# Contents

1 **Introduction** ............................................................................................................. 1  
   Stanley A. Plotkin

2 **“Variolation” and Vaccination in Late Imperial China, Ca 1570–1911** ................. 5  
   Angela Ki Che Leung

3 **Edward Jenner’s Role in the Introduction of Smallpox Vaccine** ................. 13  
   Derrick Baxby

4 **Edward Jenner, Benefactor to Mankind** .................................................................. 21  
   Ian Bailey

5 **Smallpox Eradication: The Vindication of Jenner’s Prophesy** .................. 27  
   Frank Fenner

6 **Pasteur and the Birth of Vaccines Made in the Laboratory** ...................... 33  
   Hervé Bazin

7 **Antituberculosis BCG Vaccine: Lessons from the Past** .............................. 47  
   Marina Gheorgiu

8 **A History of Toxoids** ............................................................................................ 57  
   Edgar H. Relyveld

9 **Vaccination Against Typhoid Fever: A Century of Research. End of the Beginning or Beginning of the End?** ........................................... 65  
   Philippe Sansonetti

10 **The History of Pertussis Vaccination: From Whole-Cell to Subunit Vaccines** ................................................................. 73  
    Marta Granström
11 Bacterial Polysaccharide Vaccines......................................................... 83
   Robert Austrian

12 Polysaccharide–Protein Conjugate Vaccines........................................ 91
   John B. Robbins, Rachel Schneerson, Shouson C. Szu, and Vince Pozsgay

13 After Pasteur: History of New Rabies Vaccines................................. 103
   Hilary Koprowski

14 Yellow Fever Vaccines: The Success of Empiricism, Pitfalls of Application, and Transition to Molecular Vaccinology ................... 109
   Thomas P. Monath

15 A Race with Evolution: A History of Influenza Vaccines....................... 137
   Edwin D. Kilbourne

16 The Role of Tissue Culture in Vaccine Development........................... 145
   Samuel L. Katz, Catherine M. Wilfert, and Frederick C. Robbins

17 Viral Vaccines and Cell Substrate: A “Historical” Debate .................... 151
   Florian Horaud

18 History of Koprowski Vaccine Against Poliomyelitis .......................... 155
   Hilary Koprowski in collaboration with Stanley Plotkin

19 Oral Polio Vaccine and the Results of Its Use..................................... 167
   Joseph Melnick in collaboration with Stanley Plotkin

20 The Development of IPV ........................................................................ 179
   A. John Beale

21 The Long Prehistory of Modern Measles Vaccination .......................... 189
   Constant Huygelen

22 The History of Measles Virus and the Development and Utilization of Measles Virus Vaccines ......................................................... 199
   Samuel L. Katz

23 The Development of Live Attenuated Mumps Virus Vaccine in Historic Perspective and Its Role in the Evolution of Combined Measles–Mumps–Rubella .............................. 207
   Maurice R. Hilleman

24 History of Rubella Vaccines and the Recent History of Cell Culture .................................................................................. 219
   Stanley A. Plotkin
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Three Decades of Hepatitis Vaccinology in Historic Perspective. A Paradigm of Successful Pursuits</td>
<td>233</td>
</tr>
<tr>
<td></td>
<td>Maurice R. Hilleman</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Vaccination Against Varicella and Zoster: Its Development and Progress</td>
<td>247</td>
</tr>
<tr>
<td></td>
<td>Anne Gershon</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Developmental History of HPV Prophylactic Vaccines</td>
<td>265</td>
</tr>
<tr>
<td></td>
<td>John T. Schiller and Douglas R. Lowy</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>History of Rotavirus Vaccines Part I: RotaShield</td>
<td>285</td>
</tr>
<tr>
<td></td>
<td>Albert Z. Kapikian</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Rotavirus Vaccines Part II: Raising the Bar for Vaccine Safety Studies</td>
<td>315</td>
</tr>
<tr>
<td></td>
<td>Paul A. Offit and H. Fred Clark</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Veterinary Vaccines in the Development of Vaccination and Vaccinology</td>
<td>329</td>
</tr>
<tr>
<td></td>
<td>Philippe Desmettre</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index</td>
<td>339</td>
</tr>
</tbody>
</table>
History of Vaccine Development
Plotkin, S.A. (Ed.)
2011, XIII, 349 p., Hardcover
ISBN: 978-1-4419-1338-8