

Contribution ID: 8

Type: not specified

StrainInfo: A central database for resolving microbial strain identifiers

Monday 11 November 2024 10:50 (10 minutes)

Microbial strains can be known by a myriad of different strain designations, culture collection numbers and sequence accessions, which poses a challenge to the communication of research findings, as well as the comparison and reuse of data. Culture collection numbers have the advantage of being unique, stable and subject to high quality standards. Nevertheless, each collection receiving a culture of the same strain assigns their own number at deposition. Different designations are thus used throughout publications and databases, making it difficult for scientists to draw connections between them. Here we present the StrainInfo database, a service that collects and curates culture collection numbers as well as their relations and links them with different sources of information, such as publications and sequence accession numbers. This facilitates the connecting of data describing the same strain. The information is provided through a modern and intuitive web user interface, which enables users to easily find corresponding strain identifiers and links to associated data, and through a web API, that allows for direct integration of strain identity resolution into workflows and other databases. In the future, StrainInfo additionally aims to provide a central registry service for cultures, allowing microbiologists to register strain designations and receive persistent identifiers prior to deposition and publication.

Presenter: REIMER, Lorenz (NFDI4Microbiota / Leibniz Institute DSMZ) Session Classification: Use Cases