Record Nr. UNINA9910790941303321 Autore Stanley Lesley Titolo Molecular and cellular toxicology: an introduction // Dr. Lesley A. Stanley Pubbl/distr/stampa Chichester, England:,: Wiley Blackwell,, 2014 2014 **ISBN** 1-119-95207-7 1-118-52607-4 1-118-52601-5 1-118-52606-6 Descrizione fisica 1 online resource (435 p.) Collana New York Academy of Sciences Classificazione 491.59 **QV 602** 615.9/07 Disciplina 615.9/07 Soggetti Toxicity testing Molecular biology Xenobiotics - toxicity Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes bibliographical references and index Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Background to molecular and cellular toxicology -- Individual susceptibility to toxic chemicals -- Omics techniques -- In vitro methods for predicting in vivo toxicity -- In vitro methods for absorption, distribution, metabolism and excretion -- In silico methods and structure-activity relationships -- Transgenic animal models for ADME and systemic toxicity -- Genotoxicity and its measurement --Oncogenes and the identification of human carcinogens -- Emerging techniques. Sommario/riassunto Toxicology is the study of the adverse effects of chemical, physical, or biological agents on people, animals, and the environment. Toxicologists are trained to investigate, interpret, and communicate the nature of those effects. Over the last ten years the subject of toxicology has changed dramatically, moving from a discipline which was once firmly wedded to traditional methods to one which is keen to

embrace the innovative techniques emerging from the developing fields of cell culture and molecular biology. There is an acute need for this to be reflected in a paradigm shift which