

## Book Reviews

*Editorial Policy.* Recently published books and journals (one copy) are invited by the Editorial Office for announcement and review in ANTICANCER RESEARCH (no fee). Each announcement should include the full title of the publication, authors or editors, the number of pages, price, year of publication, ISBN and publisher. Publishers will be notified upon receipt of books and tear sheets of reviews will be sent after publication. Books will be returned to the sender only if the announcement is rejected. Reviews will be objective and clear regarding the content, quality and usefulness of the publication.

### Chemotaxis Methods and Protocols.

*Edited by T. Jin, D. Hereld.*

2009, pp. 537, Euro 96.25, ISBN: 978-1-60761-197-4.

Humana Press/Springer Science+Business Media, New York, NY, USA.

Fundamental to the development and vital functions of organisms, the migration of motile cells due to the detection of shallow gradients of specific chemical signals in their environments, or chemotaxis, can be clearly seen as a major force in cell biology. In *Chemotaxis: Methods and Protocols*, expert researchers in the field provide state-of-the-art methods for investigating cell migration behaviors, studying molecular components involved in detecting extracellular signals and directing cell movement, visualizing spatiotemporal dynamics of the components in signaling networks of chemotaxis in real time, and constructing quantitative models that simulate chemoattractant-induced cell responses. Chapters include introductions to their respective topics, lists of the necessary materials and reagents, step-by-step, readily reproducible laboratory protocols, and notes on troubleshooting and avoiding known pitfalls.

This comprehensive volume serves scientists with practical guidance on the diverse methodologies that are currently propelling chemotaxis research forward in order to further our understanding of this vital biological system.

### Checkpoint Controls and Targets in Cancer Therapy.

*Edited by Z. H. Siddik.*

2010, pp. 273, ISBN: 978-1-60761-177-6.

Humana Press, Totowa, NJ, USA.

There is no question that loss of cell cycle checkpoint regulation is an intrinsic characteristic of cancer. However, many tumors retain parallel checkpoint pathways that are activated by antitumor agents and facilitate therapeutic response. Failures in these therapy-linked checkpoint controls are closely associated with cancers that are highly resistant to therapeutic interventions. *Checkpoint Controls and Targets in Cancer* provides present-day mechanistic understandings of how multiple sets of proteins orchestrate cell cycle progression, discusses critical checkpoint controls that are evaded for cancer development, focuses on checkpoint pathways associated with antitumor effects, and identifies specific

checkpoint regulators for targeting with small molecules in the clinical management of cancer. These aspects of cell cycle checkpoints are articulated critically by renowned experts from both academia and industry, and new concepts are forwarded that challenge existing dogmas. Collectively, this volume provides a unique collection of insightful contributions, which are timely and offer significant interest and appeal to basic, translational and clinical scientists.

### Single Nucleotide Polymorphisms. Methods and Protocols. Second Edition.

*Edited by A. A. Komar.*

2009, pp. 464, ISBN: 978-1-60327-410-4.

Humana Press/Springer Science and Business Media, New York, NY, USA.

In recent years, single nucleotide polymorphisms have received increased and special attention in a rapidly developing field of personalized medicine and drug treatment. Comprising more than eighty percent of all known polymorphisms, single nucleotide polymorphisms (SNPs) are primarily responsible for phenotypic differences between individuals, and have been suggested to affect the development of diseases in humans and the response to drug treatment and environmental stress. In *Single Nucleotide Polymorphisms: Methods and Protocols, Second Edition*, expert researchers explore the latest advances in this area, highlighting the substantial progress that has been made in SNP genotyping, examining recent developments in high-throughput genotyping approaches, and exploring our new understanding of the impact of SNPs on gene function. Chapters address the impact of SNPs on phenotype, examine SNP databases, look at methods that have been applied for SNP bioinformatics discovery and analysis, and discuss advanced experimental approaches used for SNP detection. Composed in the successful *Method in Molecular Biology™* series format, each chapter contains a brief introduction, step-by-step methods, a list of necessary materials, and a Notes section which shares tips on troubleshooting and avoiding known pitfalls.

Current and innovative, is an essential guidebook for individual researchers as well as institutions and companies working in the field.

### Cell Migration Signalling and Mechanisms.

*Edited by F. Entschladen, K. S. Zanker.*

2009, pp. 176, ISBN: 978-3-8055-9321-2.

S. Karger, AG Basel, Switzerland.

Cell migration is a highly complex process which involves several compartments of the cell, including surface receptors, signalling elements and the cytoskeleton. It plays an essential role in embryogenesis, wound healing and inflammatory responses, and a dysregulation of cell movement can cause pathological states such as developmental defects, chronic inflammation, cancer invasion and metastasis.

Covering extracellular regulatory signals and intracellular signal transduction pathways as well as the molecular mechanisms

of migration in stem cells, leukocytes and tumor cells in the adult human organism, this book summarizes the current state of knowledge about cell migration. In the first part, the major aspects of different migratory cells in health and disease are covered, with special emphasis on T lymphocytes. The second part provides a comprehensive overview of the principal molecular mechanisms of migration such as adhesion receptors, cytoskeletal rearrangements and locomotor force generation, which, together, can be referred to as a cell's "migrosome".

With contributions by eminent international scientists from different disciplines this book will serve as a valuable resource not only for researchers in cell biology, immunology and oncology, but also for clinicians who wish to learn more about the role of migratory processes in health and disease.

### **Dictionary of Alkaloids. Second Edition with CD-ROM.**

*Edited by J. Buckingham, K.H. Baggaley, A.D. Roberts, L.F. Szabó.*

2010, pp. 2290, £442.00, ISBN: 978-1-4200-7769-8.

CRC Press / Taylor & Francis Group, Boca Raton, FL, USA.

Drawn from the venerable *Dictionary of Natural Products*, the second edition of the *Dictionary of Alkaloids* categorizes all known alkaloids to present their concise chemical, structural, and physical data.

The dictionary embraces a wide definition of alkaloids. Double in number from the prior edition, the number of alkaloids documented is now over 20,000. For this new edition, every existing entry has been inspected for accuracy, and the great majority updated.

The *Dictionary's* extensive introduction has been completely rewritten and expanded to give a concise, authoritative, and fully referenced account of the different types of alkaloids. Geoffrey Cordell, eminent alkaloid chemist and Editor-in-Chief of the series, *The Alkaloids, Chemistry and Biology*, has provided a foreword that sets the scene for this fascinating group of natural products.

Accompanying the dictionary is a fully searchable CD-ROM that mirrors the book's complete contents and adds valuable functionality. The choice of media allows researchers to conduct high-speed electronic searches, while also giving them the ability to thumb through the book's printed pages. With either format, researchers and readers will find access to data unparalleled both in scope and depth.

### **Bladder Cancer, Diagnosis, Therapeutics and Management.**

*Edited by C.T. Lee, D.P. Wood.*

2010, pp. 330, ISBN: 978-1-58829-988-8.

Humana Press/Springer Science and Business Media, New York, NY, USA.

In this volume leading authorities and researchers present a comprehensive review of the related literature, provide insights into the obstacles of improved survival and discuss methods to advance the field of Bladder Cancer care. Their work aims to spur

innovative thoughts and approaches to common problems in the management of early stage and advanced disease. The book discusses at length the state of bladder cancer staging and the optimal treatment for localized disease. Additional sections review the applications of existing systemic therapies and look at the infrastructure needed to support translational research efforts.

The 29 chapters of the volume are divided into 4 parts: Part I: 1. Improving bladder cancer staging; 2. Understanding. Part II: Optimizing treatment of localized disease; 1. Intravesical therapy; 2. Cystectomy: Cancer control and organ preservation. Part III: Locally advanced / Distant disease: Multimodality treatment. Part IV: Next steps: Translational research.

### **Hypercalcemia Pathophysiology and Treatment.**

*Edited by F. Lumachi, S.M.M. Basso.*

2009, pp. 145, ISBN: 978-1-60805-107-6.

Bentham Science Publishers, Ltd.

Hypercalcemia is a relatively common disorder, which requires specific treatment in order to control symptoms and prevent the development of organ damage. Since primary hyperparathyroidism and malignancy are responsible for more than 90% of all cases of hypercalcemia, greater interest was given in term of developing the best strategy to manage these two critical situations.

The aim of this book is to present up-to-date knowledge on hypercalcemia, its association with renal disorders, and benign and malignant diseases, diagnostic methodologies, as well as surgical and medical treatment. Insights into the etiology, pathogenesis and pathophysiology of hypercalcemia are included in the first four chapters, also providing comprehensive descriptions of clinical features, diagnostic and treatment procedures in the specific diseases associated with hypercalcemia.

The other chapters present details on biochemical findings and ways to monitor complications and therapy, giving suggestions on the current imaging techniques, and deal with the criteria, procedures and results of surgical treatment of hypercalcemia, including unilateral and minimally-invasive parathyroidectomy. Finally, a specific chapter describes the pharmacology of anti-hypercalcemic drugs, also providing information on new drugs and future perspectives.

Uniquely, this book will serve as a complete reference source for oncologists, nephrologists, endocrinologists and other clinicians, as well as for biochemists and pharmacologists, and all those involved in hypercalcemia management and research.

### **Improved Outcomes in Colon and Rectal Surgery.**

*Edited by C.B. Whitlow, D.E. Beck, D.A. Margolin, T.C. Hicks,*

*A.E. Timmcke.*

2010, pp. 418, ISBN: 978-1-42007-152-8.

Informa Healthcare, Colchester, Essex, UK.

Written by many of the world's leading colorectal surgeons, this evidence-based text investigates the risks and benefits of colorectal surgeries. By using clinical pathways, algorithms, and case discussions, the authors identify the best practices for

patient safety and positive outcomes to ensure that physicians correctly recognize potential problems and carefully manage complications.

This volume is an essential reference for all colorectal surgeons, fellows and residents, as well as those working in gastroenterology and the medico-legal profession.

### **Controversies in the Treatment of Lung Cancer.**

*Edited by J. Heide, A. Schmittl, D. Kaiser, W. Hinkelbein.*

2010, pp. 211, Euro 134.50, ISBN: 978-3-8055-9298-7.

S. Karger, AG Basel, Switzerland.

Under the auspices of the 12th International Symposium on Special Aspects in Radiotherapy 2008 in Berlin, acknowledged experts presented their perspectives on small and non-small cell lung cancer, reflecting the latest standards and engaging in controversies in the diagnosis and treatment of this disease.

In the first part of this volume, aspects of the diagnostic workup are highlighted from the histopathologist's point of view, followed by presentations concerning the value of PET-CT and whole-body MRI in the staging of lung cancer. The use and current methods in bronchoscopy, endoscopic ultrasound, video-endoscopy and mediastinoscopy are discussed in detail. The second section presents surgical and radio-oncological treatment concepts for stage I/II non-small cell lung cancer including stereotactic radiotherapy. The third section outlines the curative options for stage III NSCLC: extended surgical approaches, definitive radiochemotherapy and current concepts in adjuvant therapies. Emphasis is also placed on altered fractionation schemes in radiotherapy. Section 4 is dedicated to palliative procedures and the last section gives an in-depth presentation of small cell lung cancer.

This book provides an excellent overview of up-to-date standards and future strategies in lung cancer treatment. It will be of great value to surgeons, radiation oncologists, pulmonary specialists and other clinicians interested in this disease.

### **Hepatocellular Carcinoma. Diagnosis and Treatment. Second Edition.**

*Edited by B.I. Carr.*

2010, pp. 748, Euro 171.15, ISBN: 978-1-60327-373-2.

Humana Press/Springer Science and Business Media, New York, NY, USA.

Hepatocellular cancer is the fifth most common cancer, with 600,000 new cases reported each year worldwide. Additionally, exciting changes in the science of HCC in the last four years have turned the practice of diagnosing and treating the disease upside down. In this volume, the leading experts in the field of HCC thoroughly update and expand upon the critically acclaimed first edition with all the latest developments in the diagnosis and treatment of primary liver cancer. The book details for physicians the diagnostic and therapeutic decision making process for dealing with such problems as incidental tumors in the liver transplant, the role of neo-adjuvant chemotherapy, intra-arterial vs intravenous therapy, the uses of

embolization, and the significance of portal vein thrombus. New chapters discuss the introduction into clinical practice of cell cycle growth inhibitors, an expanded knowledge of Genomics and Proteomics, and novel ways of delivering intra-hepatic chemotherapy. This up-to-date text is a vital resource for today's hepatologists and medical and surgical oncologists.

### **Hepatocellular Carcinoma. A Practical Approach.**

*Edited by B. AP. Knawy, K.R. Reddy, L. Bolondi.*

2009, pp. 162, ISBN: 978-0-4154-8080-2-6.

Informa Healthcare, Colchester, Essex, UK.

The progressive nature of chronic viral hepatitis B and C is likely to lead to an increase in morbidity and mortality. It is projected that the burden of disease from hepatocellular carcinoma (HCC) will rise significantly over the coming years. Despite accumulating knowledge regarding the risk factors of HCC, the screening procedures in place, and advances in therapeutic strategies, the prognosis of HCC continues to remain poor.

This volume covers comprehensively recent developments on the diagnosis, screening and medical and surgical management of HCC, and is essential reading for gastroenterologists, hepatologists, liver surgeons, hepatobiliary surgeons, oncologists and others working in the field of HCC.

### **A Practical Guide to Assay Development and High-Throughput Screening in Drug Discovery.**

2010, pp. 269, £99.00, ISBN: 978-1-4200-7050-7.

CRC Press / Taylor & Francis Group, Boca Raton, FL, USA.

The development of suitable assays, the integration of appropriate technology, and the effective management of the essential infrastructure are all critical to the success of any high-throughput screening (HTS) endeavor. However, few scientists have the multidisciplinary experience needed to control all aspects of an HTS drug discovery project. This volume integrates the experience of diverse experts who offer fundamental and practical guidance across numerous situations.

Topics discussed include: Assay developments for important target classes such as protein kinases and phosphatases, proteases, nuclear receptors, G protein-coupled receptors, ion channels, and heat shock proteins; Assay developments for cell viability, apoptosis, and infectious diseases; The application of emerging technologies and systems, including image-based high content screening, RNA interference, and primary cells; The essential components of the integrated HTS process, such as screening automation, compound library management, the screening of natural products from botanical sources, and screening informatics.

Designed to motivate researchers to bring further advances to the field, this volume provides practical guidance on how to initiate, validate, optimize, and manage a bioassay intended to screen large collections of compounds. Drawing on the knowledge from experts actively involved in assay development and HTS, this is a resource that is both comprehensive and focused.

**Mass Spectrometry of Nucleosides and Nucleic Acids.***Edited by J.H. Banoub, P.A. Limbach.*

2010, pp. 492, £95.00, ISBN: 978-1-4200-4402-7.

CRC Press / Taylor &amp; Francis Group, Boca Raton, FL, USA.

Assembling the work of an international panel of researchers, *Mass Spectrometry of Nucleosides and Nucleic Acids* summarizes and reviews the latest developments in the field and provides a window on the next generation of analysis. In the 1990s, the major focus of mass spectrometry investigators involved in nucleic acids analysis was DNA sequencing, spurred by the development of ESI and MALDI for biomolecule analysis and by the interest of the broader scientific community in obtaining the sequences of the human and other genomes. Now, nearly 20 years later, the field has matured and expanded to include a wide variety of analytical and biological investigations into nucleosides, nucleotides and nucleic acids.

Beginning with an overview of recent developments, the book highlights the most popular ionization methods and illustrates the diversity of strategies employed in the characterization and sequencing of DNA and RNA oligomers, nucleosides, nucleotides, and adducts. Included are developments in nucleic acid structural analysis, quantitative determination of DNA and RNA adducts and modifications, mass spectrometry-based sequencing and nucleic acid identification, and recent findings related to the gas-phase reactivity and properties of nucleic acids.

Providing a discussion of both the fundamental aspects of nucleic acid analysis and their application in fields of structural biology, pharmacology, and clinical research, this text serves to inform researchers in the life sciences who are interested in these applications yet lacking in mass spectrometry experience, as well as mass spectrometry investigators who are already familiar with the fundamentals but interested in learning about emerging research areas and applications involving nucleic acids.

The exciting developments in mass spectrometry technology have fueled advances in our understanding of nucleic acids and their complexes. The contributions presented in this volume capture the range of these advances, helping to inspire new findings and avenues of research.

**Drug-DNA Interaction Protocols. Second Edition.***Edited by K.R. Fox.*

2010, pp. 321, ISBN: 978-1-60327-417-3.

Humana Press/Springer Science and Business Media, New York, NY, USA.

The last few years have witnessed the creation of new generations of sequence reading compounds, which have potential for targeting specific DNA sequences. In this volume, expert researchers explore these compounds, revealing how a deeper understanding of the structure of DNA, along with an improved ability to manipulate it, has led to much progress in recent years. Chapters describe a new arsenal of techniques for probing the interactions between drugs and DNA, including various biophysical techniques for quantifying these interactions and for describing them in molecular and atomic detail, and they comprehensively consider both molecular and

cellular approaches. Composed in the successful *Methods in Molecular Biology*<sup>™</sup> series format, each chapter contains a brief introduction, step-by-step methods, a list of necessary materials, and a Notes section which shares tips on troubleshooting and avoiding known pitfalls.

This authoritative book is a critical volume that includes a wide range of chapters, which together provide methods for assessing the strength and mode of binding, the sequence selectivity, and the effect on biological systems.

**Copper Amine Oxidases. Structures, Catalytic Mechanisms and Role in Pathophysiology.***Edited by G. Floris, B. Mondovi.*

2009, pp. 344, £95.00, ISBN: 978-1-4200-7680-6.

CRC Press / Taylor &amp; Francis Group, Boca Raton, FL, USA.

Fundamental in controlling the metabolism of biogenic amines, copper amine oxidase proteins (CAOs) play a vital role in the physiology and pathology of mammals, plants, and microorganisms. Research continues to implicate their critical involvement in healthy cells, as well as in clinical manifestations associated with a wide range of diseases, including many previously considered intractable.

While progress in the field has been steady since the 1980s, the recent introduction of new investigative technology has led to a wealth of new information. Among other findings, CAOs have been linked to tumor cell proliferation and differentiation. They are also now being investigated as a new class of DNA-binding proteins.

Crossing disciplines to provide researchers with the cohesive resource they previously lacked, this volume brings together many of the pioneering researchers directly responsible for moving the field forward. Exceptionally comprehensive, this important work: Provides a historical context for today's research; Discusses the role of CAOs in normal cell function; Looks at the connection of CAO activity to various disease states including intestinal, renal, neural, cardio, and tissue-related disease; Describes the structure of the enzymes, and examines the unusual cofactor 6-hydroxydopa quinone derived from a posttranslational modification of a tyrosine residue; Details the differences found in CAOs discovered in bacteria, plants, and mammals; Explores emerging pharmacological applications and the role of CAOs as antioxidant and cardioprotective agents.

**Protein Discovery Technologies.***Edited by R. Pasqualini, W. Arap.*

2009, pp. 246, £95.00, ISBN: 978-0-8247-5468-6.

CRC Press / Taylor &amp; Francis Group, Boca Raton, FL, USA.

Featuring contributions from a distinguished international panel of experts, *Protein Discovery Technologies* elucidates the principles, techniques, strategies, and broad range of applications of protein discovery by documenting the often untold stories and personal accounts of the contributors' past scientific achievements.

Rather than an exhaustive field analysis, this globally pertinent resource in-depth discussions of various methods for protein discovery, including bioinformatics, interaction cloning, protein purification, phage display, non-primate models, and

chemical targeting. It also explores biological themes through the examination of cell death, angiogenesis, hemostasis, development, signal transduction, transcriptional control, cell cycle control, neurobiology, and quality control. This readily accessible resource discusses an array of interesting topics, including; Tumor necrosis factors; The origin of interferon as an angiogenesis inhibitor; In vivo combinatorial mapping of vascular zip codes; Extracellular matrix degradation as regulators of angiogenesis and tumor growth; A matricellular protein prototype; The use of RING finger proteins as E3 ubiquitin ligases.

Whereas most books tend to be more specialized, this book contains a broad view of the protein discoveries in many different fields, making this volume a valuable reference for today's researchers, both the new and more seasoned, who are seeking a newfound perspective or a deeper understanding of this exciting field.

### **Design of Caspase Inhibitors as Potential Clinical Agents.**

*Edited by T. O'Brien, S.D. Linton.*

2009, pp. 299, £108.00, ISBN: 978-1-4200-4540-6.

CRC Press / Taylor & Francis Group, Boca Raton, FL, USA.

Caspases represent one of the most specific protease families described to date. These extremely important enzymes are crucial to the destruction of aberrant cells – the body's self-protection mechanism for warding off the growth of abnormal cells, many of which can promote cancer. This volume introduces cutting-edge evidence regarding caspases' role in pro-inflammatory responses. New research now shows that the inhibition of caspase function is a critical component for the treatment of many diseases, including; Arthritic and neurological disorders; Lung disease; Hereditary fever syndromes; Inflammatory bowel and skin diseases; Sepsis; Liver fibrosis.

Under the editorial guidance of authoritative inflammatory disease, small molecule discovery, and apoptosis researchers, the book organizes the wide array of caspase literature into one convenient resource. It also summarizes the relative difficulty of transitioning a caspase small molecule inhibitor from the lab to the clinic and suggests approaches to circumvent this difficulty. In addition to presenting the present and future therapeutic potential for caspase inhibitors, this important reference: Includes 16 colored illustrations to bolster understanding of complex concepts; Presents thorough biological research and data from animal disease knockout studies; Discusses the steps involved with small molecule inhibitor discovery; Examines initial clinical trials of novel caspase inhibitors.

### **Pharmacoeconomics from Theory to Practice.**

*Edited by R.J.G. Arnold.*

2010, pp. 243, £76.99, ISBN: 978-1-4200-8422-1.

CRC Press / Taylor & Francis Group, Boca Raton, FL, USA.

As a running theme, the book explores the collaboration among members of the pharmaceutical industry, academia, and government in the development of the human papillomavirus

vaccine to demonstrate the full range of ethical and moral issues, as well as overall public health and commercial concerns that are often involved in decisions entailing cost-effectiveness analysis. Readers will learn about the international use of pharmacoeconomics in drug regulation, drug approval, and pricing, and the book provides examples of pharmacoeconomic models used to support these purposes in government, the pharmaceutical industry, and healthcare settings.

In this era of finite budgets, healthcare rationing, medication shortages, and the global aging and burgeoning of populations, numerous stakeholders in the healthcare arena must understand the basic principles of pharmacoeconomics and how these may be correctly applied to facilitate drug development, drug approval, rationing, patient segmentation, disease management, and pricing model development. Focusing on how to save money, not by restricting access to necessary services, but by using available resources more efficiently and rationally, this volume arms decision makers with the tools they need to make wise choices in an area where the stakes are so high.

### **Omega-3 Fatty Acids and the DHA Principle.**

*Edited by R.C. Valentine, D.L. Valentine.*

2010, pp. 249, £99.00, ISBN: 978-1-4398-1299-0.

CRC Press / Taylor & Francis Group, Boca Raton, FL, USA.

This volume explores the roles of omega-3 fatty acids in cellular membranes ranging from human neurons and swimming sperm to deep sea bacteria, and develops a principle by which to assess their benefits and risks.

The DHA Principle states that the blending of lipids to form cellular membranes is evolutionarily-honed to maximize benefit while minimizing risk, and that a complex blending code involving conformational dynamics, energy stress, energy yield, and chemical stability underlies all cellular membranes. This book lays the groundwork to understanding this code. It examines the evolution of DHA and the membrane and explores the general properties of omega-3s and other membrane lipids. It then focuses on cellular biology before shifting to a practical discussion on applications. The authors discuss the *DHA Principle* as applied to petroleum degradation, winemaking, global warming, molecular farming, aging, neurodegenerative diseases, and the prevention of colon cancer.

Reflecting the increased public interest that has emerged over the years, this volume uses an integrative approach to explain the complex roles of omega-3s in the membrane. Incorporating principles from chemistry, cellular biology, evolution, and ecology, this work gives researchers in a variety of fields the building blocks to stimulate further study.

### **Protein Engineering and Design.**

*Edited by S.J. Park, J.R. Cochran.*

2010, pp. 402, £76.99, ISBN: 978-1-4200-7658-5.

CRC Press / Taylor & Francis Group, Boca Raton, FL, USA.

Experimental protein engineering and computational protein design are broad but complementary strategies for developing

proteins with altered or novel structural properties and biological functions. By describing cutting-edge advances in both of these fields, this volume aims to cultivate a synergistic approach to protein science.

Exploring the most important strategies used by protein scientists, including experimental protein engineering and computational protein design, this volume examines: High-throughput screening platforms for protein engineering; Key techniques used for diversity generation; The use of non-natural amino acids in protein engineering; Computational and

informatics algorithms used in protein engineering; Core principles of computational protein design; Heuristic protein design; Examples of therapeutics, enzymes, biomaterials, and other proteins that are engineered by rational or combinatorial approaches; Engineered proteins that exemplify the use of both computational and combinatorial methods.

Concluding with a chapter outlining current challenges in the field, this book makes computational protein design and diversity-oriented protein engineering widely accessible to a broad audience in academia and industry alike.

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## Announcements

### **6th Charité-Mayo Conference.**

**5-8 May 2010, Berlin, Germany.**

Information: [www.charite-mayo.de](http://www.charite-mayo.de)

### **1st International Symposium on Innovative Anticancer Drugs and Strategies.**

**2-4 June 2010, Newcastle upon Tyne, UK.**

Information: [www.northumbria.ac.uk/anticancersymposium](http://www.northumbria.ac.uk/anticancersymposium)

### **24th International Congress of Computer Assisted Radiology and Surgery.**

**23-26 June 2010, Geneva, Switzerland.**

Information: [www.carc-int.org](http://www.carc-int.org)

### **3rd International Congress Biotechnologies for Spinal Surgery.**

**1-4 September 2010, Amsterdam, The Netherlands.**

Information: [www.biospine.org](http://www.biospine.org)

### **8th BUON (Balkan Union of Oncology) Congress.**

**9-11 September 2010, Sibiu, Romania.**

Information: [www.buon2010.econgres.ro](http://www.buon2010.econgres.ro)