

## **CONTENTS**

Contributors .....	ix
--------------------	----

### **Cell Biology of Somatolactin**

Toyoji Kaneko

I. Introduction .....	1
II. Structure .....	3
III. Location of Somatolactin Cells .....	5
IV. Possible Functions of Somatolactin .....	10
V. Regulation of Somatolactin Secretion and Synthesis .....	19
VI. Concluding Remarks .....	20
References .....	22

### **The Centrosome in Animal Cells and Its Functional Homologs in Plant and Yeast Cells**

Ron Balczon

I. Introduction .....	25
II. Centrosomes of Animal Cells .....	26
III. Microtubule-Organizing Centers in Higher Plant Cells .....	59
IV. Yeast Spindle Pole Bodies .....	63
V. Summary .....	71
References .....	72

## **Differentiation Processes in the Amphibian Brain with Special Emphasis on Heterochronies**

Andrea Schmidt and Gerhard Roth

I.	Introduction .....	83
II.	Overview of Amphibian Brain Development .....	89
III.	Specific Developmental Processes .....	91
IV.	Cellular and Molecular Basis of Neural Development.....	121
V.	Summary and Conclusion .....	136
	References .....	139

## **Cell Biology of Wound Healing**

Christopher J. Schaffer and Lillian B. Nanney

I.	Introduction .....	151
II.	Acute Inflammatory Phase .....	152
III.	Inflammation and Formation of Granulation Tissue: Roles of Monocytes and Macrophages .....	156
IV.	Formation of Granulation Tissue and Remodeling: Roles of Fibroblasts .....	160
V.	Reepithelialization: Roles of Keratinocytes .....	165
VI.	Formation of Granulation Tissue: Roles of Endothelial Cells .....	172
VII.	Concluding Statements .....	174
	References .....	176

## **Differentiated Properties and Proliferation of Arterial Smooth Muscle Cells in Culture**

Johan Thyberg

I.	Introduction .....	184
II.	Development of Arterial Smooth Muscle Cells .....	184
III.	Establishment of Arterial Smooth Muscle Cells in Culture .....	190
IV.	Changes in Cellular Phenotype .....	193
V.	Induction of Cellular Proliferation .....	207
VI.	Endogenous Production of Growth-Promoting Agents .....	219
VII.	Secretion of Extracellular Matrix Components .....	223
VIII.	Pharmacological Manipulation of Cell Behavior .....	226
IX.	Genetic Manipulation of Cell Behavior .....	229
X.	Implications for the Study of Arterial Disease .....	229

XI. Concluding Remarks .....	231
References .....	231

## Cortical Structure and Function in Euglenoids with Reference to Trypanosomes, Ciliates, and Dinoflagellates

G. Benjamin Bouck and Huân Ngô

I. Introduction .....	268
II. Organization of the Cell Surface Complexes .....	269
III. Biochemistry, Physiology, and Molecular Biology of the Surface Complex .....	274
IV. Reuse of the Parental Surface Complex during Surface Duplication .....	299
V. Concluding Remarks .....	308
References .....	309
Index .....	319