

Contents

Part I Evolution and Epidemiology

Influenza Virus: The Biology of a Changing Virus	3
Samira Mubareka and Peter Palese	
The Epidemiology of Influenza and Its Control	27
Lone Simonsen, Cécile Viboud, Robert J. Taylor, and Mark A. Miller	
Epidemiology of Influenza in Tropical and Subtropical Low-Income Regions	55
W. Abdullah Brooks and Mark C. Steinhoff	
The Origin and Evolution of H1N1 Pandemic Influenza Viruses	77
Robert G. Webster, Richard J. Webby, and Michael Perdue	
The Emergence of 2009 H1N1 Pandemic Influenza	95
Benjamin Greenbaum, Vladimir Trifonov, Hossein Khiabani, Arnold Levine, and Raul Rabadan	

Part II Immunity and Vaccine Strategies

Influenza Vaccines Have a Short but Illustrious History of Dedicated Science Enabling the Rapid Global Production of A/Swine (H1N1) Vaccine in the Current Pandemic	115
John Oxford, Anthony Gilbert, and Robert Lambkin-Williams	
Influenza and Influenza Vaccination in Children	149
Romina Libster and Kathryn M. Edwards	

The Immune Response to Influenza A Viruses	173
Justine D. Mintern, Carole Guillonneau, Stephen J. Turner, and Peter C. Doherty	
Correlates of Protection Against Influenza	199
Emanuele Montomoli, Barbara Capecchi, and Katja Hoschler	
The Role of Animal Models In Influenza Vaccine Research	223
Catherine J. Luke and Kanta Subbarao	
Live Attenuated Influenza Vaccine	273
Harry Greenberg and George Kemble	
Cell Culture-Derived Influenza Vaccines	293
Philip R. Dormitzer	
Conserved Internal Proteins as Potential Universal Vaccines	313
Alan Shaw	
Emulsion-Based Adjuvants for Improved Influenza Vaccines	327
Derek T. O'Hagan, Theodore Tsai, and Steven Reed	
Lessons Learned from Clinical Trials in 1976 and 1977 of Vaccines for the Newly Emerged Swine and Russian Influenza A/H1N1 Viruses	359
Robert B. Couch	
Occurrences of the Guillain–Barré Syndrome (GBS) After Vaccinations with the 1976 Swine A/H1N1 Vaccine, and Evolution of the Concern for an Influenza Vaccine-GBS Association	373
Robert B. Couch	
Human Monoclonal Antibodies for Prophylaxis and Treatment of Influenza	383
Wouter Koudstaal, Fons G. UytdeHaag, Robert H. Friesen, and Jaap Goudsmit	
Part III Economic and Social Implications	
Learning from the First Pandemic of the Twenty-First Century	401
Giuseppe Del Giudice and Rino Rappuoli	
Economic Implications of Influenza and Influenza Vaccine	425
Julia A. Walsh and Cyrus Maher	
Index	441



<http://www.springer.com/978-3-0346-0278-5>

Influenza Vaccines for the Future

Rappuoli, R.; Del Giudice, G. (Eds.)

2011, XIV, 446 p. 70 illus., 30 illus. in color., Hardcover

ISBN: 978-3-0346-0278-5