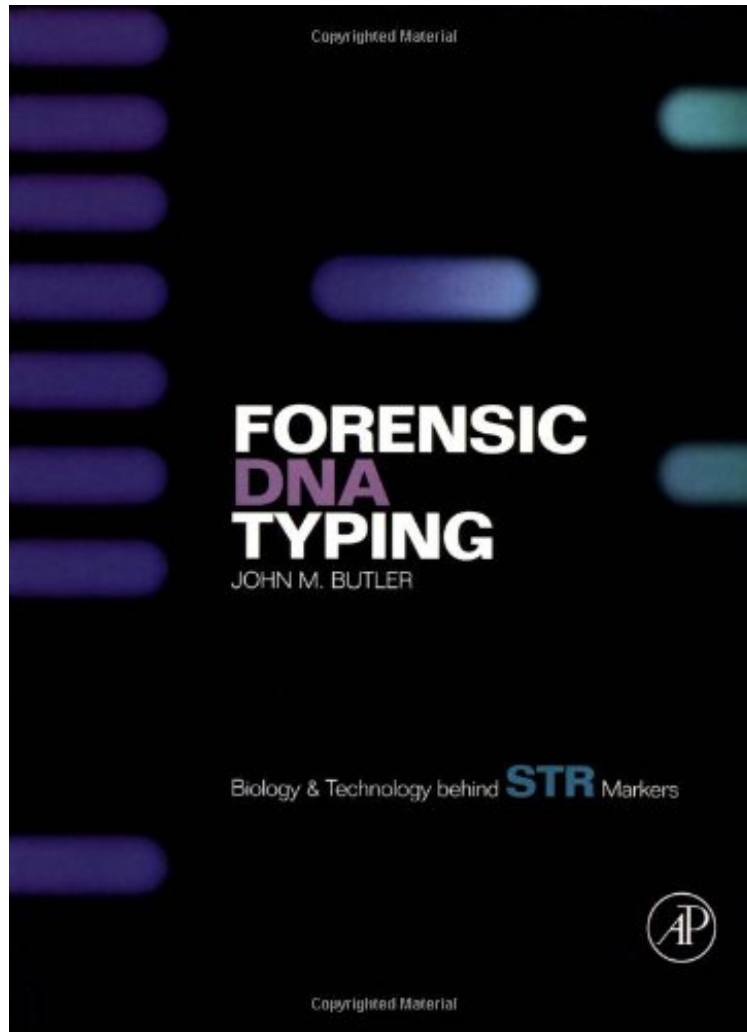


# Forensic DNA Typing: Biology and Technology Behind STR Markers

John M. Butler

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**John M. Butler : Forensic DNA Typing: Biology and Technology Behind STR Markers** before purchasing it in order to gage whether or not it would be worth my time, and all praised Forensic DNA Typing: Biology and Technology Behind STR Markers:

2 of 2 people found the following review helpful. Outstanding Text Book on Forensic ScienceBy Wilbert J. MorellThis book is an outstanding text book for those interested in Forensic Science, Genetics, and Genealogy. However, like most text books you must realize text books are often 3-6 years behind latest science and technology. In the case of Genetics and Genealogy markers, this book is 6 years behind. However, it is put together with enough

information to give the reader an expert understanding and appreciation of both the science and the technology. W. J. Morell Environmental Systems Engineer Genealogist. 0 of 0 people found the following review helpful. Science for the non-scientist. By Elizabeth Gunn I write police procedurals and curse myself often for not taking more technical courses in school. Books like this are essential for getting the basics crammed into my head. I don't know enough to get all of this on a first reading, so I go back again and again, nibbling at the edges, hoping to reach the core. We're lucky to have patient teachers like John M. Butler! 1 of 2 people found the following review helpful. Forensic DNA Textbook By 4n6student I will be using the text for my fall class at the University of Florida this fall. I just started getting into the chapters, but I like how the author brings in case history to explain different topics covered. The inclusion of charts, graphs and pictures also adds to the students' comprehension of the material. I also like that the author gives numerous reference sites should additional information be sought. Oh! and I like that this book is available on-line or available for the Kindle reader. :)

Forensic DNA Typing focuses on the biology and technology behind short tandem repeat (STR) markers and the most common forensic DNA analysis method used today. This comprehensive handbook will help forensic scientists gain a better understanding of STRs and the procedures needed to properly analyze them, while helping professionals in the law enforcement and legal communities comprehend the complexities of DNA profiling. It will also help laboratories meet the training requirements in the new DNA Advisory Board Quality Assurance Standards. The first few chapters of Forensic DNA Typing provide a thorough introduction to the topic for readers who might be less familiar with DNA, while providing a useful review for more advanced readers. It goes on to cover new genetic markers and information on rapidly changing technologies to help professionals make accurate identifications through DNA typing. Detailed illustrations and examples are used throughout. The book concludes with reviews of the DNA testing performed in high-profile cases such as the O.J. Simpson trial, the President Clinton-Monica Lewinsky affair, the Tomb of the Unknown Soldier, the Thomas Jefferson-Sally Hemings family controversy, and others. John Butler has been involved in the validation of the short tandem repeat markers that form the basis of the FBI's nationwide DNA database, CODIS, and in the development of new and innovative technologies. His talent for explaining complex information is apparent in the clear organization, illustrations, and straightforward language of this text. Forensic DNA Typing has already established itself as the standard reference in the field. Key Benefits: \* Chapters cover the topic from introductory level right up to "cutting edge" research \* Forensic scientists learn about the new methods and technologies required by STR typing \* DNA laboratories find out how to meet the training requirements of the DNA Advisory Board Quality Assurance Standards (listed in Appendix III) \* Lawyers and law enforcement professionals understand the science behind the techniques \* All readers can use the information listed on suppliers of DNA analysis equipment, products and services \* Provides a comprehensive look at the biology, technology, and applications of DNA typing \* Focuses on the major molecular biological technique currently being used throughout the world \* Uses a wide array of illustrations and examples to make the material easy to understand \* Progresses from basic introductory information to cutting-edge research \* Designed for forensic scientists, law enforcement and legal professionals, and students in related fields \* Provides DNA analysts with all the reported alleles for the 13 CODIS STR loci, including sizes and sequences \* Includes the DNA Advisory Board Quality Assurance Standards \* Reviews DNA testing performed in high-profile cases

"...a well written and informative book...The author has succeeded in presenting complex biological and technical information on STR markers in a way that allows the reader to clearly visualize and understand the principles involved...this book would serve as an excellent introductory textbook for students in forensic science or as a reference text for scientists employed in forensic biology or related fields." - Peter Bilous, RCMP Forensic Laboratory Services, Edmonton, Alberta, Canada, for the CANADIAN SOCIETY OF FORENSIC SCIENCES JOURNAL, December 2001 "Forensic DNA Typing provides a wealth of general and background information on STRs and details on current and future technologies employed in forensic DNA typing...I would strongly recommend this book as a training aid for new analysts or a DNA typing reference for forensic scientists." - Brendan F. Shea, DNA Analysis Unit, Federal Bureau of Investigation, for FORENSIC SCIENCE COMMUNICATIONS "As a guide and reference for the non-specialist this book is extremely useful. The practical details and methods make it a valuable purchase for scientists, doctors, lawyers and police officers. It is clear and practical. The chapter of case studies at the end puts informative flesh on the subject which is still mysterious to many in the forensic field. The book goes a long way to demystifying DNA and I would recommend it highly." Winner of the Highly Commended Award for 2001" - British Medical Association "...While there are many books that discuss the principles of molecular biology and forensic testing, none have dealt solely with the biology, technology, and applications of DNA typing in such a comprehensive fashion as this one. Dr. Butler has a unique perspective on DNA typing. His background...uniquely [qualifies] him as an expert in the forensic field...a very readable text..."--Dennis J. Reeder, Ph.D., FBI DNA Advisory Board, from the Foreword. 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. - Internet Journal of Forensic

Medicine  
From the Back Cover  
Since it was first used in a criminal investigation in 1986, forensic DNA testing has become not only one of the most high profile tools available to the legal system, but also one with a very high degree of confidence. The use of DNA testing has helped determine the perpetrators of violent crimes, resolve questioned paternity and identify the remains of missing persons or victims of mass disasters. John Butler 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 cannot afford not to own this book. Short tandem repeat loci will be the most widely used markers in forensic DNA analysis for many years to come, and suitable information on STR typing is needed for crime laboratory personnel as well as members of the legal community. This book examines the science of current DNA typing methods by focussing on the biology and technology behind STR markers and the most common forensic DNA analysis methods used today. Features:

- \* Chapters cover the topic from introductory level right up to "cutting edge" research
- \* Forensic scientists learn about the new methods and technologies required by STR typing
- \* DNA laboratories find out how to meet the training requirements of the DNA Advisory Board Quality Assurance Standards (listed in Appendix III).
- \* Lawyers and law enforcement professionals understand the science behind the techniques
- \* Information listed on suppliers of DNA analysis equipment, products and services

About the Author  
John M. Butler is a NIST Fellow and Group Leader at the U.S. National Institute of Standards and Technology, Gaithersburg, Maryland. Dr. Butler earned his Ph.D. from the University of Virginia while doing DNA research in the FBI Laboratory's Forensic Science Research Unit. He has over 100 publications in this field and is a frequent presenter on the topic of DNA typing.