Record Nr. UNINA9910298311503321 Thymic Development and Selection of T Lymphocytes / / edited by **Titolo** Thomas Boehm, Yousuke Takahama Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2014 **ISBN** 3-642-40252-6 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (134 p.) Collana Current Topics in Microbiology and Immunology, , 0070-217X;; 373 Disciplina 611.01816 Soggetti **Immunology** Human physiology Cytogenetics Human Physiology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Development and Function of Cortical Thymic Epithelial Cells --Mechanisms of Thymus Medulla Development And Function -- Selfpeptides in TCR Repertoire Selection and Peripheral T Cell Function. - Central Tolerance Induction -- Trafficking to the Thymus -- The CD4/CD8 Lineages: Central Decisions and Peripheral Modifications for T Lymphocytes. The thymus is an evolutionarily ancient primary lymphoid organ Sommario/riassunto common to all vertebrates in which T cell development takes place. Failing thymus function is associated with immunodeficiency and/or autoimmunity. In this volume, leading experts provide a comprehensive overview of recent advances in thymopoiesis research. The chapters cover the development of the thymic epithelial microenvironment, address the formation of a diverse and self-tolerant repertoire of T cell receptors as the basis for cellular immunity, discuss the mechanisms by which progenitor cells colonize the thymus and detail the molecular basis for T lineage decisions. The reviews illustrate the important role of the multifaceted process of thymopoiesis for adaptive immunity.