1. Record Nr. UNINA9910810702103321 Autore Balding D. J Titolo Weight-of-evidence for DNA profiles / / David J. Balding Hoboken, N.J., : John Wiley & Sons, c2005 Pubbl/distr/stampa **ISBN** 1-280-27211-2 9786610272112 0-470-30050-7 0-470-86769-8 0-470-86766-3 Edizione [1st ed.] Descrizione fisica 1 online resource (199 p.) Collana Statistics in practice 614/.1/0727 Disciplina Soggetti Forensic genetics - Statistical methods Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references (175-181) and index. Nota di contenuto Weight-of-evidence for Forensic DNA Profiles: Statistics in Practice: Contents; Preface; 1 Introduction; 1.1 Weight-of-evidence theory; 1.2 About the book; 1.3 DNA profiling technology; 1.4 What you need to know already; 1.5 Other resources; 2 Crime on an island; 2.1 Warm-up examples; 2.1.1 Disease testing: Positive Predictive Value (PPV); 2.1.2 Coloured taxis: 2.2 Rare trait identification evidence: 2.2.1 The "island" problem; 2.2.2 A first lesson from the island problem; 2.3 Making the island problem more realistic; 2.3.1 Uncertainty about p; 2.3.2 Uncertainty about N 2.3.3 Possible typing errors 2.3.4 Searches; 2.3.5 Other evidence; 2.3.6 Relatives and population subdivision; 2.4 Weight-of-evidence exercises; 3 Assessing evidence via likelihood ratios; 3.1 Likelihood ratios; 3.2 The weight-of-evidence formula; 3.2.1 Application to the island problem; 3.2.2 The population P; 3.3 General application of the formula; 3.3.1 Several items of evidence; 3.3.2 Assessing all the evidence; 3.3.3 The role of the expert witness; 3.4 Consequences for DNA evidence; 3.4.1 Many possible culprits; 3.4.2 Incorporating the non-DNA evidence; 3.4.3 Relatives 7.1.4 Multiple loci: the effect of linkage

Assessing Weight-of-Evidence for DNA Profiles is an excellent

Sommario/riassunto

introductory text to the use of statistical analysis for assessing DNA evidence. It offers practical guidance to forensic scientists with little dependence on mathematical ability as the book includes background information on statistics - including likelihood ratios - population genetics, and courtroom issues. The author, who is highly experienced in this field, has illustrated the book throughout with his own experiences as well as providing a theoretical underpinning to the subject. It is an ideal choice for forensic scientis