

CONTENTS

Contributors	page vii
Editors' Preface	xi
J. F. ALLEN	
Light, time and micro-organisms	1
J. P. ARMITAGE	
Motility responses towards light shown by phototrophic bacteria	33
J. L. SPUDICH	
Archaeal rhodopsins use the same light-triggered molecular switch for ion transport and phototaxis signalling	57
A. E. WALSBY	
Gas vesicles and buoyancy in cyanobacteria: interrelations with light	69
P. HEGEMANN AND H. HARZ	
How microalgae see the light	95
K. J. HELLINGWERF, R. KORT AND W. CRIELAARD	
Negative phototaxis in photosynthetic bacteria	107
D. J. COVE AND T. LAMPARTER	
The role of light in the regulation of moss development	125
R. J. COGDELL, P. FYFE, N. FRASER, C. LAW, T. HOWARD, K. MCLUSKEY, S. PRINCE, A. FREER AND N. ISAACS	
Photosynthetic light harvesting	143
M. K. PHILLIPS-JONES	
Light regulation of pigment-protein gene expression in <i>Rhodobacter</i> species	159
D. A. HODGSON AND A. E. BERRY	
Light regulation of carotenoid synthesis in <i>Myxococcus xanthus</i>	185
G. MACINO, G. ARPAIA, H. LINDEN AND P. BALLARIO	
Responses to blue-light in <i>Neurospora crassa</i>	213
S. S. GOLDEN, M. ISHIURA, C. HIRSCHIE JOHNSON AND T. KONDO	
Circadian rhythms in cyanobacteria	225
T. ROENNEBERG AND J. REHMAN	
Survival in a temporal world - the circadian programme of the marine unicell <i>Gonyaulax</i>	237
D. LLOYD AND D. A. GILBERT	
Temporal organization of the cell division cycle in eukaryotic microbes	251

J. C. DUNLAP, J. J. LOROS, S. K. CROSTHWAITE, Y. LIU, N. GARCEAU, D. BELL-PEDERSEN, M. SHINOHARA, C. LUO, M. COLLETT, A. B. COLE AND C. HEINTZEN	
The circadian regulatory system in <i>Neurospora</i>	279
C. P. KYRIACOU, A. PICCIN AND E. ROSATO	
The molecular genetics of <i>Drosophila</i> clocks	295
Index	313