Table of Contents

TABLE OF CONTENTS

Introduction; D. Linke and A. Goldman

1. Adhesins of human pathogens from the genus Yersinia;
2. Adhesive mechanisms of Salmonella enteric;
3. Adhesion Mechanisms of Borrelia burgdorferi;
4. Adhesins of Bartonella spp.;
5. Adhesion Mechanisms of Plant-Pathogenic Xanthomonadeae;
6. Adhesion by Pathogenic Corynebacteria;
7. Biological Systems;
8. Protein Folding in Bacterial Adhesion: Secretion and Folding of Classical Monomeric Autotransporters;
9. Structure and Biology of Trimeric Autotransporter Adhesins;
10. Crystallography and EM of chaperone/usher pilus systems;
11. Crystallography of Gram-positive Bacterial Adhesins;
12. The nonideal coiled coil of M protein and its multifarious functions in pathogenesis;
13. Bacterial Extracellular Polysaccharides;
14. Carbohydrate mediated bacterial adhesion;
15. The Application of NMR Techniques to Bacterial Adhesins;
16. Electron microscopy techniques to study bacterial adhesion; I. Grin,
17. EM Reconstruction of Adhesins: Future Prospects;
18. Atomic force microscopy to study intermolecular forces and bonds associated with bacteria;
19. Assessing Bacterial Adhesion on an Individual Adhesin and Single Pili Level using Optical Tweezers;
20. Short time-scale bacterial adhesion dynamics;
21. Deciphering Biofilm Structure and Reactivity by Multiscale Time-resolved Fluorescence Analysis;
22. Inhibition of Bacterial Adhesion on Medical Devices;

Index