

# Contents

<b>1</b>	<b>Introduction to Biofilms</b> . . . . .	<b>1</b>
	Thomas Bjarnsholt	
<b>2</b>	<b>Chronic Wound Colonization, Infection, and Biofilms</b> . . . . .	<b>11</b>
	Klaus Kirketerp-Møller, Karen Zulkowski, and Garth James	
<b>3</b>	<b>The Relation of Biofilms to Chronic Otitis Media and Other Ear-Related Chronic Infections</b> . . . . .	<b>25</b>
	Preben Homøe and Helle Krogh Johansen	
<b>4</b>	<b>Human Oral Bacterial Biofilms: Composition, Dynamics, and Pathogenesis</b> . . . . .	<b>35</b>
	Robert J. Palmer Jr., Richard Darveau, Richard J. Lamont, Bente Nyvad, and Ricardo P. Teles	
<b>5</b>	<b>Implant-Associated Infection</b> . . . . .	<b>69</b>
	Werner Zimmerli and Andrej Trampuz	
<b>6</b>	<b>The Role of Bacterial Biofilms in Infections of Catheters and Shunts</b> . . . . .	<b>91</b>
	Trine Rolighed Thomsen, Luanne Hall-Stoodley, Claus Moser, and Paul Stoodley	
<b>7</b>	<b>Osteomyelitis</b> . . . . .	<b>111</b>
	Graeme A. O'May, Rebecca A. Brady, Ranjani Prabhakara, Jeff G. Leid, Jason H. Calhoun, and Mark E. Shirtliff	
<b>8</b>	<b>The Importance of Biofilms in Chronic Rhinosinusitis</b> . . . . .	<b>139</b>
	Jeff G. Leid, Emily K. Cope, Stacy Parmenter, Mark E. Shirtliff, Scot Dowd, Randall Wolcott, Randall Basaraba DVM, Darrell Hunsaker, James Palmer, and Noam Cohen	
<b>9</b>	<b><i>Helicobacter pylori</i> and Biofilm Formation</b> . . . . .	<b>161</b>
	Lone Rasmussen and Leif Percival Andersen	

<b>10</b>	<b><i>Pseudomonas aeruginosa</i> Biofilms in the Lungs of Cystic Fibrosis Patients</b>	<b>167</b>
	Niels Højby, Helle Krogh Johansen, Claus Moser, Oana Ciofu, Peter Østrup Jensen, Mette Kolpen, Lotte Mandsberg, Michael Givskov, Søren Molin, and Thomas Bjarnsholt	
<b>11</b>	<b>Innate Immune Response to Infectious Biofilms</b>	<b>185</b>
	Peter Østrup Jensen and Claus Moser	
<b>12</b>	<b>Adaptive Immune Responses and Biofilm Infections</b>	<b>201</b>
	Claus Moser and Peter Østrup Jensen	
<b>13</b>	<b>Antibiotic Tolerance and Resistance in Biofilms</b>	<b>215</b>
	Oana Ciofu and Tim Tolker-Nielsen	
<b>14</b>	<b>Novel and Future Treatment Strategies</b>	<b>231</b>
	Morten Alhede, Tim Holm Jakobsen, and Michael Givskov	
<b>15</b>	<b>Different Methods for Culturing Biofilms In Vitro</b>	<b>251</b>
	S. Brook Peterson, Yasuhiko Irie, Bradley R. Borlee, Keiji Murakami, Joe J. Harrison, Kelly M. Colvin, and Matthew R. Parsek	
<b>16</b>	<b>In Vivo Models of Biofilm Infection</b>	<b>267</b>
	Kendra P. Rumbaugh and Nancy L. Carty	
<b>17</b>	<b>Summary and Perspectives</b>	<b>291</b>
	Thomas Bjarnsholt, Peter Østrup Jensen, Claus Moser, and Niels Højby	
<b>Index</b>		<b>295</b>

Biofilm Infections

Bjarnsholt, Th.; Jensen, P.Ø.; Moser, C.; Høiby, N. (Eds.)

2011, XIV, 314 p., Hardcover

ISBN: 978-1-4419-6083-2