

EMPOWERING KNOWLEDGE: MATERIAL AND DATA REPOSITORIES

PANEL DISCUSSION

| | |
|--------------|---------------|
| Date | 24.10.2024 |
| Session Time | 17:50 - 18:50 |
| Room | Modulo 1 |

Chair(s):

- Andrey Yurkov (Germany)
- Edward Moore (Sweden)

Session Description

The roundtable is exploring different facets of microbial species discoveries, conservation and new challenges for the modern microbial systematics. The introduction of DNA- and more recently whole-genome-based approaches for identification has dramatically transformed our perception of biodiversity of microorganisms. The increasing use of culture-independent approaches is rapidly expanding the knowledge of novel lineages and the global diversity numbers. The availability of the reference material and associated data is crucial for modern science. Among new challenges, restrictions imposed by Access-and-Benefit-Sharing legislations complicate collection and research on microorganisms in many parts of the world. Whole-genome sequencing initiatives establish the solid basis for classification of microorganisms but present new challenges to microbial systematics in light of the increasing availability of genomic data and the ongoing exploration of microorganisms known solely from sequence data.

Panelists:

- Jörg Overmann (Germany)
- Irina Druzhinina (United Kingdom)
- Ipek Kurtboke (Australia)

Goals of the round table:

- Facilitate collaboration among scientists who rely on inviable material, viable cultures, and solely sequence data.
- Examine the challenges that material and data availability restrictions pose to open science.
- Assess the future role of repositories as knowledge providers for science, industry, and society.