Record Nr. UNINA9911015625203321 Autore Mayevsky Avraham Titolo Body Oxygen Homeostasis and Mitochondrial Function: From Animal Models to Clinical Applications / / by Avraham Mayevsky, Efrat Barbiro-Michaely, Michael Tolmasov, Mira M. Mandelbaum-Livnat Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 3-031-94113-6 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (493 pages) Altri autori (Persone) Barbiro-MichaelyEfrat TolmasovMichael Mandelbaum-LivnatMira M Disciplina 571.6 Soggetti Cytology Metabolism **Neurosciences** Cell Biology Neuroscience Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Section I. Introduction -- Chapter 1. General Introduction and Historical Nota di contenuto Background -- Chapter 2. Body Organs Energy Metabolism -- Section II. Detailed Animal Studies -- Chapter 3. Responses of Most Vital and Less-Vital Organ to Oxygen and CO2 Supply -- Chapter 4. Effects of Vasoactive Mediators and Anesthesia on Brain and Small Intestine --Chapter 5. Effects of Hemorrhage and Resuscitation -- Section III. Clinical Monitoring -- Chapter 6. Technology Transfer: From Experimental Animals to Clinical Use -- Chapter 7. Clinical Monitoring Using Commercial Devices -- Chapter 8. Discussion and Conclusions. Sommario/riassunto This book links oxygen metabolism from experimental animal models to human clinical applications, bringing together concepts and knowledge from laboratory models to clinical practice. In particular, the book provides the experimental results of a rat model exposed to various protocols that prove the suggested monitoring approach, describes the various monitoring devices developed for patients'

monitoring in clinical situations, and provides a discussion of the

results as well as conclusions. The book is ideal for a range of basic scientists, seeking greater understanding of the clinical applications and potential translation of in vitro and animal model studies as well as a range of clinicians, seeking greater understanding of the fundamentals of oxygen metabolism and homeostasis.