
- Chapter 10: Lateral Transfer in Eukaryotic Genomes: Fluidity in the Human Blueprint
- Chapter 11: A Transposon Progenitor of the Vertebrate Immune System
- Chapter 12: DNA Transfer Among the Domains of Life
- Chapter 13: Controlling Mobile Element Activity
- Chapter 14: Lateral DNA Transfer: Themes and Evolutionary Implications

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