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Nota di contenuto	Part A. Evolution, origin and fate of macrophages -- 1 Evolutionary aspects of Macrophages polarization -- 2 Development and functional differentiation of tissue-resident vs. monocyte-derived macrophages in inflammatory reactions -- 3 Hofbauer cells – placental macrophages of fetal origin -- 4 Mesenchymal stem cells direct the immunological fate of macrophages -- 5 Monocyte/Macrophage - NK cell Cooperation: Old Tools for New Functions -- 6 Macrophages in non-vertebrates: from insects and crustaceans to marine bivalves -- Part B. Immunobiology of macrophages -- 7 F4/80 as a Major Macrophage Marker: The case of the Peritoneum and Spleen -- 8 Immunobiology of Nitric Oxide and Regulation of Inducible Nitric Oxide Synthase -- 9 Role for mechanotransduction in macrophage and dendritic cell immunobiology -- Part C. Role of macrophages in disease -- 10 Macrophages' Role in Tissue Disease and Regeneration -- 11 Macrophages and their contribution to the development of atherosclerosis -- 12 Macrophage

Dysfunction in Respiratory Disease -- Part D. Macrophages as a target for biointervention -- 13 Activation of macrophages in response to biomaterials -- 14 Macrophage differentiation in normal and accelerated wound healing -- 15 Macrophages and RhoA pathway in transplanted organs. .

Sommario/riassunto

This volume gives a state-of-the-art overview on macrophage functions in various invertebrate and vertebrate systems and diseases. It also covers various aspects of macrophage development and formation, behavior and response to nano- and biomaterials, the latter of which have become very important components of modern medicine. Macrophages are evolutionarily conserved phagocytotic cells. In recent years macrophages have emerged as one of the most versatile cells of immune system, which, depending on the milieu and circumstance, participate in development or inhibition of cancer, regeneration, wound healing, inflammation, organ rejection and interaction between mother and a fetus. This book will be of particular interest to researchers working in immunology, cancer research, developmental biology, or related fields.
