1. Record Nr. UNINA9910772097003321 Autore Simón Carlos Titolo Handbook of Genetic Diagnostic Technologies in Reproductive Medicine : Improving Patient Success Rates and Infant Health Pubbl/distr/stampa Milton:,: Taylor & Francis Group,, 2022 ©2022 **ISBN** 1-00-302494-7 1-000-56741-9 1-003-02494-7 1-000-56736-2 Edizione [2nd ed.] Descrizione fisica 1 online resource (480 pages) Altri autori (Persone) RubioCarmen Disciplina 618.1/78042 Soggetti Prenatal diagnosis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Includes bibliographical references and index. Nota di bibliografia Cover -- Title Page -- Copyright Page -- Table of Contents --Nota di contenuto Contributors -- Preface -- Chapter 1 The Brave New World of Genomics -- Chapter 2 Genetics at the Cell Level: The Human Cell Atlas --Chapter 3 The Genetic Risk of a Couple Aiming to Conceive -- Chapter 4 Carrier Screening for Single-Gene Disorders -- Chapter 5 Meiotic Abnormalities in Infertile Males -- Chapter 6 Chromosomal Analysis of Sperm -- Chapter 7 Epigenetics in Sperm, Epigenetic Diagnostics, and Transgenerational Inheritance -- Chapter 8 Aneuploidy in Human Oocytes and Preimplantation Embryos -- Chapter 9 Epigenetics from Oocytes to Embryos -- Chapter 10 Embryo Kinetics and Aneuploidy --Chapter 11 Preimplantation Genetic Testing of Aneuploidies (PGT-A) --Chapter 12 Preimplantation Genetic Testing for Structural Rearrangements -- Chapter 13 Mosaicism in Preimplantation Embryos -- Chapter 14 Embryo Cell-Free DNA in the Culture Medium and Its Potential for Non-Invasive Aneuploidy Testing -- Chapter 15 Mitochondria and Embryo Viability -- Chapter 16 Preimplantation

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Sommario/riassunto

Different genetic diagnostic and treatment options are used worldwide to improve routine IVF procedures for the benefit of patients. This handbook updates the new genetic diagnostic technologies that have been translated to the clinic, aiming to improve outcomes in the clinic and result in a healthy baby in the home. Chapters cover the use of genetic technologies in a personalized manner to unravel the possible genetic risks for the couple wishing to conceive, in terms of sperm, the embryo, the endometrium, miscarriage, and finally the fetus. This expanded new edition covers the range of the latest genetic diagnostic technologies being translated into practice internationally to improve routine IVF procedures for the benefit of patients. Bringing together international experts to discuss their work, this text gives a context for the developments in this very fast-moving area of research and offers a comprehensive and rounded appraisal of hot topics.