



Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics)

Download now

Click here if your download doesn"t start automatically

Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics)

Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics)

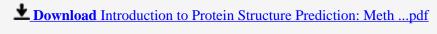
A look at the methods and algorithms used to predict protein structure

A thorough knowledge of the function and structure of proteins is critical for the advancement of biology and the life sciences as well as the development of better drugs, higher-yield crops, and even synthetic bio-fuels. To that end, this reference sheds light on the methods used for protein structure prediction and reveals the key applications of modeled structures. This indispensable book covers the applications of modeled protein structures and unravels the relationship between pure sequence information and three-dimensional structure, which continues to be one of the greatest challenges in molecular biology.

With this resource, readers will find an all-encompassing examination of the problems, methods, tools, servers, databases, and applications of protein structure prediction and they will acquire unique insight into the future applications of the modeled protein structures. The book begins with a thorough introduction to the protein structure prediction problem and is divided into four themes: a background on structure prediction, the prediction of structural elements, tertiary structure prediction, and functional insights. Within those four sections, the following topics are covered:

- Databases and resources that are commonly used for protein structure prediction
- The structure prediction flagship assessment (CASP) and the protein structure initiative (PSI)
- Definitions of recurring substructures and the computational approaches used for solving sequence problems
- Difficulties with contact map prediction and how sophisticated machine learning methods can solve those problems
- Structure prediction methods that rely on homology modeling, threading, and fragment assembly
- Hybrid methods that achieve high-resolution protein structures
- Parts of the protein structure that may be conserved and used to interact with other biomolecules
- How the loop prediction problem can be used for refinement of the modeled structures
- The computational model that detects the differences between protein structure and its modeled mutant

Whether working in the field of bioinformatics or molecular biology research or taking courses in protein modeling, readers will find the content in this book invaluable.



Read Online Introduction to Protein Structure Prediction: Me ...pdf

Download and Read Free Online Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics)

From reader reviews:

Luisa Johnson:

As people who live in typically the modest era should be revise about what going on or information even knowledge to make all of them keep up with the era that is always change and advance. Some of you maybe will update themselves by examining books. It is a good choice for you but the problems coming to you is you don't know what one you should start with. This Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) is our recommendation to cause you to keep up with the world. Why, because book serves what you want and wish in this era.

Paula Cofield:

The event that you get from Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) may be the more deep you searching the information that hide inside words the more you get enthusiastic about reading it. It does not mean that this book is hard to know but Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) giving you thrill feeling of reading. The author conveys their point in selected way that can be understood by anyone who read this because the author of this reserve is well-known enough. This specific book also makes your own personal vocabulary increase well. Making it easy to understand then can go together with you, both in printed or e-book style are available. We recommend you for having this particular Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) instantly.

Jean Mora:

People live in this new day of lifestyle always make an effort to and must have the extra time or they will get wide range of stress from both daily life and work. So, whenever we ask do people have extra time, we will say absolutely of course. People is human not really a huge robot. Then we consult again, what kind of activity have you got when the spare time coming to you of course your answer can unlimited right. Then do you try this one, reading textbooks. It can be your alternative in spending your spare time, the book you have read is Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics).

Bernadine Parker:

Reading a book for being new life style in this year; every people loves to learn a book. When you examine a book you can get a lot of benefit. When you read publications, you can improve your knowledge, mainly because book has a lot of information in it. The information that you will get depend on what kinds of book that you have read. If you would like get information about your research, you can read education books, but if you act like you want to entertain yourself read a fiction books, this kind of us novel, comics, and soon. The Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) provide you with a new experience in reading through a book.

Download and Read Online Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) #VDGNKSF2ZUI

Read Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) for online ebook

Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) books to read online.

Online Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) ebook PDF download

Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) Doc

Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) Mobipocket

Introduction to Protein Structure Prediction: Methods and Algorithms (Wiley Series in Bioinformatics) EPub