

Contents

<i>Preface</i>	<i>v</i>
<i>Contributors</i>	<i>ix</i>
1 Clinical, Epidemiologic, and Laboratory Aspects of Methicillin-Resistant <i>Staphylococcus aureus</i> Infections	1
<i>Elizabeth L. Palavecino</i>	
2 Community-Associated Methicillin-Resistant <i>Staphylococcus aureus</i> Case Studies	25
<i>Madeleine G. Sowash and Anne-Catrin Uhlemann</i>	
3 Rapid Methods for Detection of MRSA in Clinical Specimens	71
<i>Elizabeth L. Palavecino</i>	
4 Immunofluorescence Microscopy for the Detection of Surface Antigens in Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA)	85
<i>Yekaterina Timofeyeva, Ingrid L. Scully, and Annaliesa S. Anderson</i>	
5 Internal Transcribed Spacer (ITS)-PCR Identification of MRSA	97
<i>Shin-ichi Fujita</i>	
6 Pulsed-Field Gel Electrophoresis Typing of <i>Staphylococcus aureus</i> Isolates	103
<i>Yiping He, Yanping Xie, and Sue Reed</i>	
7 Multilocus Sequence Typing (MLST) of <i>Staphylococcus aureus</i>	113
<i>Nicholas A. Saunders and Anne Holmes</i>	
8 Staphylococcal Cassette Chromosome <i>mec</i> (SCC <i>mec</i>) Analysis of MRSA	131
<i>Teruyo Ito, Kyoko Kuwahara-Arai, Yuki Katayama, Yuki Uehara, Xiao Han, Yoko Kondo, and Keiichi Hiramatsu</i>	
9 Genetic Interruption of Target Genes for Investigation of Virulence Factors	149
<i>Adhar C. Manna</i>	
10 Molecular Analysis of Staphylococcal Superantigens	169
<i>Wilmara Salgado-Pabón, Laura C. Case-Cook, and Patrick M. Schlievert</i>	
11 Investigation of <i>Staphylococcus aureus</i> Adhesion and Invasion of Host Cells	187
<i>Junshu Yang and Yinduo Ji</i>	
12 Investigation of Biofilm Formation in Clinical Isolates of <i>Staphylococcus aureus</i>	195
<i>James E. Cassat, Mark S. Smeltzer, and Chia Y. Lee</i>	

13	Transcriptomic Analysis of <i>Staphylococcus aureus</i> Using Microarray and Advanced Next-Generation RNA-seq Technologies.....	213
	<i>Ting Lei, Aaron Becker, and Yinduo Ji</i>	
14	Proteomic Approach to Investigate Pathogenicity and Metabolism of Methicillin-Resistant <i>Staphylococcus aureus</i>	231
	<i>Patrice François, Alexander Scherl, Denis Hochstrasser, and Jacques Schrenzel</i>	
15	Metabolomic Investigation of Methicillin-Resistant <i>Staphylococcus aureus</i>	251
	<i>Ting Lei, Lei Wang, Chi Chen, and Yinduo Ji</i>	
16	Treatment of Infections Due to Resistant <i>Staphylococcus aureus</i>	259
	<i>Gregory M. Anstead, Jose Cadena, and Heta Javeri</i>	
17	Anti-infective Drug Development for MRSA.....	311
	<i>Anu Daniel</i>	
18	Animal Models in Drug Development for MRSA	333
	<i>Andrea Marra</i>	
	<i>Index</i>	347

Methicillin-Resistant Staphylococcus Aureus (MRSA)

Protocols

Ji, Y. (Ed.)

2014, X, 353 p. 54 illus., 24 illus. in color., Hardcover

ISBN: 978-1-62703-663-4

A product of Humana Press