Record Nr. UNINA9910465851303321 Autore Shatkay Hagit **Titolo** Mining the biomedical literature / / Hagit Shatkay and Mark Craven Pubbl/distr/stampa Cambridge, Massachusetts:,: MIT Press,, c2012 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2012] **ISBN** 1-283-55006-7 9786613862518 0-262-30516-X Descrizione fisica 1 PDF (150 pages) Collana Computational molecular biology Altri autori (Persone) CravenMark 610.285 Disciplina Soggetti Medical literature - Data processing Biological literature - Data processing Data mining Medical informatics **Bioinformatics** Information storage and retrieval systems - Medicine Information storage and retrieval systems - Biology Content analysis (Communication) Information retrieval Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Fundamental Concepts in Biomedical Text Analysis -- Information Retrieval -- Information Extraction -- Evaluation -- Putting it All Together: Current Applications and Future Directions. Sommario/riassunto The introduction of high-throughput methods has transformed biology into a data-rich science. Knowledge about biological entities and processes has traditionally been acquired by thousands of scientists through decades of experimentation and analysis. The current abundance of biomedical data is accompanied by the creation and quick dissemination of new information. Much of this information and

knowledge, however, is represented only in text form--in the

biomedical literature, lab notebooks, Web pages, and other sources.

Researchers' need to find relevant information in the vast amounts of text has created a surge of interest in automated text-analysis. In this book, Hagit Shatkay and Mark Craven offer a concise and accessible introduction to key ideas in biomedical text mining. The chapters cover such topics as the relevant sources of biomedical text; text-analysis methods in natural language processing; the tasks of information extraction, information retrieval, and text categorization; and methods for empirically assessing text-mining systems. Finally, the authors describe several applications that recognize entities in text and link them to other entities and data resources, support the curation of structured databases, and make use of text to enable further prediction and discovery.