

Discover how these proteins can offer novel insight for rational drug design

"Peter Tompa's fine comprehensive overview of this rapidly advancing field is of timely importance, both for its documentation and for emphasizing the importance of IDPs in biology and protein science. ... This book demonstrates Tompa's considerable command of the field, providing appropriate examples and ample details in every respect. Its coverage of the latest developments in the field is impressive, and the author manages to strike a good balance between detail and concept to lead the reader through this novel field."

—From the Foreword by Professor Sir Alan Fersht, University of Cambridge, UK

Although drug discovery rates have leveled off, new insight generated by the study of intrinsically disordered proteins (IDPs) may offer fresh strategies for drug development. Providing the first focused and detailed treatment of the rapidly emerging field of protein disorder, **Structure and Function of Intrinsically Disordered Proteins** illustrates how these proteins defy the structure-function paradigm and play important regulatory and signaling roles. The author introduces basic terms and fundamental principles of protein science and presents a unified theory of ordered and disordered proteins. He also outlines new applications of traditional biophysical and bioinformatic techniques, such as x-ray crystallography and NMR. The book includes an overview of the structure, function, and evolution of IDPs and addresses biomedical implications and protein disorder in drug development for cancer and neurodegenerative diseases.



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