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	 5.2 Some definitions 5.3 What methods exist to tackle the proteome complexity?5.4 Quantitative proteomics 5.5 Pre-fractionation in proteome analysis 5.6 Multi-dimensional chromatography 5.7 Protein chip arrays 5.8 Imaging mass spectrometry Acknowledgements 6 Mass Spectrometry in Proteomics 6.1 Introduction 6.2 MS technology 6.3 Principle of protein identification based on MS data 6.4 Proteomics workflows 7 High Throughput Cloning, Expression and Purification Technologies 7.1 Introduction 7.2 Gene cloning 7.3 Protein expression 7.4 High-throughput protein purification 7.5 Validation of the pipeline and outlook7.6 Conclusion PART 3: APPLICATIONS 8 Meningococcus B: from Genome to Vaccine 8.1 Meningococcus, a major cause of bacterial meningitis 8.2 Group B meningococcus as an example of reverse vaccinology 8.3 Conclusions 9 Vaccines Against Pathogenic Streptococci 9.1 Introduction 9.2 Comparative genomics of streptococci 9.3 A vaccine against group B streptococcus 9.4 A vaccine against group A streptococcus 9.5 Conclusions 10 Identification of the 'Antigenome' - a Novel Tool for Design and Development of Subunit Vaccines Against Bacterial Pathogens 10.1 Introduction 10.2 Small DNA insert libraries - a tool to cover a pathogen's 'antigenome' 10.3 Proper display platforms 10.4 Selected human sera to provide imprints of pathogen encounters 10.5 Cognate antibodies reveal the 'antigenome' of a pathogen 10.6 How to retrieve from the 'antigenome' the candidate antigens for vaccine development 10.7 Summary and discussion 11.1 Old problems and new perspectives
	for chlamydial vaccines.
Sommario/riassunto	While the sequence of the human genome sequence has hit the headlines, extensive exploitation of this for practical applications is still to come. Genomic and post-genomic technologies applied to viral and bacterial pathogens, which are almost equally important from a scientific perspective, have the potential to be translated into useful products and processes much more rapidly.Genomics, Proteomics and Vaccines introduces the history of vaccinology and discusses how vaccines are expected to evolve in the future. It describes the relevant technologies, including genome sequencing and a