1. Record Nr. UNINA9910220045103321 Autore Eamonn P. Culligan Titolo From Genes to Species: Novel Insights from Metagenomics Frontiers Media SA, 2016 Pubbl/distr/stampa Descrizione fisica 1 electronic resource (229 p.) Collana Frontiers Research Topics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The majority of microbes in many environments are considered "as yet uncultured" and were traditionally considered inaccessible for study through the microbiological gold standard of pure culture. The emergence of metagenomic approaches has allowed researchers to access and study these microbes in a culture-independent manner through DNA sequencing and functional expression of metagenomic DNA in a heterologous host. Metagenomics has revealed an extraordinary degree of diversity and novelty, not only among microbial communities themselves, but also within the genomes of these microbes. This Research Topic aims to showcase the utility of metagenomics to gain insights on the microbial and genomic diversity in different environments by revealing the breadth of novelty that was in the past, largely untapped.