Preface

This volume is a collection of articles from the proceedings of the International School of Structural Biology and Magnetic Resonance 6th Course: Structure, Dynamics, and Function of Biological Macromolecules and Assemblies. This NATO Advance Study Institute was held in Erice at the Ettore Majorana Foundation and Centre for Scientific Culture on July 10-22, 2003. The aim of the Institute was to bring together experts applying different physical methods to problems of macromolecular dynamics – notably x-ray diffraction, NMR and other forms of spectroscopy, and macromolecular dynamics measurements and simulations. Emphasis was placed on correlating structural problems with mechanisms of biological function. The range of topics here represents the diversity of critical problems in biology, from protein structure determination and folding dynamics to the mechanisms of allostery in enzymes from RNA structure and function in viral disease to the triumph of the ribosome structure. The individual articles represent the state of the art in each area covered and provide a guide to the original literature in this rapidly developing field.

Editor
Joseph D. Puglisi
Stanford University
Stanford, California

Assistant Editor
Manolia V. Margaris
Stanford University
Stanford, California