1. Record Nr. UNINA9910298317703321

Titolo	Oxygen Transport to Tissue XXXVI / / edited by Harold M. Swartz, David K. Harrison, Duane F. Bruley
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2014
ISBN	1-4939-0620-8
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (370 p.)
Collana	Advances in Experimental Medicine and Biology, , 2214-8019 ; ; 812
Disciplina	572.47
Soggetti	Human physiology Immunology Respiratory organs - Diseases Human Physiology Pneumology
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 at the end of each chapters and index.
Nota di contenuto	Mitochondrial Genetic Abnormalities after Radiation Exposure -- Crediting Six Discoverers of Oxygen -- Hypoxia in Tumors: Pathogenesis-related Classification, Characterization of Hypoxia subtypes, and Associated Biological and Clinical Implications -- Heterogeneity in Tissue Oxygenation: From Physiological Variability in Normal Tissues to Pathophysiological Chaos in Malignant Tumours -- Oxygen Diffusion: An Enzyme-controlled Variable Parameter -- Role of Microvascular Shunts in the Loss of Cerebral Blood Flow Autoregulation -- Impact of Hypoxia-related Tumor Acidosis on Cytotoxicity of Different Chemotherapeutic Drugs in vitro and in vivo -- The Founding of ISOTT: The Shamattawa of Engineering Science and Medical Science -- A Tale of Two Methods: Combining Near-Infrared Spectroscopy with MRI for Studies of Brain Oxygenation and Metabolism -- Advances in Probes and Methods for Clinical EPR Oximetry -- Real-Time, In Vivo Determination of Dynamic Changes in Lung and Heart Tissue Oxygenation using EPR Oximetry -- Modulation of Hypoxia by Magnetic Nanoparticle Hyperthermia to Augment Therapeutic Index -- Skeletal Muscle and Glioma Oxygenation by Carbogen Inhalation in Rats: A Longitudinal Study by EPR Oximetry using Single-Probe Implantable

Oxygen Sensors -- Recurrent Low-dose Chemotherapy to Inhibit and Oxygenate Head and Neck Tumors -- How in vivo EPR Measures and Images Oxygen -- What We Learn From In Vivo EPR Oxygen Images -- EPR Image Based Oxygen Movies for Transient Hypoxia -- Repetitive Measurements of Intrarenal Oxygenation in vivo using L band Electron Paramagnetic Resonance -- Quantitative Hypoxia Imaging for Treatment Planning of Radiotherapy -- A New Flavonoid Regulates Angiogenesis and Reactive Oxygen Species Production -- Angiotensin II Reduces Transport-Dependent Oxygen Consumption but Increases Transport-Independent Oxygen Consumption in Immortalized Mouse Proximal Tubular Cells -- Investigation of Cerebral Autoregulation in the Newborn Piglet during Anaesthesia and Surgery -- Influence of the Maternal use of Labetalol on the Neurogenic Mechanism for Cerebral Autoregulation Assessed by Means of NIRS -- Development of a Near Infrared Multi-Wavelength, Multi-channel, Time-Resolved Spectrometer for Measuring Brain Tissue Haemodynamics and Metabolism -- Simulating NIRS and MRS measurements during cerebral hypoxia-ischaemia in piglets using a computational model -- Analysis of Slow Wave Oscillations in Cerebral Haemodynamics and Metabolism Following Subarachnoid Haemorrhage -- Effects of Enriched Environment on Hippocampal Neuronal Cell Death and Neurogenesis in Rat Global Ischemia -- Automated Image Analysis for Diameters and Branching Points of Cerebral Penetrating Arteries and Veins Captured with Two-Photon Microscopy -- Cerebral Hemodynamic Changes and Metabolic Alteration in Severe Hemorrhagic Shock -- Physiological Mechanism of Increase in Deoxy-hemoglobin Concentration during Neuronal Activation in Patients with Cerebral Ischemia: A Simulation Study with the Balloon Model -- Effect of Blood in the Cerebrospinal Fluid on the Accuracy of Cerebral Oxygenation Measured by Near Infrared Spectroscopy -- Vessel Specific Imaging of Glucose Transfer with Fluorescent Glucose Analogue in Anesthetized Mouse Cortex -- Ischemic Pretreatment Delays Ischemic Brain Vasospasm Injury in Gerbils -- Changes in Cerebral Blood Oxygenation Induced by Active Standing Test in Children with POTS and NMS -- Optical Imaging of Brain Activation in Gambian Infants -- Asymmetrical Changes in Cerebral Blood Oxygenation Induced by an Active Standing Test in Children with Postural Tachycardia Syndrome -- Changes of Cerebral Tissue Oxygen Saturation at Sleep Transitions in Adolescents -- Influence of Subjective Happiness on the Prefrontal Brain Activity: An fNIRS Study -- Ginkobiloba Extract Improves Working Memory Performance in Middle-aged women; Role of Asymmetry of Prefrontal Cortex Activity during a Working Memory Task -- Bayesian Prediction of Anxiety Level in Aged People at Rest using 2-Channel NIRS Data from Prefrontal Cortex -- Short-term Hypoxic Preconditioning Improved Survival following Cardiac Arrest and Resuscitation in rats -- Venular Valves and Retrograde Perfusion -- Monitoring of Filter Patency during Carotid Artery Stenting using Near-Infrared Spectroscopy with High Time-Resolution -- Use of NIRS to Assess Effect of Training on Peripheral Muscle Oxygenation Changes in Elite Rugby Players Performing Repeated Supramaximal Cycling Tests -- Skeletal Muscle Deoxygenation Responses during Treadmill Exercise in Children -- Development of a Hybrid Microwave-Optical Thermoregulation Monitor for the Muscle -- Evaluation of a Textile-Based Near Infrared Spectroscopy System in Calf Muscle Oxygenation Measurements -- Skin Temperature in Lower Hind Limb Subjected to Distal Vein Arterialization in Rats -- Index.

Sommario/riassunto

This book contains the refereed contributions from the 41st annual meeting of ISOTT. The annual meetings of ISOTT bring together

scientists from various fields (medicine, physiology, mathematics, biology, chemistry, physics, engineering, etc.) in a unique international forum. Traditionally, ISOTT conferences are a place, where an atmosphere of interaction is created, where many questions are asked after each presentation and lively discussions occur at a high scientific level. This vivid interaction is the main motivation for members to participate and gain new ideas and knowledge in the broad field of oxygen transport to tissue. The papers in this volume summarize some of the outstanding contributions from the 41st annual meeting. Special features in this volume include invited presentations from senior members of ISOTT for the theme “the wisdom of ISOTT” in which founders, past presidents and prize winners from previous meetings provided both cutting edge new knowledge and integratedoverviews of critical aspects of the field. The presentations and manuscripts also include those provided by the special opportunity provided by having part of the ISOTT meeting overlap with the EPR-2013 meeting where both focused on preclinical and clinical measurements of oxygen, with a particular emphasis on cancer.