Record Nr. UNINA9910734856603321 Lassa Fever: Epidemiology, Immunology, Diagnostics, and Therapeutics Titolo // edited by Robert Garry Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2023 **ISBN** 3-031-35807-4 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (199 pages) Collana Current Topics in Microbiology and Immunology, , 2196-9965;; 440 Disciplina 616.91 Soggetti Virology Medical microbiology Internal medicine Tropical medicine Medical Microbiology Internal Medicine **Tropical Medicine** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto 50 years of Lassa fever research -- Lassa Virus Genetics -- Ecology of Lassa virus -- Epidemiology of Lassa Fever -- Lassa virus countermeasures -- Lassa virus structural biology and replication --Lassa Fever Natural History and Clinical Management. Sommario/riassunto This volume provides a comprehensive and up-to-date overview of the various aspects of Lassa virus (LASV), the causative agent of Lassa fever, a frequently fatal zoonotic disease endemic to West Africa. Compiled by world-leading experts in the field, this book provides an introduction to the 50-year history of Lassa fever research, the genetic diversity of LASV, and its geographic distribution. Subsequent chapters focus on the ecology and epidemiology of LASV, discussing in-depth the interactions of the virus with its hosts - multimammate mice and other rodents - and the interactions between these animal reservoirs and humans. The book also details the many advances in understanding the structural biology and replication of LASV, including

new insights into the structure and function of its proteins. These

advances in the basic understanding of LASV biology have enabled the development of LASV countermeasures, including sensitive and specific diagnostic assays. Promising drug candidates, including monoclonal antibodies, and vaccines are also discussed. A final and essential chapter addresses current and future clinical practice for clinical management of Lassa fever. This volume is intended for researchers and clinicians in the fields of virology, epidemiology, and microbiology.