Record Nr. UNINA9910367566603321 Autore **Brussow Harald Titolo** Hurdles for Phage Therapy (PT) to Become a Reality MDPI - Multidisciplinary Digital Publishing Institute, 2019 Pubbl/distr/stampa **ISBN** 3-03921-392-X Descrizione fisica 1 electronic resource (484 p.) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Alternative treatment modes for antibiotic-resistant bacterial pathogens have become a public health priority. Bacteriophages are bacterial viruses that infect and lyse bacterial cells. Since bacteriophages are frequently bacterial host species-specific and can often also infect antibiotic-resistant bacterial cells, they could represent ideal antimicrobials for fighting the antibiotic resistance crisis. The medical use of bacteriophages has become known as phage therapy. It is widely used in Russia, where phage cocktails are sold in pharmacies as an over-the-counter drug. However, no phage product has been registered for medical purposes outside of the former Soviet Union. The current Special Issue of Viruses contains a collection of papers from opinion leaders in the field who explore hurdles to the introduction of phage therapy in western countries. The articles cover diverse topics ranging from patent to regulatory issues, the targeting of suitable bacterial infections, and the selection and characterization of safe and efficient phage cocktails. Phage resistance is discussed, and gaps in our knowledge of phage-bacterium interactions in the mammalian body are revealed, while other articles explore the use of

phages in food production and processing.