

## Highlights on Transport of two-peptide leaderless Enterocin DD14 and its biological activities

Djamel DRIDER

UMR Transfrontalière BioEcoAgro INRAE 1158, Lille University, F-59000 Lille, France

**Email** : [djamel.drider@univ-lille.fr](mailto:djamel.drider@univ-lille.fr)

In this presentation, I will first describe how enterocin DD14 (EntDD14); a leaderless is transported outside of the cytoplasm. In addition to ABC transporters is the main machinery dedicated to transport of bacteriocins from lactic acid bacteria. Nevertheless, in the case of EntDD14, we find another channel that is synergistically used alongside with the ABC transporters. Then, I will illustrate the main biological functions such as its antibacterial activity, mainly against *Staphylococcus aureus in vitro* and *in vivo* on mice models. Then, I will end my presentation by showing recent data and simulation obtained on its activity across enveloped viruses such as HSV-1 and SARS-COV-2.

Keywords : Enterocin DD14, antibacterial activity, antibacterial activity, microbiota