1. Record Nr. UNINA9910674378603321 Grand celebration . Volume 1: 10th Anniversary of the Human Genome **Titolo** Project / / John Burn, James R. Lupski, Karen E. Nelson and Pabulo H. Rampelotto (Eds.) [Basel, Switzerland]: ,: MDPI - Multidisciplinary Digital Publishing Pubbl/distr/stampa Institute, , 2016 ©2016 **ISBN** 9783038421702 9783038421245 3038421243 Edizione [Edition 2016] Descrizione fisica 1 online resource (xi, 262 pages): illustrations (black and white, and colour); digital file(s) Disciplina 599.935 611.0181663 Soggetti Human gene mapping Human genetics - Forecasting Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "This book is a reprint of the special issue that appeared in the online open access journal Genes (ISSN 2073-4425) in 2014" -- title page verso. Nota di bibliografia Includes bibliographical references. Sommario/riassunto "In 1990, scientists began working together on one of the largest biological research projects ever proposed. The project proposed to sequence the three billion nucleotides in the human genome. The Human Genome Project took 13 years and was completed in April 2003, at a cost of approximately three billion dollars. It was a major scientific achievement that forever changed the understanding of our own nature. The sequencing of the human genome was in many ways a triumph for technology as much as it was for science. From the Human Genome Project, powerful technologies have been developed (e.g., microarrays and next generation sequencing) and new branches of science have emerged (e.g., functional genomics and

pharmacogenomics), paving new ways for advancing genomic research

and medical applications of genomics in the 21st century. The investigations have provided new tests and drug targets, as well as insights into the basis of human development and diagnosis/treatment of cancer and several mysterious humans diseases. This genomic revolution is prompting a new era in medicine, which brings both challenges and opportunities. Parallel to the promising advances over the last decade, the study of the human genome has also revealed how complicated human biology is, and how much remains to be understood. The legacy of the understanding of our genome has just begun. To celebrate the 10th anniversary of the essential completion of the Human Genome Project, in April 2013 Genes launched this Special Issue, which highlights the recent scientific breakthroughs in human genomics, with a collection of papers written by authors who are leading experts in the field." -- Preface, page xi.