

# Contents

<b>1 Roles of Androgen Receptor Coregulators and Cell Signaling in the Regulation of Androgen-Responsive Genes .....</b>	<b>1</b>
Irina U. Agoulnik and Nancy L. Weigel	
<b>2 Selective and Classical Androgen Response Elements in Androgen-Regulated Gene Expression .....</b>	<b>13</b>
Frank Claessens, Liesbeth Clinckemalie, Helsen Christine, Lien Spans, Vanessa Dubois, Michaël Laurent, Steven Boonen, and Dirk Vanderschueren	
<b>3 Negative Androgen-Response Elements in Androgen Target Genes .....</b>	<b>29</b>
Wei Qi and Zhengxin Wang	
<b>4 Chromatin Looping and Long Distance Regulation by Androgen Receptor .....</b>	<b>43</b>
Benjamin Sunkel and Qianben Wang	
<b>5 The Functionality of Prostate Cancer Predisposition Risk Regions Is Revealed by AR Enhancers .....</b>	<b>59</b>
Houtan Noushmehr, Simon G. Coetzee, Suhni K. Rhie, Chunli Yan, and Gerhard A. Coetzee	
<b>6 Mechanisms of ARE-Independent Gene Activation by the Androgen Receptor in Prostate Cancer Cells: Potential Targets for Better Intervention Strategies .....</b>	<b>85</b>
Manohar Ratnam, Mugdha Patki, Mesfin Gonit, and Robert Trumbly	
<b>7 Androgen Action, Wnt Signaling, and Prostate Tumorigenesis .....</b>	<b>101</b>
Zijie Sun and Suk Hyung Lee	

<b>8</b>	<b>Toward Revealing the Complexity of Androgen-Responsive Protein and Noncoding Transcripts in Prostate Cancer .....</b>	<b>117</b>
	Melanie L. Lehman and Colleen C. Nelson	
<b>9</b>	<b>Androgen-Responsive Gene Expression in Prostate Cancer Progression .....</b>	<b>135</b>
	Amy H. Tien and Marianne D. Sadar	
<b>10</b>	<b>Androgen Receptor-Regulated Genes in Prostate Cancer Initiation Versus Metastasis .....</b>	<b>155</b>
	Soo Ok Lee, Chiung-Kuei Huang, Luo Jie, and Chawnshang Chang	
<b>11</b>	<b>Androgen-Independent Induction of Androgen-Responsive Genes by Interleukin-6 Regulation.....</b>	<b>177</b>
	Zoran Culig	
<b>12</b>	<b>The Effect of AR Overexpression on Androgen Signaling in Prostate Cancer.....</b>	<b>187</b>
	Alfonso Urbanucci, Kati K. Waltering, Ian G. Mills, and Tapio Visakorpi	
<b>13</b>	<b>The Expression Signature of Androgen Receptor Splice Variants and Their Distinctive Transcriptional Activities in Castration-Resistant Prostate Cancer .....</b>	<b>201</b>
	Stephen R. Plymate and Jun Luo	
<b>14</b>	<b>Androgen Regulation of the Cell Cycle in Prostate Cancer .....</b>	<b>215</b>
	Haojie Huang	
<b>15</b>	<b>Androgen Receptor Signaling Interactions Control Epithelial–Mesenchymal Transition (EMT) in Prostate Cancer Progression .....</b>	<b>227</b>
	Sarah K. Martin, Michael V. Fiandalo, and Natasha Kyprianou	
<b>16</b>	<b>Androgen Receptor Regulation of Serum Response Factor Signaling in Prostate Cancer.....</b>	<b>257</b>
	Alissa R. Verone and Hannelore V. Heemers	
<b>17</b>	<b>Regulation of Angiogenesis by Androgen-Responsive Gene EAF2.....</b>	<b>273</b>
	Laura E. Pascal and Zhou Wang	
<b>18</b>	<b>The Role of miR-21, an Androgen-Regulated MicroRNA, in Prostate Cancer.....</b>	<b>285</b>
	Judit Ribas and Shawn E. Lupold	

**19 Androgen-Dependent Oncogenic Activation of ETS  
Transcription Factors by Recurrent Gene Fusions  
in Prostate Cancer: Biological and Clinical Implications ..... 307**  
Albert Dobi, Taduru Sreenath, and Shiv Srivastava

**20 Clusterin as a Target for Treatment of Castration-Resistant  
Prostate Cancer ..... 329**  
Amina Zoubeydi and Martin Gleave

**Index..... 341**

Androgen-Responsive Genes in Prostate Cancer  
Regulation, Function and Clinical Applications

Wang, Z. (Ed.)

2013, IX, 348 p. 75 illus., 37 illus. in color., Hardcover

ISBN: 978-1-4614-6181-4