

Contents

TER MEULEN, Volker: Opening Address.....	9
COSSART, Pascale: Introductory Presentation	11
HAASE, Axel: Welcome Address	13

Political and Social Aspects of Infectious Diseases

LEVEN, Karl-Heinz: Biological Warfare – Perspectives from Premodern History ..	19
HEYMANN, David L.: The Global Infectious Disease Situation.....	27
MUELLER, Steffen, JIANG, Ping, RIEDER, Elizabeth, DEJESUS, Nidia, IWASAKI, Akiko, PAUL, Aniko, CELLO, Jeronimo, and WIMMER, Eckard: Pathogenesis and Prevention of Poliomyelitis and the Chemical Synthesis of Poliovirus	35
KURTH, Reinhard, and RASCH, Gernot: Scientific, Social and Political Aspects of Virus Eradication.....	45
ATLAS, Ronald M.: Bioterrorism: New Challenges for Infectious Disease Research and Education.....	53

Mechanisms of Genome Flexibility

HACKER, Jörg, DOBRINDT, Ulrich, GOTTSCHALK, Gerhard, BRÜGGEMANN, Holger, CARNIEL, Elisabeth, BUCHRIESER, Carmen, MIDDENDORF, Barbara, and HOCHHUT, Bianca: Analysis of Infectious Agents and the Concept of Pathogenicity Islands	61
MAZEL, Didier: Integron Formation.....	67
WEBSTER, Robert G., LIPATOV, Aleksandr S., GOVORKOVA, Elena A., OZAKI, Hiroichi, PEIRIS, Malik, GUAN, Yi, POON, Leo, and WEBBY, Richard J.: Evolution of H5N1 Influenza Viruses in Asia	75
ANDERSSON, Siv G. E.: Deterioration of α -Proteobacterial Human Pathogen Genomes	81
CARNIEL, Elisabeth: Genome Changes and Evolution of <i>Yersinia pestis</i>	87

Reservoir, Transmission, Rapid Diagnosis

BRÜGGEMANN, Holger, WIEZER, Arnim, and GOTTSCHALK, Gerhard: Insights in Metabolism and Toxin Production from the Complete Genome Sequence of <i>Clostridium tetani</i>	95
TER MEULEN, Jan, DAFFIS, Stephane, LECOMPTE, Emilie, KOIVOGUI, Lamine, CALVET, Elisabeth, and DENYS, Christiane: Immuno-epidemiological Study of the Re-emergence of Lassa Fever and Yellow Fever in West Africa	101
HEINZ, Franz X.: Tick-borne Encephalitis Virus and Other Flaviviruses	105
HENDERSON, Donald A.: Smallpox: from Eradication to Resurrection	111
DROSTEN, Christian, PANNING, Marcus, and SCHMITZ, Herbert: Detection of Rare and Emerging Viruses: SARS and Viral Hemorrhagic Fevers.....	117

Pathogenicity

MOCK, Michèle: Anthrax.....	125
MONTECUCCO, Cesare, CACCIN, Paola, DAL MOLIN, Federica, GARBISA, Spiridione, MOCK, Michèle, MORBIATO, Laura, ROSSETTON, Ornella, ROMANELLO, Vanina, and TONELLO, Fiorella: Bacterial Toxins with Intracellular Targets: the Case of Botulinum and Anthrax Toxins	127
SANDVIG, Kirsten: Pathways Used by Protein Toxins into Cells.....	133
GOLDMAN, William E., and RAPPLEYE, Chad A.: RNA Interference as a Tool for Studying Fungal Pathogens	141
WAHL-JENSEN, Victoria, STRÖHER, Ute, SCHNITTLER, Hans-Joachim, and FELDMANN, Heinz: Current Opinion on Ebola Virus Pathogenesis.....	147
SMITH, Geoffrey L.: Vaccinia Virus Virulence	155

Host-Pathogen-Interaction, Host Specificity

COSSART, Pascale: Host Specificity: The Listeria Paradigm	163
SANSONETTI, Philippe J.: How <i>Shigella</i> Pushes the Innate Immune Response beyond Borders	167
CELLI, Jean, and GORVEL, Jean-Pierre: The Hijack of the Endoplasmic Reticulum by Pathogenic <i>Brucella</i>	175
SÖSTEDT, Anders, ANDERSSON, Henrik, LAI, Xin-He, LINDGREN, Helena, GOLOVLIOV, Igor, TELEPNEV, Maxim, and BARANOV, Vladimir: The Intracellular Life Style of <i>Francisella tularensis</i>	183
SPIEGEL, Martin, WEBER, Friedemann, KOCHS, Georg, and HALLER, Otto: How Viruses Fight the Interferon System	189
MEYER, Thomas F., FOWLER, Trent, REJMAN LIPINSKI, Anette, HEUER, Dagmar, MÜLLER, Elke, RUDEL, Thomas, MACHUY, Nikolaus, BECKER, Stephan, and KRÜGER, Ute: RNA Interference and Infectious Agents	199

Prevention and Therapy

ANDERSON, Roy M.: Epidemic Outbreak Analysis – the Design of Control Policies	209
PUTICS, Ákos, IVANOV, Konstantin A., HERTZIG, Tobias, GORBALENYA, Alexander E., and ZIEBUHR, John: Novel Targets for Anti-SARS Therapy: Coronavirus-encoded RNA-processing Enzymes.....	211
METTENLEITER, Thomas C.: Veterinary Viruses.....	221
KIM, Chun, and KAUFMANN, Stefan H. E.: Bioterrorism and Vaccination: A Novel Intervention Strategy against Bioterroristic Anthrax Attacks	231
PILGRIM, Sabine, SCHOEN, Christoph, STRITZKER, Jochen, FRENZEN, Alexa, LOEFFLER, Daniela, GENTSCHEV, Ivaylo, and GOEBEL, Werner: Virulence-Attenuated Intracellular Bacterial Pathogens as Tools for the Development of Novel Live Vaccines	235
KLENK, Hans-Dieter: Concluding Remarks	241