METHODS IN MOLECULAR BIOLOGY™

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Bioinformatics and Drug Discovery

Second Edition

Edited by

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Humana Press

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Preface

Recent advances in drug discovery have been rapid and impressive. When we published the first edition of *Bioinformatics and Drug Discovery*, our goal was to facilitate employment of these new technologies in the process of drug discovery. We detailed a pipeline of methods and techniques that could be used. In just a few short years, these technologies have become much more powerful and robust. To address this challenge, this edition has been completely updated to include topics that range from new technologies in target identification, to genomic analysis, cheminformatics, protein analysis, and network or pathway analysis. In addition, it is nearly impossible for an investigator to be familiar with all these techniques. As a result, we have formatted our chapters slightly differently than most published by Humana Press. Each chapter provides an extended introduction that describes the theory and application of the technology. In the second part of each chapter, we have incorporated detailed procedures related to the use of these technologies and software. Even the pipeline of methodologies and the biologic analysis that they perform have grown and evolved.

Bioinformatics and Drug Discovery targets those interested in the different aspects of drug design, which include academicians (biologists, informatists, chemists, and biochemists), clinicians, and scientists at pharmaceutical companies. All the chapters in this edition of *Bioinformatics and Drug Discovery* have been written by well-established investigators who use the methods on a regular basis. In all, this book is designed to provide readers not only with the planned insightful overview of key topics but also with the customary ample supply of unfailing reproducible step-by-step procedures for techniques described.

Albuquerque, NM

Richard S. Larson

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