Cytokine Frontiers: Regulation of Immune Responses in Health and Disease

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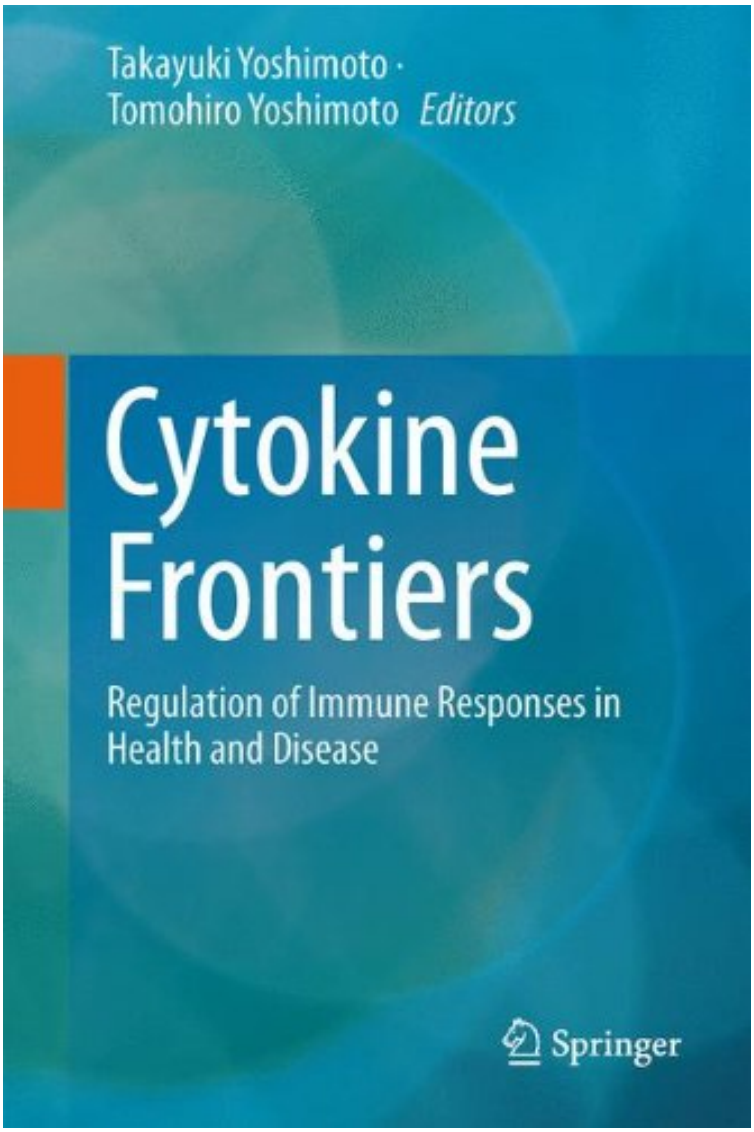

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From Springer : Cytokine Frontiers: Regulation of Immune Responses in Health and Disease before purchasing it in order to gage whether or not it would be worth my time, and all praised Cytokine Frontiers: Regulation of Immune Responses in Health and Disease:

This book guides the reader through the latest research on the cytokine network, covering signaling pathways, control of the immune response, and potential therapeutics. Different cytokines stimulate diverse responses in various phases of inflammation and immunity, including the innate immune response, the generation of effector T cells, and the development of antibodies by the humoral immune system. It is now clear that the pathophysiology of many infectious, autoimmune, allergic, and malignant diseases can be largely explained by which cytokines are induced and subsequently regulate the cellular responses. In clinical medicine, cytokines are involved in a wide spectrum of diseases. This book describes in three parts the properties and roles of 15 key cytokines under physiological and pathological conditions. Part I presents nine cytokines associated with inflammatory disorders, pro-inflammatory cytokines, and the recently identified new helper T (Th) subset: Th17 cells. Part II gives details of three cytokines associated with allergic disorders, including Th2 responses and recently identified types of innate cells. Part III describes three cytokines that are associated with immunological tolerance and anti-inflammation, including regulatory T (Treg) cells, IL-10-producing Treg (Tr1) cells, and inducible IL-35-producing Treg (iTr35) cells. Cytokines are considered to be important as therapeutic targets for specific agonists or antagonists in numerous immune and inflammatory diseases. The ultimate goal of this book is to facilitate the development of therapeutic treatments for such diseases which has been limited by an insufficient understanding of the biology of cytokines and the complicated network that they create.

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