1. Record Nr. UNINA9910768444903321 Autore Oh Jae-Won **Titolo** Pollen Allergy in a Changing World: A Guide to Scientific Understanding and Clinical Practice / / by Jae-Won Oh Singapore:,: Springer Singapore:,: Imprint: Springer,, 2018 Pubbl/distr/stampa **ISBN** 981-10-5499-1 Edizione [1st ed. 2018.] 1 online resource (xiii, 181 pages): illustrations Descrizione fisica Disciplina 571.845 Soggetti Respiratory organs—Diseases **Immunology** Pneumology/Respiratory System Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto I. Introduction -- 1. What is an allergy? -- 2. Why doses a person become allergic? -- 3. Factors influencing clinical significance of aeroallergens -- 4. The importance of pollen counts -- 5. Why collect and identify pollens? -- II. Pollen collection -- 1. Purpose of standardized air sampling -- 2. Samplers -- 3. Pollen Sampling Methods -- 4. Operation -- III. Pollen identification -- 1. The appearance of airborne grass pollen grains -- 2. Other airborne pollen grains -- IV. Allergenic pollen images -- 1. Single grains (Monads) without apertures -- 2. Single grains with furrows -- 3. Single grain with apertures -- V. Classification of Allergenic plants -- 1. Anatomy of plant -- 2. Taxonomy -- VI. Pollen allergy and meteorological factors -- 1. Effects of weather on allergen load and pollen potency -- 2. Pollen calendars -- 3. Effects of weather on pollen flight -- 4. Forecast the pollen concentration -- VII. How does climate change influence allergenic pollen? -- 1. Thunderstorm-related asthma -- 2. Mechanisms for thunderstorm asthma -- VIII. How to diagnose the pollen allergy -- 1. Skin Prick Test -- 2. Intradermal Skin Test -- 3. Allergy Blood Tests -- IX. How to treat and prevent the pollen allergy. Sommario/riassunto This book presents the latest scientific knowledge on the role of

pollens in triggering respiratory allergies and offers up-to-date

guidance on the diagnosis, treatment, and prevention of pollen allergy.

Detailed information is supplied on allergenic plants and on the complex associations between pollen allergy and local weather conditions, air pollution, and climate change. Readers will learn how climate change in particular is impacting on pollen concentrations, pollen allergenicity, the pollen season, and plant and pollen distribution. A further important feature is the presentation of a forecasting system for allergenic pollens that takes into account a variety of meteorological factors and is designed to be of benefit to allergy patients. This up-to-date scientific knowledge is complemented by clear guidance on all aspects of the management of pollen allergy. The closing chapters address global trends in allergy research and future prospects for pollen allergy. The book will appeal both to researchers seeking state of the art information on the topic and to clinicians wishing to optimize patient care.