Record Nr. UNINA9910227347503321 Autore Miklos Fuzi Titolo The Global Challenge Posed by the Multiresistant International Clones of Bacterial Pathogens Frontiers Media SA, 2017 Pubbl/distr/stampa Descrizione fisica 1 electronic resource (291 p.) Collana Frontiers Research Topics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Multiresistant bacterial pathogens pose a serious problem worldwide Sommario/riassunto making the appropriate treatment of patients with healthcareassociated infections a challenge. The spread of antibiotic resistance is either mediated by mobile genetic elements (MGEs) or the dissemination of genetically-related groups of pathogens, "high-risk clonal complexes". Interestingly most multiresistant healthcareassociated bacteria command just a few dominant international clonal complexes causing infections in various geographical areas. It is of utmost importance to identify the determinants associated with and promoting the spread of antibiotic resistance and the dissemination of these multiresistant pathogens. The Topic comprises mostly of population and epidemiological studies investigating antibiotic resistance mechanisms, MGEs and the impact of antibiotic resistance. and the production of virulence factors on the clonal dynamics of a diverse range of bacterial species. Though, the exploration of the mechanisms governing clonal dynamics and the dissemination of antibiotic resistance will remain a salient issue for a considerable time to come we believe that the papers published in the Topic have usefully

> contributed to the better understanding of some of the processes involved and supplement papers investigating the "non-bacterial" constituents of clonal mobility, like proper medical practice and

compliance with hygienic standards.