Record Nr. UNINA9910787332303321 Informatics in radiation oncology / / edited by George Starkschall, R. **Titolo** Alfredo C. Siochi Pubbl/distr/stampa Boca Raton:,: CRC Press, Taylor & Francis Group,, [2014] 2014 **ISBN** 0-429-19350-5 1-4398-2582-3 1 online resource (xiv, 307 pages): illustrations (some color) Descrizione fisica Collana Imaging in medical diagnosis and therapy Disciplina 616.07/54 616.0754 616.9940642 Soggetti Medical informatics Cancer - Radiotherapy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front Cover: Contents; Series Preface; Preface; Editors; Contributors; Chapter 1 - What Is Biomedical Informatics?; Chapter 2 - Ontology for Radiation Oncology; Chapter 3 - Web-Based Information Delivery; Chapter 4 - Electronic Medical Record: Chapter 5 - Toward a Terminology for Radiation Oncology; Chapter 6 - Informatics for Accessing Hospital Information Systems; Chapter 7 - Information Flow through the Radiation Oncology Process; Chapter 8 - Integrating Radiology with Radiation Oncology: Challenges and Opportunities; Chapter 9 - Image Management in Radiotherapy; Chapter 10 -Connectivity Chapter 11 - Information Resources for Radiation OncologyChapter 12 - Radiogenomics: The Future of Personalized Radiation Therapy?; Chapter 13 - Teaching Support; Chapter 14 - Communication, Collaboration, IT, and Informatics Infrastructure for Clinical Trials; Chapter 15 - Research Data Management, Integration, and Security; Chapter 16 - Open-Source Informatics Tools for Radiotherapy Research; Chapter 17 - NCI Cancer Imaging Program: Imaging Informatics and Radiotherapy Implications; Chapter 18 - Informatics for Multimodality Imaging; Chapter 19 - Imaging for Radiation Treatment Planning

Chapter 20 - Evaluation of Treatment PlansChapter 21 - Human-Computer Interaction in Radiation Therapy; Chapter 22 - Informatics for Image-Guided Radiation Therapy; Chapter 23 - Patient Assessment Tools; Chapter 24 - Outcomes Modeling; Chapter 25 - Quality Assurance in Informatics; Chapter 26 - Quality Assurance and the Informatics Environment; Back Cover

Sommario/riassunto

A complete overview of the subject, this book discusses the role of information in the process of radiation oncology, acquisition, communication, and display of data; infrastructure requirements; and the use of data in clinical evaluation and research. It describes essential informatics tools, including various imaging techniques and image management systems, treatment planning systems, radiation oncology management systems, and the electronic medical record. Expert contributors explain how to obtain imaging and other diagnostic information as well as treatment prescriptions, treatment setup and delivery data, and outcome reviews--Provided by publisher.