Culture collections data management

<u>Vincent Robert</u>¹, Souhail Ben Afia¹, Syrine Ben Afia¹, Ammar Ben Hadj Amor¹, Erik Blom¹, Walid Chouaib¹, Achraf Haddaji¹, Julie Robert¹, Patricia Nelis¹, Arwa Romdhane¹, Szaniszlö Szöke^{†1}, Nathalie van de Wie¹

BioAware, Hannut, Belgium

Over the past 30-40 years, many new technologies have emerged that have revolutionized the way we work, and the tools available to us are so advanced that they would have been unimaginable just a few decades ago.

The rapid development of new technologies in the fields of DNA, RNA, and protein analysis has revolutionized biological research and generated huge amounts of complex data. However, managing and analyzing these data sets is not easy and requires sophisticated information technologies and algorithms. Many scientists face difficulties in understanding and applying these tools effectively. To overcome these challenges, new approaches and collaborations are needed between research groups and private companies. Artificial intelligence is one of the promising avenues in this domain. Our group has been working for more than 30 years to develop tools that can handle any data that culture collections need to manage. Our BioloMICS software is now used worldwide by the largest public collections, many private companies as well as international initiatives like MIRRI, MycoBank, Q-Bank, and many others. We are looking forward to tackling new and exciting challenges that will require dedicated, professional and large teams of software developers.