

# List of Contents

## Part I. Cadherins

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| Cadherin Adhesion: Mechanisms and Molecular Interactions . . . . . | 3   |
| <i>T.D. Perez, W.J. Nelson</i>                                     |     |
| Structural Aspects of Adherens Junctions and Desmosomes . . . . .  | 23  |
| <i>H.-J. Choi, W.I. Weis</i>                                       |     |
| Cadherins in Development . . . . .                                 | 53  |
| <i>H. Semb</i>                                                     |     |
| Cadherins in Cancer. . . . .                                       | 69  |
| <i>K. Strumane, G. Berx, F. Van Roy</i>                            |     |
| In Vivo Functions of Catenins. . . . .                             | 105 |
| <i>T. Brabletz</i>                                                 |     |
| The Molecular Composition and Function of Desmosomes . . . . .     | 137 |
| <i>L.M. Godsel, S. Getsios, A.C. Huen, K.J. Green</i>              |     |

## Part II. Integrins and Extracellular Matrix

|                                                                                                       |     |
|-------------------------------------------------------------------------------------------------------|-----|
| Regulation of Signal Transduction by Integrins. . . . .                                               | 197 |
| <i>Y. Miyamoto, P. Reddig, R.L. Juliano</i>                                                           |     |
| Integrins and Extracellular Matrix in Animal Models . . . . .                                         | 217 |
| <i>U. Müller</i>                                                                                      |     |
| Hemidesmosomes: Molecular Organization and Their Importance<br>for Cell Adhesion and Disease. . . . . | 243 |
| <i>J. Koster, L. Borradori, A. Sonnenberg</i>                                                         |     |

## Part III. Immunoglobulin Superfamily

|                               |     |
|-------------------------------|-----|
| CEA-Related CAMs . . . . .    | 283 |
| <i>A.K. Horst, C. Wagener</i> |     |

|                                                                     |     |
|---------------------------------------------------------------------|-----|
| Roles of Nectins in Cell Adhesion, Signaling and Polarization ..... | 343 |
| <i>K. Irie, K. Shimizu, T. Sakisaka, W. Ikeda, Y. Takai</i>         |     |
| Ig Superfamily Cell Adhesion Molecules in the Brain .....           | 373 |
| <i>E.T. Stoeckli</i>                                                |     |

#### **Part IV. Physiology and Pathology of Cell Adhesion**

|                                                         |     |
|---------------------------------------------------------|-----|
| Adhesion Mechanisms of Endothelial Cells .....          | 405 |
| <i>P.F. Bradfield, B.A. Imhof</i>                       |     |
| Pharmacology of Platelet Adhesion and Aggregation ..... | 437 |
| <i>B. Nieswandt, S. Offermanns</i>                      |     |
| <b>Subject Index</b> .....                              | 473 |