Record Nr. UNINA9910841344003321 Mucus hypersecretion in respiratory disease [[electronic resource]] Titolo Chichester, West Sussex, England;; Hoboken, NJ, USA,: Wiley, 2002 Pubbl/distr/stampa **ISBN** 1-280-27111-6 9786610271115 0-470-66827-X 0-470-85929-6 0-470-86079-0 Descrizione fisica 1 online resource (304 p.) Collana Novartis Foundation symposium;; 248 Altri autori (Persone) ChadwickDerek GoodeJamie Disciplina 616.2 Soggetti Mucous membrane Respiratory organs - Diseases Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "Editors, Derek J. Chadwick and Jamie A. Goode"--P. [v]. "Symposium on Mucus Hypersecretion in Respiratory Disease, held at the Novartis Foundation, London, 26-28 February 2002"--P. [v]. Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto MUCUS HYPERSECRETION IN RESPIRATORY DISEASE; Contents; Participants; Chair's introduction; Epidemiological studies in mucus hypersecretion; Discussion; Post-secretory fate of host defence components in mucus; Discussion; Mechanisms of submucosal gland morphogenesis in the airway; Discussion; Mucin-producing elements and inflammatory cells; Discussion; Respiratory tract mucins: structure and expression patterns; Discussion; Development and validation of a lectin-based assay for the quantitation of rat respiratory mucin: Discussion: Regulation of mucin secretion from in vitro cellular models DiscussionOscillations of pH inside the secretory granule control the gain of Ca(2+) release for signal transduction in goblet cells exocytosis; Discussion; A calcium-activated chloride channel blocker inhibits goblet cell metaplasia and mucus overproduction; Discussion; Mechanisms by which Gram-positive bacteria and tobacco smoke stimulate mucin induction through the epidermal growth factor receptor (EGFR); Discussion; Non-allergic models of mucous cell

metaplasia and mucus hypersecretion in rat nasal and pulmonary airways; Discussion

Cytokine regulation of mucus production in a model of allergic asthmaDiscussion; The role of apoptotic regulators in metaplastic mucous cells; Discussion; Current and future therapies for airway mucus hypersecretion; Discussion; Clinical evaluation of new therapies for treatment of mucus hypersecretion in respiratory diseases; Discussion; Final general discussion; Index of contributors; Subject index

## Sommario/riassunto

A number of chronic respiratory diseases including chronic bronchitis, asthma, cystic fibrosis and bronchiectasis are characterized by mucus hypersecretion. Following damage to the airway epithelium, a repair process of dedifferentiation, regenerative proliferation and redifferentiation takes place that is invariably accompanied by mucus hypersecretion as a key element in the host defence mechanism. In chronic respiratory diseases, however, excessive mucus production leads to a pathological state with increased risk of infection, hospitalization and morbidity. An understanding of the mechanism