Contents

Preface ........................................................................................................... v
Contributors .............................................................................................. ix
Contents of Volume 1 ..................................................................................... xiii

1 Druggable Signaling Proteins
   Mouldy Sioud and Marianne Leirdal .................................................. 1

2 DNA Methylation and Histone Modifications in Patients
   With Cancer: Potential Prognostic and Therapeutic Targets
   Michel Herranz and Manel Esteller .................................................. 25

3 Wnt Signaling as a Therapeutic Target for Cancer
   Andreas Herbst and Frank Thomas Kolligs ................................... 63

4 The NG2/HMP Proteoglycan as a Cancer Therapeutic Target
   Martha Chekenya and Heike Immervoll ...................................... 93

5 Heterotrimeric G Proteins and Disease
   Øyvind Melien ................................................................................. 119

6 High-Mobility Group Box-1 Isoforms as Potential Therapeutic Targets in Sepsis
   William Parrish and Luis Ulloa .................................................... 145

7 Antisense Oligonucleotides: Target Validation and Development of Systemically Delivered Therapeutic Nanoparticles
   Chuanbo Zhang, Jin Pei, Deepak Kumar, Isamu Sakabe,
   Howard E. Boudreau, Prafulla C. Gokhale,
   and Usha N. Kasid ........................................................................ 163

8 Nucleic Acid-Based Aptamers as Promising Therapeutics in Neoplastic Diseases
   Laura Cerchia and Vittorio de Franciscis ....................................... 187

9 Guidelines for the Selection of Effective Short-Interfering RNA Sequences for Functional Genomics
   Kumiko Ui-Tei, Yuki Naito, and Kaoru Saigo ............................... 201
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Suppression of Apoptosis in the Liver by Systemic and Local Delivery of Small-Interfering RNA</td>
<td>Lars Zender and Stefan Kubicka</td>
<td>217</td>
</tr>
<tr>
<td>11</td>
<td>Target Validation Using RNA Interference in Solid Tumors</td>
<td>Seyedhossein Aharinejad, Mouldy Sioud, Trevor Lucas, and Dietmar Abraham</td>
<td>227</td>
</tr>
<tr>
<td>12</td>
<td>Validation of Telomerase and Survivin as Anticancer</td>
<td>Nadia Zaffaroni, Marzia Pennati, and Marco Folini</td>
<td>239</td>
</tr>
<tr>
<td>13</td>
<td>Collagen-Induced Arthritis in Mice: A Major Role for Tumor Necrosis Factor-α</td>
<td>Richard O. Williams</td>
<td>265</td>
</tr>
<tr>
<td>14</td>
<td>Novel Opportunities for Therapeutic Targeting in Systemic Autoimmune Diseases</td>
<td>Meryem Ouarzane and Moncef Zouali</td>
<td>285</td>
</tr>
<tr>
<td>15</td>
<td>Considerations for Target Validation and Industrial Approaches</td>
<td>Carlos R. Plata-Salamán and Sergey E. Ilyin</td>
<td>299</td>
</tr>
<tr>
<td>16</td>
<td>Regulatory RNAs: Future Perspectives in Diagnosis, Prognosis, and Individualized Therapy</td>
<td>Marjorie P. Perron, Vincent Boissonneault, Lise-Andrée Gobeil, Dominique L. Ouellet, and Patrick Provost</td>
<td>311</td>
</tr>
<tr>
<td>17</td>
<td>Treatment Options and Individualized Medicine</td>
<td>Mouldy Sioud and Øyvind Melien</td>
<td>327</td>
</tr>
</tbody>
</table>

Index                                                                                           | 341  |