1. Record Nr. UNINA9910824275603321

Autore	Boverhof Darrell R
Titolo	Applications of Toxicogenomics in Safety Evaluation and Risk Assessment
Pubbl/distr/stampa	Hoboken : , : Wiley, , 2011
ISBN	1-283-23966-3 9786613239662 1-118-00104-4 1-118-00103-6
Edizione	[First edition.]
Descrizione fisica	1 online resource (402 pages)
Altri autori (Persone)	GollapudiB. Bhaskar
Disciplina	616.042 616/.042
Soggetti	Genetic toxicology Health risk assessment Risk Assessment Toxicity testing Toxicogenetics Toxicology Pharmacogenetics Risk Risk Management Epidemiologic Measurements Organization and Administration Pharmacology Probability Genetics Public Health Health Occupations Statistics as Topic Biological Science Disciplines Biology Health Services Administration Environment and Public Health Natural Science Disciplines Health Care Health Care Evaluation Mechanisms Epidemiologic Methods Quality of Health Care

	Investigative Techniques Health Care Quality, Access, and Evaluation Health & Biological Sciences Toxicology & Public Health
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Contents; Preface; Contributors; 1 Toxicology, ""Omics"" Technologies, and Toxicogenomics: A Primer; 2 Introduction to Human Health Risk Assessment; 3 Practical Considerations for the Application of Toxicogenomics to Risk Assessment: Early Experience, Current Drivers, and a Path Forward; 4 Approaches and Practical Considerations for the Analysis of Toxicogenomics Data; 5 Genomics in Identifying Mutagenic Mode of Action in Carcinogenesis; 6 Application of Genomics for Predicting and Understanding the Mode of Action for Nongenotoxic Carcinogens; 7 Genomics in Characterizing Endocrine Toxicity 8 Studying Organ-Specific Toxicity Using Gene-Expression Profiling9 Toxicogenomic Studies in Human Populations; 10 Toxicogenomics Applied to Ecological Risk Assessment; 11 Analysis of Transcriptomic Dose-Response Data for Toxicology and Risk Assessment; 12 Toxicogenomics as a Tool for Validating Animal to Human Extrapolations in Chemical Risk Assessment: Concepts, Applications, and Challenges; 13 Toxicogenomics and Animal Alternatives; 14 Toxicogenomics and the Regulatory Framework; 15 Standardization of Gene-Expression Information for the Safety Evaluation: Activities in Japan 16 Applying Transcriptional Profiling in Drug Safety Evaluation17 Reframing the Risk Assessment Paradigm: Toward a Systems Biology Approach; Index
Sommario/riassunto	This book provides a timely overview of toxicogenomics, with special emphasis on the practical applications of this technology to the risk assessment process. Introductory sections are followed by a series of chapters highlighting practical and systematic applications of toxicogenomics in informing the risk assessment process - including the areas of mutagenicity, carcinogenicity, endocrine toxicity, organ-specific toxicity, population monitoring, and ecotoxicology. The book concludes with approaches for the integration of this technology in safety evaluation studies, and an outlook on how tox