1. Record Nr. UNINA9910877186203321 Titolo Structural bioinformatics [Place of publication not identified], : Wiley Blackwell, 2009 Pubbl/distr/stampa **ISBN** 1-280-55693-5 9786610556939 0-471-32634-8 0-471-72120-4 Descrizione fisica 1 online resource (674 pages) Methods of biochemical analysis Structural bioinformatics Collana Disciplina 572.8/733 Soggetti Structural bioinformatics Molecular Biology Computational Biology **Biochemistry** Biology Genetics **Biological Science Disciplines** Chemistry Natural Science Disciplines **Disciplines and Occupations** Biology - General Health & Biological Sciences Physical Sciences & Mathematics Organic Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Sommario/riassunto From the Foreword: "[A] must read for all of us committed to understanding the interplay of structure and function...[T]he individual

> chapters outline the suite of major basic life science questions, such as the status of efforts to predict protein structure and how proteins carry out cellular functions, and also the applied life science questions such

as how structural bioinformatics can improve health care through accelerating drug discovery." This book provides a basic understanding of the theories, associated algorithms, resources, and tools used in structural bioinformatics. The reader emerges with the ability to make effective use of protein, DNA, RNA, carbohydrate, and complex structures to better understand biological function. Moreover, it draws a clear connection between structural studies and the rational design of new therapies.