

Contents

Preface	vii
Notes for the user	ix
Ready reference	xiii
Dictionary	1
Appendix: Alphabetical list of genera	505

- biotechnology
- diagnosis (hereditary and infectious diseases)
- drug development
- epidemiology
- forensic science
- gene therapy
- genetically modified (GM) foods
- genomics
- industrial enzymes
- microbiology
- molecular biology
- oncology
- systems biology
- taxonomy
- vaccine development

This edition contains over 3200 references to published papers and reviews. Some of these references are the source(s) of information on which particular entries are based; they can provide additional details (e.g. protocols), and they also permit the reader to make his or her own assessment of a given source. Other references are included in order to indicate further information which is relevant to a given entry.

Some pervasive topics – for example, PCR, forensic applications, stem cells, microRNAs, gene fusion, phages, over-expression, retroviruses, typing, microarrays – are treated more extensively. These essay-style entries are intended to bring the newcomer up to date with a broad working knowledge of the area. Such entries may also be of use to the over-specialized researcher.

Commercial systems and materials are widely used in DNA technology, and a range of entries describe these products. This kind of entry may be useful, for example, when a paper offers no information about