Título: CCAMP & CLIST: ZOONOTIC BACTERIAL COLLECTIONS OF THE OSWALDO CRUZ INSTITUTE – FIOCRUZ

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Resumo:

The bacterial culture collections can be considered as excellent sources of bacteria for bioprospecting materials of biotechnological interest, because they comprehend genomic libraries that can be compared in the future. The Campylobacter Collection (CCAMP) and the Listeria Collection (CLIST), located at the Bacterial Zoonoses Laboratory (LABZOO - IOC -Fiocruz, RJ), are both dedicated to the maintenance of relevant zoonotic bacteria. CCAMP is a microbial collection that includes about 1.500 Campylobacter spp. strains from human clinical specimen, cultures of other warm blood animals, besides environmental and food samples. CLIST includes about 1.326 pathogenic strains of Listeria spp. and Yersinia spp. from different infectious and transmission sources. These bacterial strains are preserved in viable conditions, genetically stable and free of contamination, which are provided to national and international academic institutions, for research purposes, free of charge. In addition, both bacterial collections provide technical services such as deposit, identification, characterization and distribution of strains for developing scientific research, human resources training and scientific advisory in their expertise areas. Besides the preservation of bacterial strains, CCAMP and CLIST perform specialized taxonomic identification services. This identification can be based in the research of phenotypic and genotypic characteristics that are sufficient to insert microorganisms in the genus/species taxonomic levels. Phenotypic characterization includes current discriminatory methods, which associated with classic, cytological, biochemical, physiological and serological methods complement the identification up to species and biotype levels of the bacterial groups. Genotypic analysis is performed based on the methodologies of specific or nonspecific amplification of bacterial DNA regions, PFGE, plasmid profile analysis, DNA sequencing and research on genes of virulence and antibiotic resistance. Recently, CCAMP and CLIST were accepted as members of the World Federation for Culture Collections (WFCC). Also, CCAMP has been accredited as Trusted Depository Collection by the Genetic Heritage Management Council (CGEN/ Ministry of Environment).

Palavras-chaves: Culture Collections, Campylobacter spp., Listeria spp., Yersinia spp., Zoonoses.

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