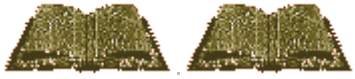
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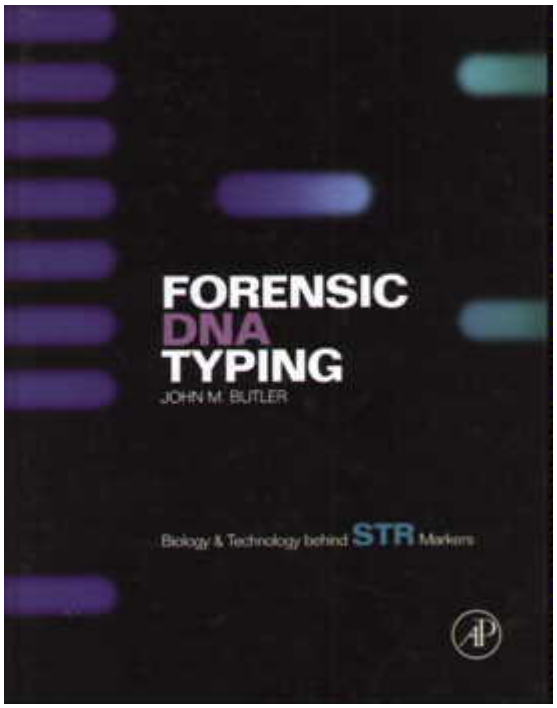
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PATHBREAKING

Forensic DNA Typing - Biology & Technology behind STR Markers, 1st Edition, *by* John M. Butler. Hard Bound, 7.5" x 10".
Academic Press, Harcourt Place, 32 Jamestown Road, London NW1 7BY, UK. Publication Date: Jan 2001, xiv+322 pages, ISBN 0-12-147951-X. Price £46.95, $69.95

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John M. Butler



John M. Butler, the author of this book, has been involved, first in the validation of the short tandem repeat (STR) markers that form the basis of the FBI's nation-wide DNA database (CODIS) and, lately, in the development of new and innovative technologies that may influence the future of the field. If you are involved with forensic DNA testing in any way, you perhaps would benefit greatly from this book. Dr. Butler can be contacted by Clicking here.

Forensic DNA Typing, Biology & Technology Behind STR Markers by John M. Butler is a very useful book for newcomers to the field of forensic genetics. STR DNA typing is presently the method of choice for most forensic genetic testing. The book has more than 300 pages with 17 chapters, four appendices and a large number of tables and figures.

John M. Butler, PhD, is Project Leader at the Human Identity DNA Technologies Group, Biotechnology Division, Chemical Science & Technology Laboratory, National Institute of Standards and Technology, Gaithersburg, MD, USA. John M. Butler has work within the field of forensic genetics for more than 10 years. John M. Butler made his PhD thesis on 'Sizing and quantitation of polymerase chain reaction products by capillary electrophoresis for use in DNA typing' and later worked especially on typing of Short Tandem Repeat (STR) DNA regions. He has received a number

of scientific rewards for his work. In 2003, he received the scientific prize of the International Society of Forensic Genetics for his work on DNA typing in forensic genetics.

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The first chapters of Forensic DNA Typing cover the history of DNA typing, the biology of DNA with special reference to STR systems and the Polymerase Chain Reaction (PCR). The challenges of DNA typing in crime casework such as degraded DNA, contamination and DNA mixtures in stains are described. Typing of Y chromosome STR markers and mitochondrial DNA typing is also described. Several chapters deal with the technical details of electrophoresis and detection and visualization of the DNA. Potentially important new technologies are also described. The important aspects of validation and quality are dealt with in a separate chapter, and the details of the quality assurance standards of the DNA Advisory Board of the FBI in the USA are available in an appendix. The principles of DNA databases are described with special reference to the CODIS database in the USA. The book ends with a presentation of a handful of high profile cases from the USA, including the O. J. Simpson trial and the Monica Lewinsky affair.

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Forensic DNA Typing is very useful to forensic genetic scientists and it can also help practicing lawyers, law enforcement professionals, and other people involved in cases with DNA evidence. The book offers an introduction that can be understood by the beginner in the field. It is also very focused on practical issues and, thereby, offers answers to frequently asked basic questions by people who are not DNA experts.

Parts of Forensic DNA Typing focus very much on how DNA typing is being performed and used in the USA and on the legal situation in the country. Although these parts of the book are of limited relevance to readers in other parts of the world, they do not reduce the value of the book.

Although Forensic DNA Typing was published in 2001, the book has so many qualities that it is worth considering for everybody who is involved in modern forensic genetic DNA typing or is dependent on the results and the interpretation of the results.

-Niels Morling

-Niels Morling
Niels Morling is Associate Professor and Director of the Department of Forensic Genetics (Institute of Forensic Medicine), at the University of Copenhagen, Denmark. Professor Morling is on the editorial board of Anil Aggrawal's Internet Journal of Forensic



Medicine and Toxicology. He can be contacted at niels.morling@inet.uni2.dk.

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