1. Record Nr. UNINA9910298302403321

Autore	Banerjee Ena Ray
Titolo	Perspectives in Inflammation Biology [[electronic resource] /] / by Ena Ray Banerjee
Pubbl/distr/stampa	New Delhi : , : Springer India : , : Imprint : Springer, , 2014
ISBN	81-322-1578-8
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (162 p.)
Disciplina	570.28 616/.0473
Soggetti	Cell biology Stem cells Microbial ecology Cytokines Growth factors Biology—Technique Animal models in research Cell Biology Stem Cells Microbial Ecology Cytokines and Growth Factors Biological Techniques Animal Models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1. Pulmonary and Systemic inflammation -- Chapter 2. Preclinical models of acute and chronic models of lung inflammation -- Chapter 3. Studying the roles of some key molecules in acute allergic asthma -- Research area 1- Enantiomers of albuterol, the OTC drug of choice for acute asthma management -- Research area 2. Studies on prophylactic and therapeutic strategies to combat some local and systemic inflammatory pathologies -- Sub-chapter I. Role of integrin 4 (VLA- Very Late Antigen 4) and integrin 2 (CD18) in a pulmonary inflammatory and a systemic disease model using genetic knockout

mice -- Sub-chapter 2. Role of E-, L-, and P-selectins in the onset, maintenance and development of acute allergic asthma -- Sub-Chapter 3. Role of gp91phox subunit of NADPH oxidase and MMP-12 in a acute inflammatory and an acute degenerative pulmonary disease model using genetic knockout mice -- Chapter 4. Role of integrins 4 and 2 onset and development of chronic allergic asthma in mice -- Chapter 5 Role of integrin 4 (VLA- Very Late Antigen 4) in lymphopoiesis by short and long term transplantation studies in genetic knockout model of mice -- Chapter 6. Studying the roles of some critical molecules in systemic inflammation. .

Sommario/riassunto

“Perspectives in Inflammation Biology” outlines detailed studies using preclinical murine models in Inflammation. The book is meant for academicians, industry persons, research scholars and students alike. The detailed perspective for a beginner and the exhaustive methodologies and analyses outlined, for the veteran researcher, makes this book a unique link between someone who is thinking of embarking on a study of inflammation and one who is delving deep into this area of specialization. The book deals with asthma and allergy as specific disease areas of inflammation of the lung, aseptic peritonitis as a disease of systemic inflammation and details how each role player in its pathophysiology has a unique niche of activity. Data acquisition, sequentiality and analyses in context demonstrate how each role player is validated systematically to become a target for drug discovery. Methods and models used in the course of my work and their relevance will demonstrate to the researcher how a study can be developed from an idea. Further into a researcher’s ongoing work, this book is meant to stimulate new questions and pave ways for better dissection of a phenomenon. The highlights of this book are the detailed tables tabulating sub species of immune cells, their inflammatory recruitment indices, their translation into tissue-to-tissue traffic of the inflammatory stimulus and the delicate interplay of resident structural cells, cells recruited from circulation, their feedback poiesis in bone marrow, their instruction in the lymphoid organs and tissues as well as the non-cellular mediators synthesized from corresponding genetic instruction. The book shall definitely help students and researchers how a disease can be simplified from its complex ramifications and network of implications and put back into perspective and the whole thing falls into place without an intimate understanding of the mechanism and the compelling circumstances that causes a disease, a drug hunter cannot hope to begin her quest. To find the “Achilles’ heel” and effectively neutralize the enemy!