

CONTENTS

Preface	v
Contributors	ix
1 From Functional Linkage to Integrative Physiology	1
<i>Wolfgang Walz</i>	
2 Functional Genomics	7
<i>David L. Mattson</i>	
3 Electrolytes and Acid–Base Physiology	27
<i>Meghan M. Taylor</i>	
4 Circulation and Fluid Volume Control	43
<i>Bruce N. Van Vliet and Jean-Pierre Montani</i>	
5 Neuroendocrine Networks	67
<i>John A. Russell and Gareth Leng</i>	
6 Physiology and Behavior: <i>Energy Balance</i>	95
<i>Michel Cabanac</i>	
7 Neural Circuits and Behavior	121
<i>Theodore H. Bullock</i>	
8 Physiological Determinants of Consciousness	129
<i>Mircea Steriade</i>	
9 Physical Activity	149
<i>Frank W. Booth and P. Darrell Neuffer</i>	
10 Biochemical Adaptation to Extreme Environments	169
<i>Kenneth B. Storey and Janet M. Storey</i>	
11 Repair and Defense Systems at the Epithelial Surface in the Lung	201
<i>Pieter S. Hiemstra</i>	
12 The Zebrafish As an Integrative Physiology Model	215
<i>Alicia E. Novak and Angeles B. Ribera</i>	
13 Curriculum Design for Integrative Physiology	239
<i>Dee U. Silverthorn and Penelope A. Hansen</i>	
Index	259



<http://www.springer.com/978-1-58829-315-2>

Integrative Physiology in the Proteomics and
Post-Genomics Age

Walz, W. (Ed.)

2005, X, 269 p., Hardcover

ISBN: 978-1-58829-315-2

A product of Humana Press