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Altri autori (Persone)	Gonzalez AndradeFabricio
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Nota di contenuto	Bringing tissue identification into the 21st century : mRNA analysis as the next molecular biology revolution in forensic science? / Trisha L. Noreault-Conti and Eric Buel -- Trace DNA analysis / Kaye Ballantyne -- The continuing evolution of forensic DNA databases / Simon J. Walsh, John S. Buckleton, and Olivier Ribaux -- Homicide investigation : anthropology and genetic analysis of the crime scene / I. Roca ... [et al.] -- Influence of humic acid on DNA analysis / Davora Sutlovic -- Advances in DNA typing in sexual assault casework / Maraia de Faatima Terra Pinheiro -- Analysis of reduced size STR amplicons as tools for the study of degraded DNA / Miriam Baeta ... [et al.] -- The study of ancient DNA in forensic genetics -/ Cecilia Sosa and Begona Martinez-Jarreta -- Forensic mitochondrial DNA analysis / Luisa Pereira, Farida Alshamali, and Fabricio Gonzalez-Andrade -- SNPs technologies in forensic genetics : approach and applications / Anna Barbaro -- Statistical assessment of DNA paternity tests in uncommon cases : from the routine to the extreme / Iosif S. Tsybovsky, Nikolay N. Kuzub, and Vera M. Veremeichyk -- MtDNA analysis for genetic identification of forensically important insects / Adriano Tagliabracci and Federica Alessandrini -- Molecular techniques for the identification of non-human species in forensic biology / Antonio Alonso -- Local DNA databases in forensic casework / Jose Luis Ramirez ... [et al.] -- In vitro studies of DNA recovered from incinerated teeth / Paola Leon-Sanz ... [et al.] -- Promising prospects of Chinese medical semiology on

Sommario/riassunto

In addition to supplementing existing analysis techniques in serious crime cases, trace DNA can allow investigation of volume crime cases such as burglary or vehicle theft, where previously DNA evidence was not considered usable. However, despite the widespread use of trace DNA, at present there are very few specific validated methods. This has lead to controversy in the use of trace DNA, and particularly the low copy number amplification technique. It has been established that the use of existing methodology (developed for high-copy number samples) leads to significant levels of artefacts with trace DNA, including allele drop-out and drop-in, stutter, and allelic/locus imbalance. To minimize these, there are numerous modifications that can be made to existed methods to increase the success of trace DNA analysis. This book presents advances in the field of DNA research as an aid in Forensic studies and Genetics.
