Record Nr. UNINA9910298456403321 Infection and Cancer: Bi-Directorial Interactions / / edited by Michael R. Titolo Shurin, Yasmin Thanavala, Nahed Ismail Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-20669-9 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (400 p.) Disciplina 610 Soggetti Cancer research Infectious diseases **Immunology** Microbiology Cancer Research Infectious Diseases Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Infection and Cancer: Multi-directorial relationship -- Part I Infectionassociated cancers -- Human tumor viruses: A historical perspective --Epidemiology of virus infection and human cancer -- Bacterial infections and cancer development -- Human protozoal infections and their potential for causing neoplasms -- An update on helminths in human carcinogenesis -- Infection-associated hematological malignancies -- Multiple infections and cancer: Etiology, mechanisms and implications in cancer control -- Inflammatory mechanisms of infection-associated cancer -- Part II Infection-associated cancers: Specific examples -- Helicobacter pylori: The cancer bug -- Oral infection, carcinogenesis and cancer -- Streptococcus Bovis and colorectal cancer -- Human papillomavirus-related cancers -- Part III Cancer-associated infections -- Infectious diseases in cancer patients:

An overview -- Part IV Infection and cancer: Comorbid development -- Comorbid development of infection and cancer -- Part V Infection agent-based vectors for cancer therapy -- Bacterial cancer therapy: how patients might benefit from Salmonella infections -- Development

Sommario/riassunto

of Salmonella-based cancer vaccines -- Harnessing the host immune response to infection - BCG immunotherapy for bladder cancer -- Index.

This unique book summarizes current knowledge on co-development of infectious diseases and cancer. It provides an overview of the complex and unique role of the immune system, inflammation, tumormediated immunosuppression and infection-induced immunomodulation in cancer and infection progression. Chapters are organized into themed parts, beginning with a look at the historical perspective of human tumor viruses, then aspects and examples of infection-related cancers and cancer-associated infections. The work discusses how cancer- and infection-associated immune responses interact in a bi-directorial fashion and how these interactions may evolve during both disease progression and in response to therapy. The phenomenon of independent development of cancer and infection in the same host, known as comorbid cancer-infection progression, is explored. Understanding the complex pathways involved in the progression of infection and cancer will allow the prevention of the development of certain types of cancer, as well as advancing prophylactic anti-cancer vaccines. Readers of this work will discover innovative approaches for multidisciplinary projects, focusing on the design of original therapeutic modalities for cancer therapy. The book will therefore be particularly valuable to scholars interested in cancer immunology and researchers and clinicians in the field of basic and applied immunobiology and microbiology. .