1. Record Nr. UNINA9910254477403321

Titolo	The Ageing Immune System and Health / / edited by Valquiria Bueno, Janet M. Lord, Thomas A. Jackson
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XII, 182 p. 19 illus., 11 illus. in color.)
Disciplina	618.97 612.67
Soggetti	Geriatrics Aging Immunology Cell biology Geriatrics/Gerontology Cell Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	1. Introduction -- 2. Innate Immune Response and Ageing (neutrophils, monocytes, dendritic cells, DAMPs, PAMPs -- 3. Adaptive Immune Response and Aging (T and B lymphocytes, naïve, effector and memory phenotypes and functions) -- 4. Modulatory/Suppressive Cells and Ageing (T regulatory cells, B regulatory cells, Myeloid Derived Suppressor Cells, Modulatory Neutrophils, M1 and M2 macrophages) -- 5. Mucosal Immune System and Ageing -- 6. Epigenetics and Ageing -- 7. Cancer and Ageing -- 8. Infections/Vaccination and Ageing -- 9. Cytomegalovirus and immmunosenescence -- 10. Frailty and Ageing -- 11. Inflammation and Neurodegenerative Diseases and Ageing -- 12. Effects of chronic inflammatory diseases (chronic kidney disease, rheumatoid arthritis, crohns disease etc) on the ageing of the immune system -- 13. Interventions in Elderly focusing Immunosenescence (physical activity, nutrition, supplements).
Sommario/riassunto	The present book intends to provide an update on immunosenescence

and how deficiencies in the immune system contribute to a higher susceptibility to infections, decline in organ function, reduced vaccination responses, age-related disease and the ageing process itself, negatively affecting longevity. Our focus is on the main changes in immune system cells and their products occurring during the ageing process and the possible consequences for health and disease. This includes: discussion of the modulatory and/or suppressive mechanisms associated with the alterations in T regulatory cells, B regulatory cells and Myeloid Derived Suppressor cells; changes in the immune system observed in chronic neurodegenerative diseases, cancer, lung disease and frailty will also be discussed. Most importantly we provide recent literature information about possible interventions (focusing on physical activity) that could alleviate the negative effects of immunosenescence. The Ageing Immune System and Health is a comprehensive guide on the field intended to all physicians, researchers, professors and students interested on relationship between immune system, ageing and health. .