1. Record Nr. UNINA9910483782803321

Titolo	Fighting Campylobacter Infections : Towards a One Health Approach / / edited by Steffen Backert
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-65481-8
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XIX, 319 p. 25 illus., 22 illus. in color.)
Collana	Current Topics in Microbiology and Immunology, , 2196-9965 ; ; 431
Disciplina	616.9041
Soggetti	Medical microbiology Diseases Food - Microbiology Immunology Medical Microbiology Food Microbiology Infeccions per Helicobacter pylori Medicina preventiva Terapèutica Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Human campylobacteriosis - a serious infectious threat in a One Health perspective -- The data behind risk analysis of Campylobacter jejuni and Campylobacter coli infections -- Population biology and comparative genomics of Campylobacter species -- Management strategies for prevention of Campylobacter infections through the poultry food chain: a European perspective -- Emission sources of Campylobacter from agricultural farms, impact on environmental contamination and intervention strategies -- Phage biocontrol of Campylobacter: a One Health approach -- Campylobacter virulence factors and molecular host-pathogen interactions -- Diarrheal mechanisms and the role of intestinal barrier dysfunction in Campylobacter infections -- Murine models for the investigation of colonization resistance and innate immune responses in Campylobacter

jejuni infections -- Natural competence and horizontal gene transfer in Campylobacter -- Molecular mechanisms of Campylobacter biofilm formation and quorum sensing.

Sommario/riassunto

This edited volume explores Campylobacter species, which are some of the most important foodborne pathogens. Above all, contaminated poultry meat can cause human gastroenteritis in both developed and developing countries. The respective contributions reveal how these infections can also increase the risk of generalized paralytic diseases such as Guillain-Barré syndrome, Miller-Fisher syndrome, and Chinese paralytic syndrome. Due to their influence on the nervous system, circulatory system, and various organs, Campylobacter infections represent a serious public health concern. Campylobacter can be effectively combated by addressing the hygienic conditions in both food production and human lifestyles. Accordingly, the authors put forward a One Health perspective, which provides readers with essential insights into the basic biology of Campylobacter, as well as practical guidance on aspects ranging from food production to the clinical treatment of infections. Chapters 'Population Biology and Comparative Genomics of Campylobacter Species' and 'Natural Competence and Horizontal Gene Transfer in Campylobacter' are available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.