

1. Record Nr.	UNINA9910461613503321
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Titolo	Systemic homeostasis and poikilostasis in sleep [[electronic resource]] : is REM sleep a physiological paradox? / / Pier Luigi Parmeggiani
Pubbl/distr/stampa	London, : Imperial College Press, 2011
ISBN	1-283-14341-0 9786613143419 1-84816-573-0
Descrizione fisica	1 online resource (200 p.)
Disciplina	612.821
Soggetti	Rapid eye movement sleep - Psychological aspects Homeostasis Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Acknowledgements; Preface; Chapter 1 The Principle of Homeostasis; Functional Aspects of the Principle of Homeostasis; Conceptual Dissection of Homeostasis: Physiological Parameters and Operators; Dissecting the Physiological Phenomena of Sleep; Conclusion and Perspectives; Chapter 2 The Study of Homeostasis in Sleep; Ultradian Sleep Cycle; Circadian Sleep Cycle; Suspension of the Systemic Control of Homeostasis in REM Sleep; Practical Criteria for the Study of Systemic Homeostasis and Poikilostasis in Sleep; Systemic Dissection and Recombination of Physiological Functions PerspectiveConclusion; Chapter 3 Respiration in Sleep; Control of Respiration in Sleep; NREM Sleep; REM Sleep; Central Command of Breathing in Sleep; Conclusion; Chapter 4 Circulation in Sleep; Control of Circulation; Changes of Circulation in Sleep; NREM Sleep; REM Sleep; Central Command of Circulation in Sleep; Conclusion; Chapter 5 Temperature Regulation in Sleep; Body Temperature; Homeothermy; Physiological Effectors of Thermoregulation; Behavioural Thermoregulation in Sleep; Autonomic Thermoregulation in Sleep; Conclusion; Chapter 6 Influence of Temperature on Sleep Influence of Ambient Temperature on the Ultradian Wake-Sleep

CycleConclusion; Chapter 7 Compartmentalised Brain Homeostasis in Sleep; Physiological Mechanisms Underlying Brain Cooling; Defence of Brain Homeothermy in Sleep; Defence of Brain's Blood Supply in Sleep; Systemic Functional Implications; Conclusion; Chapter 8 Ultradian Homeostasis-Poikilostasis Cycle; Ultradian Homeostasis-Poikilostasis Cycle; Behavioural Expression of the Ultradian Homeostasis-Poikilostasis Cycle; Sleep and Instinct; Functional Significance of Homeostasis and Poikilostasis in Sleep; Conclusion
Chapter 9 Systemic Physiological Regulation in the Ultradian Wake-Sleep CycleHierarchical Functional Permutations; Influence of the Hierarchical Dynamics of the Ultradian Wake-Sleep Cycle on Physiological Functions; Chapter 10 Epilogue; References; Index

Sommario/riassunto

This book aims at presenting biologists and clinicians with a compact description of the physiologic manifestations of sleep that are significant from the viewpoint of the principle of homeostasis. In the jargon of the physiologic literature, the word 'homeostasis', introduced by W.B. Cannon (1926), refers to the existence of a constant state of extracellular body fluids with regards to their physical and chemical properties. Since normal cell function depends on the constancy of such fluids, in multicellular animals there are many regulatory mechanisms under the control of the central nervous
