1. Record Nr. UNINA9910678587003321 New advances in neglected tropical diseases / / Marcia Aparecida **Titolo** Speranca, editor Pubbl/distr/stampa [London]:,:IntechOpen,,2023 **ISBN** 1-80355-346-4 Descrizione fisica 1 online resource (132 pages) Disciplina 616.9883 Soggetti Neglected Diseases - prevention & control Neglected Diseases - diagnosis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Advances in the understanding of neglected tropical diseases (NTDs) are inspiring the scientific community to investigate their ecoepidemiology and physiopathology, and to employ new biotechnological tools to fight against these devasting and complex infectious diseases which are associated with poverty. The topics covered include the employment of digital PCR and next-generation sequencing strategies to diagnose NTDs in hosts and reservoirs in urban and rural areas, and new findings on insects' reproductive biology that are enabling different vector control strategies. Ecoepidemiology of arboviruses in Latin America and physiopathology of Burili disease caused by Mycobacterium ulcerans are discussed, as is molecular characterization of Plasmodium vivax circumsporozoite protein (CSP) and its use in the epidemiology of malaria and vaccine development. Finally, the origin and pathogenic role of a serine protease inhibitor of Trypanosoma cruzi (TcISP2), the causative agent of Chagas disease, are explored.