Molecular Methods for Microbial Identification and Typing

K. J. Towner and A. Cockayne

Department of Microbiology and PHLS Laboratory, University Hospital,
Queen's Medical Centre, Nottingham, UK

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Contents

Preface	v
1 An introduction to microbial identification and typing methods	1
1.1 A brief overview of microbial identification	1
1.2 Conventional biological methods for microbial typing	3
1.3 Molecular approaches to microbial identification and typing	10
References	18
2 Analysis of nucleic acid profiles	28
2.1 Introduction	28
2.2 Plasmid analysis	29
2.3 Analysis of chromosomal DNA	42
2.4 Summary	52
References	53
3 Identification and typing by nucleic acid hybridization techniques	64
3.1 Introduction	64
3.2 Basic principles of nucleic acid hybridization	65
3.3 Analysis of RFLPs by hybridization techniques	76
3.4 Summary	82
References	85
4 Nucleic acid amplification and sequencing techniques	93
4.1 Introduction	93
4.2 The polymerase chain reaction (PCR)	94
4.3 Other amplification methods	105
4.4 Nucleic acid sequencing techniques	108
4.5 Summary	111
References	112

5 Analysis of protein and lipopolysaccharide profiles	123
5.1 Introduction to protein fingerprinting	123
5.2 Protein analysis	124
5.3 Lipopolysaccharide typing schemes	145
5.4 Summary	149
References	150
6 Typing and identification of microorganisms with antibodies	159
6.1 Introduction	159
6.2 Production of antibodies for serotyping and identification	160
6.3 Techniques used in serotyping	165
6.4 Summary	179
References	180
7 Final summary and future prospects	187
Index	194

Preface

This book is intended as a source book for postgraduate students, research workers and diagnostic microbiologists in all fields of microbiology, but particularly those active in medical microbiology, who wish to explore the possibilities of modern molecular methods for microbial identification and typing.

Many examples of such applications are concealed in the scientific literature, but rather than dwell in depth on specific organisms or epidemiological situations, we have tried to introduce the principles of each individual method and give an overview of the methodology, advantages and disadvantages implicit in each technique. Thus it is not a 'recipe' book, but is intended as a first point of reference for microbiologists seeking an introduction to these techniques.

The development of these methods has resulted in an exciting period for microbial identification and typing. While many of the methods have been developed with bacteria in mind, we hope that the lists of organisms and extensive references to detailed methodology will enable the interested reader to find an advanced molecular technique that can be applied readily to their own 'favourite' organism, be it a bacterium, virus, fungus or protozoan.

It is a pleasure to acknowledge the encouragement received from friends and colleagues in our own department and elsewhere. We would particularly like to thank Debbie Cooke and Sarinder Day for their help with the illustrations. This book would not have been possible without the tolerance and sustenance provided by Janet Towner and Fiona MacDonald.

Kevin Towner and Alan Cockayne
Nottingham