ANIL AGGRAWAL'S
Internet Journal of
Forensic Medicine and Toxicology
The world's first online journal devoted entirely to forensic medicine and toxicology · Published 1 January and 1 July

VOL. 11, NO. 2
Downloaded from www.anilaggrawal.com · ISSN 0972-8074 (Online) · https://www.anilaggrawal.com/ij/vol_011_no_002/reviews/tb/page014b.html

Book Reviews: Technical Books Section

(Page 14 b - Review by Niels Morling, Denmark)

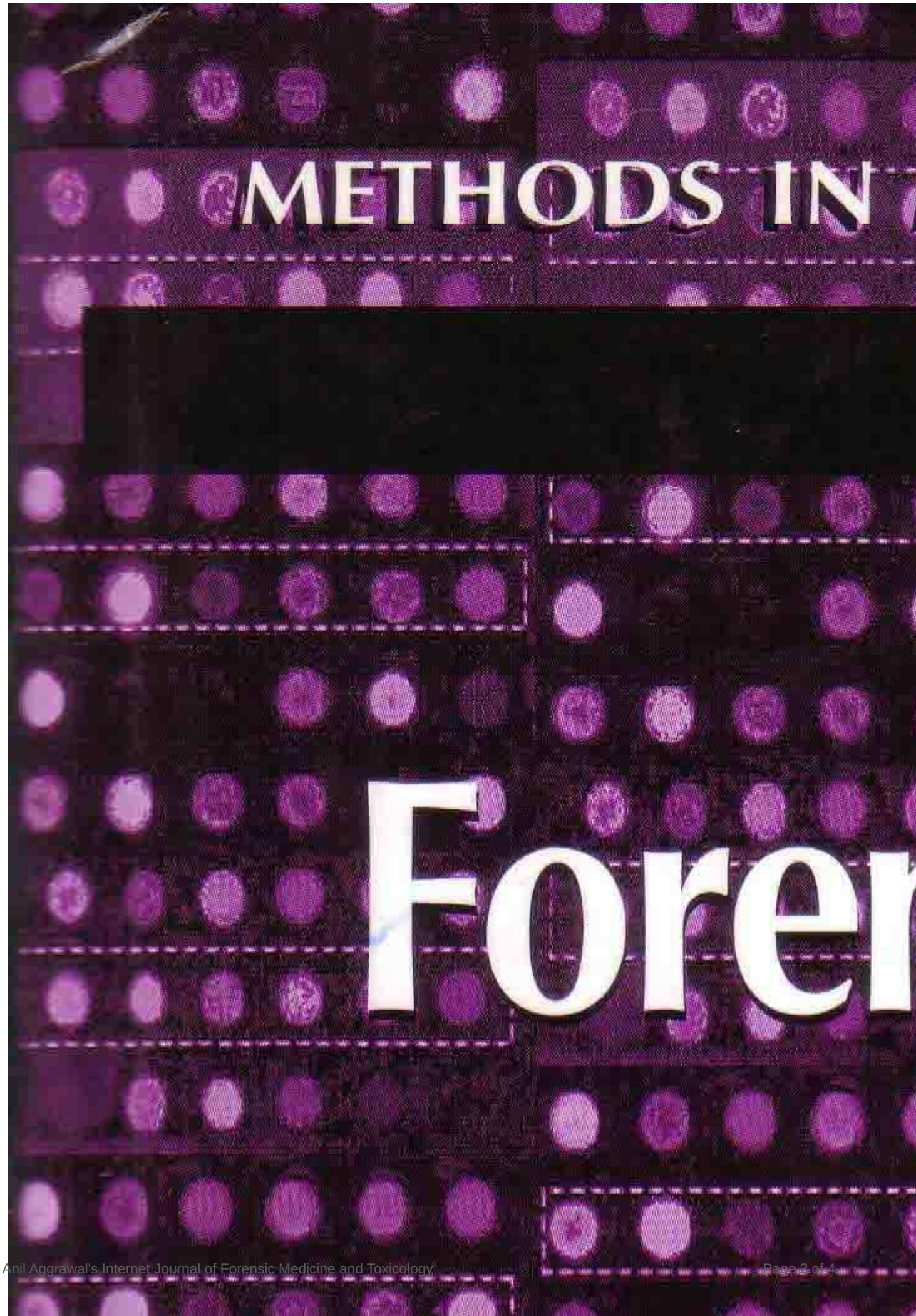
...FEATURED BOOK : MAIN PAGE VERY USEFUL TO DNA SCIENTISTS ... Forensic DNA Typing Protocols is very useful to scientists who are involved in the development of new methods in forensic genetic, and the book is especially valuable for those who are beginning SNP typing for forensic genetic purposes.... [Main page] Reviews | [1] [2]...

Forensic DNA Typing Protocols (Methods in Molecular Biology Series, Vol. 297), 1st Edition, *edited by* Angel Carracedo, Hardback, acid-free Paper, 9.3" x 6.3" x 0.9".
Springer, [imprint - Humana], 233 Spring Street, New York, NY 10013, USA ; Publication Date: December 2004. x + 280 pages, ISBN-10: 1588292649, ISBN-13: 978-1588292643, ISBN 1-58829-264-9, E-ISBN 1-59259-867-6, ISSN 1064-3745. DOI (Digital Object Identifier): 10.1226/1588292649. Price $99.50.

Official Site: Click here to visit

Amazon Link: Click here to visit

Click cover to buy from amazon


METHODS IN
Foren

Forensic DNA Typing Protocols describes the newest methods for forensic genetic DNA analysis. The book has 286 pages, 18 chapters and 34 authors, who are all competent scientist involved in forensic genetic investigations.

The book obviously concentrates on new technologies. The extremely rapid developments of the DNA typing methods in last 20 years including the presently very much used typing for autosomal STRs with commercially available kits are described in only 10 pages. Hereafter, two methods for quantification of DNA with real time PCR and a method based on analysis of Cytochrome b genes for species determination are described. The new STR markers on the Y chromosome are covered and supplemented with a chapter that gives the general background for creating STR multiplex PCR assays.

The majority of the book describes methods related to the new Single Nucleotide Polymorphisms (SNP). Only few SNP based assay for practical forensic genetic typing purposes have yet been developed, and the book has a chapter on how to use online databases on DNA sequences to select SNP markers of forensic interest for those who want to start from the beginning. Various methods that can be used for SNP typing in forensic genetics are described, including a PCR based methods with the LightCycler, universal tags in hybridisation assays in micro arrays, a PCR based hybridisation assay with electronically addressing of the DNA onto the pads of a mini-array systems (Nanogen), MALDI-TOF mass spectrometry and the use of UV photo induced cleavage of DNA fragments, pyrosequencing, single base extension and detection in capillary electrophoresis (SNaPshot).

View this book on Amazon

One of the chapters describes methods for development of large PCR multiplexes for the simultaneous detection of 35 Y chromosome SNPs by means of SNaPshot and capillary electrophoresis, and these guidelines for creation of large multiplexes are so general that they can be used for the creation of PCR multiplexes for other purposes. The field of pharmacogenetic DNA typing is covered by the description of a SNaPshot based method for the detection of a number of alleles of CYP2*D6 and CYP2*C19. The last two chapters describe the problems and challenges related to DNA typing of ancient DNA and offers methods to solve the problems.

Forensic DNA Typing Protocols is very useful to scientists who are involved in the development of new methods in forensic genetic, and the book is especially valuable for those who are beginning SNP typing for forensic genetic purposes.

-Niels Morling
Niels Morling is a renowned Forensic DNA typing expert from Denmark. He has been associated with this journal as an editor. More information about him can be had by clicking here.



Request a PDF file of this review by clicking here. (If your screen resolution can not be increased, or if printing this page is giving you problems like overlapping of graphics and/or tables etc, you can take a proper printout from a pdf file. You will need an Acrobat Reader though.)