Chaperone-usher pili loci of colonization factor-negative human enterotoxigenic
Escherichia coli

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© 2017 Del Canto, O’Ryan, Pardo, Torres, Gutiérrez, Cádiz, Valdés, Mansilla, Martínez, Hernández, Caro, Levine, Rasko, Hill, Pop, Stine and Vidal. Enterotoxigenic Escherichia coli (ETEC) is one of the most common causes of diarrhea worldwide. Among the 25 different ETEC adhesins, 22 are known as "colonization factors" (CFs), of which 17 are assembled by the chaperone-usher (CU) mechanism. Currently, there is no preventive therapy against ETEC, and CFs have been proposed as components for vaccine development. However, studies of diarrhea-causing ETEC strains worldwide indicate that between 15 and 50% of these are negative for known CFs, hindering the selection of the most widespread structures and suggesting that unknown adhesins remain to be
identified. Here, we report the result of a comprehensive analysis of 35 draft genomes of ETEC strains which do not carry known adhesin genes; our goal was to find new CU pili loci. The phylogenetic profiles and serogroups of these strains were high