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Foreword

Essentials of forensic science

The world of forensic science is changing at a very fast pace. This is in terms of the provision of forensic science services, the development of technologies and knowledge and the interpretation of analytical and other data as it is applied within forensic practice. Practising forensic scientists are constantly striving to deliver the very best for the judicial process and as such need a reliable and robust knowledge base within their diverse disciplines. It is hoped that this book series will provide a resource by which such knowledge can be underpinned for both students and practitioners of forensic science alike.

The Forensic Science Society is the professional body for forensic practitioners in the United Kingdom. The Society was founded in 1959 and gained professional body status in 2006. The Society is committed to the development of the forensic sciences in all of its many facets, and in particular to the delivery of highly professional and worthwhile publications within these disciplines through ventures such as this book series.

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UK Series Editor
Preface

It is strange to consider that the use of DNA in forensic science has been with us since 1985 and, although a relatively new discipline, it has impacted greatly on the criminal justice system and society as a whole. It is routinely the case that DNA figures in the media, in both real cases and fictional scenarios. The increased interest in forensic science has led to a burgeoning of university courses with modules in forensic science. This book is aimed at undergraduate students studying courses or modules in Forensic Genetics.

We have attempted to take the reader through the process of DNA profiling from the collection of biological evidence to the evaluation and presentation of genetic evidence. Although each chapter can stand alone, the order of chapters is designed to take the reader through the sequential steps in the generation of a DNA profile. The emphasis is on the use of short tandem repeat (STR) loci in human identification as this is currently the preferred technique. Following on from the process of generating a DNA profile, we have attempted to describe in accessible terms how a DNA profile is interpreted and evaluated. In addition, databases of DNA profiles have been developed in many countries and hence there is need to examine their use. While the focus of the book is on STR analysis, chapters on lineage markers and single nucleotide polymorphisms (SNPs) are also provided. A new Chapter has also been added to this edition that provides an overview of DNA profiling of non-human species.

As the field of forensic science and in particular DNA profiling moves onwards at a rapid pace, there are few introductory texts that cover the current state of this science. We are aware that there is a range of texts available that cover specific aspects of DNA profiling and where there this is the case, we direct readers to these books, papers or websites.

We hope that the readers of this book will gain an appreciation of both the underlying principles and the application of forensic genetics.
It is strange to consider that the use of DNA in forensic science has been with us for just over 20 years and, while a relatively new discipline, it has impacted greatly on the criminal justice system and society as a whole. It is routinely the case that DNA figures in the media, in both real cases and fictional scenarios.

The increased interest in forensic science has led to a burgeoning of university courses with modules in forensic science. This book is aimed at undergraduate students studying courses or modules in Forensic Genetics.

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